More Than Words: Using Nursery Rhymes and Songs to Support Domains of Child Development

Ginger Mullen

Ginger Mullen has been delivering oral rhyme and storytelling programs for young children and their families for more than twenty years in libraries, schools, preschools, daycares, and community organizations. She leads professional development workshops independently and for the Parent-Child Mother Goose Program™. She holds a master of arts in children's literature from UBC, which has led to various teaching positions at UBC, Mount Royal University, and Southern Alberta Institute of Technology. Email: ginger.mullen@shaw.ca

During her 20 years of work experience using traditional nursery rhymes (including songs) across a variety of early childhood education programs, the author has come to realize their versatility in supporting multiple domains of child development. She contextualizes specific rhymes within domains defined by the Early Development Instrument: physical health and well-being, language and cognitive development, communication skills and general knowledge, social competence, and emotional maturity. By discussing how rhymes can be practised effectively with children of different ages, she aims to highlight the developmental benefits of using them with children and to further promote their use among caregivers and practitioners.

Keywords: child development; Early Development Instrument; nursery rhymes and songs; caregivers and practitioners

Coming to Research

Traditional English nursery rhymes and songs, also known as Mother Goose rhymes, have long played a role in early childhood. From the medieval "Baa Black Sheep" to today's "The Wheels on the Bus," the lives of young children have been enriched with a wealth of verse and song orally passed down through generations.

My experiences with nursery rhymes are both academic and professional. I integrate them into my teaching practices at the postsecondary level. I have also delivered oral rhyme and storytelling programs for 20 years. My work in the field of early childhood education began at Vancouver Public Library, where I led storytimes for babies, toddlers, preschoolers, and their families. These storytimes usually included interactive rhymes as movement breaks. It was only when I started to facilitate programs with my mentor, Jane Cobb, that I began to understand the developmental benefits of "language play," which refers to the oral tradition of stories and nursery rhymes, including songs, enjoyed between an adult and a child or group of children (Cobb, 2007). Language play forms the bedrock of the nationally recognized Parent-Child Mother Goose Program™ (n.d.) that brings together parents, caregivers, and children to orally, and repeatedly, share nursery rhymes and stories. I am now a certified PCMG-P teacher-trainer, and I continue this type of work with community organizations in Calgary, Alberta, such as Lead Foundation and Families Matter, where I am fortunate to share my knowledge with parents, children, early childhood educators, and colleagues, including teachers, classroom aides, and therapists. This knowledge concerns the words and cadences/tunes of the rhymes and songs, as well as ways that language play can be used to engage children in various contexts.

Throughout the years that I have been leading various programs, I have used and adapted rhymes for different age groups to mitigate challenging situations, create emotional bonds, and promote children's early language development. I am passionate about sharing my knowledge and experience with the professional and academic communities in the field of early childhood education. I hope that this article encourages caregivers and practitioners to effectively use rhymes to promote multiple areas of child development,[1] such as motor skills and social skills.

Research

According to the EDI website, the Early Development Instrument is a kindergarten teacher questionnaire developed in 2000 by Dr. Dan Offord and Dr. Magdelana Janus at McMaster University that measures "children's ability to meet age-appropriate developmental expectations in five general domains" (Early Development Instrument, 2016b, para. 1). While the EDI assesses children in the

second half of kindergarten, when they are between five and six years, the domains are relevant during the years leading up to this time. The EDI is used and discussed in this paper because it has been widely implemented across Canada, except for Nunavut, and the data are considered valid and reliable by educators, researchers, and administrators (Early Development Instrument, 2016b). The EDI categorizes childhood development into five areas: physical health and well-being, language and cognitive development, communication skills and general knowledge, social competence, and emotional maturity. These domains are further divided into 26 subdomains (see Table 1).

Table 1: Early Development Instrument Domains and Subdomains

EDI Domain	Subdomains
Physical Health and Well-Being	•Fine and gross motor skills •Adequate energy for classroom activities •Independence in looking after own needs •Daily living skills
Language and Cognitive Development	•Reading awareness •Age-appropriate reading and writing skills •Age-appropriate numeracy skills •Ability to understand similarities and differences •Ability to recite back specific pieces of information from memory
Communication and General Knowledge	•Skills to communicate needs and wants in socially appropriate ways •Symbolic use of language •Storytelling •Age-appropriate knowledge about life and the world around
Social Competence	•Curiosity about the world •Eagerness to try new experiences •Knowledge of standards of acceptable public behaviour •Ability to control own behaviour •Appropriate respect for adult authority •Cooperation with others •Following rules •Ability to play and work with other children
Emotional Maturity	•Ability to think before acting •A balance between too fearful and too impulsive •An ability to deal with feelings at an age-appropriate level •Empathetic response to other people's feelings

In Alberta, Canada, the most recent EDI data published by the Early Development Mapping Project Alberta (2014) reveals that only 46.4 percent of kindergarten children show appropriate development in all five domains. This troubling statistic underscores that parents and caregivers would benefit from support to further help their children thrive, such as relevant information and programs. Research also shows that children learn well in environments "rich in language, joy, and playfulness" (Makovichuk, Hewes, Lirette, & Thomas, 2014, p. 105). Nursery rhymes and songs can provide this environment as they have long existed as an interactive childhood experience. Therefore, I argue that language play can easily serve as an effective medium to foster children's development in the five domains discussed in the EDI.

In this paper, I focus on selected subdomains: fine and gross motor skills in physical health and well-being, age-appropriate reading and numeracy skills in language and cognitive development, storytelling and age-appropriate knowledge in communication and general knowledge, the ability to play/cooperate with others and follow rules in social competence, and the ability to deal with feelings at an age-appropriate level and empathetically respond to other people's feelings in emotional maturity. First, I provide information

about how typically developing children learn the skill outlined in the each of the subdomains and why it is important, using the terms baby (birth to walking), toddler (walking to age 3), and preschooler (ages 3 to 5). I then offer a nursery rhyme that can be used to foster that skill. Although these rhymes belong to the oral tradition, I provide useful sources with additional information. Finally, in italics, I include suggestions to help readers—parents, caregivers, teachers, practitioners, therapists—visualize how to make effective and interactive uses of each rhyme with an individual child or group of children.

Physical health and well-being

According to the EDI, this category's subdomains include "fine and gross motor skills**,** adequate energy levels for classroom activities, independence in looking after own needs, and daily living skills" (Early Development Instrument, 2016a, "Domains and Subdomains," para. 1). Motor skills serve as an obvious point of entry into the relationship between nursery rhymes and child development because we can experientially gauge children's acquisition of these abilities. We clearly observe when they begin to sit, crawl, walk, and run. We delight when they begin to point at objects, transfer objects from one hand to another, or colour with a crayon.

Gross motor skills refer to abilities required to control the large muscles of the body: sitting, rolling, crawling, walking, and running. Action-oriented language play can support children's development as they progress through different stages. During the reflexive stage, roughly birth to six months, children rely on their involuntary responses to stimuli, such as sucking and grasping (Frost, Wortham, & Riefel, 2008). They cannot yet move with intention, but we can help their bodies learn and practise movements that they will soon perform by themselves. For example, babies begin to roll over from back to front on their own between three and five months of age (Robinson, 2007), but we can use the following rhyme with them as soon as they are born:

> Leg over leg,
> The dog went to Dover.
> When he came to a style,
> Whoops! He went over. (Cobb, 2007, p .159)
>
> *For this rhyme, lay your baby on her back. Grab her legs and march them to the beat. At "Whoops!" cross one leg over the other and gently turn her onto her stomach. Then repeat the rhyme to help her roll back. This rhyme is also fun to use during a diaper change.*

The rudimentary stage of gross motor development, about six months to two years, sees children begin to intentionally control their movement. They learn to independently sit, reach, crawl, stand, and walk (Frost et al., 2008). Crawling is an important yet often underrecognized movement that begins when children are between seven and eight-and-a-half months (Robinson, 2007). Many people consider crawling simply as the precursor to walking, but it indeed serves several critical functions. For example, through this activity, children strengthen several muscle groups (abdomen, shoulders, hips) that aid movement and stability. This provides them with strong wrists and sensory input to their hands that will also benefit their fine motor skills. Their cross-lateral movement (right knee with left hand, vice versa) builds and reinforces neural pathways between the two hemispheres of the brain. And, they hone binocular vision by looking down, away, and back down. This, in turn, stimulates eye tracking and other areas of brain development (personal communication, Enns, 2008; also see Haring, 2015). Here is a rhyme to promote crawling:

> Slowly, slowly, very slowly
> Creeps the garden snail.
> Slowly, slowly, very slowly
> Up the garden rail.
>
> Quickly, quickly, very quickly
> Runs the little mouse.
> Quickly, quickly, very quickly
> Up into its house. (Cobb, 2007, p. 148)
>
> *You need an open area that allows ample space to creep like a snail. For the first verse, slowly follow your baby. Repeat the first verse a few times to get a slow rhythm. Then, for the second verse, chase him, catch him, and end with a tickle under his arm.*

Once children have mastered rudimentary movements, they progress to the fundamental stage. From two to seven years, they learn to run, jump, throw, roll, catch, and kick. These activities build foundational skills that foster later participation in sport and other physical activities (Frost et al., 2008). Traditional horsie-games serve as a great vehicle for this kind of movement:

> See the ponies walking, walking, down the country road. (Say twice)
> See the ponies trotting, trotting, down the country road. (Say twice)
> See the ponies galloping, galloping, down the country road. (Say twice)
> See the ponies coming home, all tired out, all tired out, all tired out. (Cobb, 2007, p. 187)
>
> *This rhyme is suited for playing/working with a single child or a group. You need an open space in which to run. Then, let the gait mimic the lyrics. You can easily adapt the rhyme by inserting more diverse movements, such as running, cantering, and pacing, based on your group dynamics. Suggest nonequestrian actions such as skipping, twirling, jumping, or flying. Or, change the subject from horses to fairies, monsters, dinosaurs, or anything else of interest to children. In my experience, most children love this activity and are eager, when invited, to contribute their own ideas. The challenge lies not in getting them to participate, but in toning down their energy once they have begun. I often repeat the final line, speaking very slowly, to bring the group to a calm ending, and then I add, "And they all sat down."*

Gross motor skills also provide a foundation on which children build fine motor skills involving the smaller movements of hands, fingers, and wrists. For example, in order for preschool children to cut properly with scissors, they first need to control the large muscles used to sit in a stable position (Brook, Wagenfield, & Thompson, n.d.).

Similar to gross motor skills, children develop their fine motor skills progressively: from the core to the limbs, or from proximal to distal (Brook et al., n.d.). They learn to control their arms before their hands, for instance. Hand-clapping rhymes are well suited for babies who are beginning to bring their hands together, known as crossing the midline, between seven and nine months (Robinson, 2007). The following rhyme is a classic:

> Pat-a-cake, pat-a-cake, baker's man.
> Bake me a cake as fast as you can.
> Pat it, and roll it, and mark it with a B.
> And put it in the oven for Baby and me. (Cobb, 2007, p. 98)
>
> *When you first introduce this to your baby, hold her hands to help her clap to the rhythm. As she becomes more skilled, she will independently clap and roll her own hands. Later, in her preschool years, she will pretend to write a letter of the alphabet on the palm of her hand, or yours.*

After children have mastered hand control, they turn to their fascinating fingers, those players of early childhood dramas dangling at the end of their hands. Between six and nine months, they begin to poke with their index fingers (Voress & Pearson, 2013). Not only does this seemingly simple milestone allow them to communicate their needs and wants, but it also helps them to isolate and move their fingers independently. Here is an energetic rhyme for fine motor practice:

> Two little dickie birds sitting on a wall:
> One named Peter. One named Paul.
> Fly away Peter. Fly away Paul.
> Come back Peter. Come back Paul. (Cobb, 2007, p. 101)
>
> *When you practise the above rhyme with your baby, he will be delighted to watch your actions. But your toddler will be even more so when he does the actions with you. Face him and ask him to imitate you. Hold out your index fingers and wiggle them as you say "Peter" and "Paul." Then, hide your characters behind your back and bring them out again for the last line. Your imaginative toddler will wiggle his birds, fly them behind his back, and make them reappear.*

In addition to small muscle movements, fine motor skills involve the development of hand-eye coordination. When babies first reach for their toes, they are beginning to build a necessary skill that they will hone over many years. From feeding to dressing, reading, and

playing sports, hand-eye coordination and the ability to use two hands together greatly influences children's overall development. The simplicity of this rhyme makes it very easy for adults and children to learn:

> Johnny, Johnny, Johnny, Johnny
> Whoops! Johnny
> Whoops! Johnny
> Johnny, Johnny, Johnny. (Cole & Calmenson, 1991, p. 44)
>
> *Ask your toddler to hold up her hand and spread her fingers. With your index finger, touch her pinkie, say "Johnny," and then do the same with her ring, middle, and index fingertips. Say "whoops" and use the curve between her index finger and thumb as a slide. Say "Johnny" when you rest on the thumb. Say "whoops" and return to the pinkie in the reverse order. Adapt this rhyme by using specific names (Sally, Sam, Mummy, Daddy). Once your toddler is familiar with the rhyme, she can try this on your fingers, or her own. She will be able to master this in her preschool years. I remember my own toddler practising this as he concentrated intently on making his fingertips touch.*

In summary, gross and fine motor actions that complement language play can effectively help young children to develop areas of their physical health. Actions help babies experience age-appropriate movements such as rolling over and clapping. Chase games and fingerplays help toddlers to build muscle strength and coordination. And rhymes that require greater levels of hand-eye and motor coordination provide preschoolers with opportunities to practise running, trotting, and using their hands together.

Language and cognitive development

Language and cognitive development are immensely sophisticated neurological processes. According to the EDI, this domain "includes reading awareness, age-appropriate reading and writing skills, age-appropriate numeracy skills, ability to understand similarities and differences, and ability to recite back specific pieces of information from memory" ("Domains and Subdomains," para. 4). Many rhymes offer opportunities to informally introduce children to early reading and numeracy skills.

To become strong readers, children first need a strong foundation of oral language. In fact, their language skills play a larger role than cognitive ability in literacy acquisition (McGinty & Justice, 2010). Phonological awareness comprises an important part of this foundation: Children need to understand that spoken words are composed of different sounds, or phonemes. Exposure to rhyming is an excellent strategy to help children develop phonological awareness (Bryant, Bradley, Maclean, & Crossland, 1989; Dunst, Meter, & Hamby, 2011). Oral language also builds vocabulary (McGinty & Justice, 2010); when children know a word, they will more easily decode it in print materials like books. Language play thus offers great aural opportunities for children to learn the meaning of words as well as the sounds with which they are constructed. Consider the complexity of sounds and words in this seemingly simple rhyme:

> The moon is round,
> As round can be.
> Two eyes, a nose
> And a mouth … like me! (Cobb, 2007, p. 91)
>
> *Hold your baby face to face to face so that he can watch how your mouth creates specific sounds. As you lightly touch his face, he learns to associate the word with the body parts. In your words, he hears a monosyllabic rhyme in lines two and four emphasizing the phoneme "ee." He also hears the phonemes "b" and "m." The repeated exposure to the comparison of the moon and your face will help him to recognize, much later, the technique of simile in both prose and poetry.*

In addition to fostering age-appropriate early reading development, "The Moon is Round" also addresses age-appropriate math skills. Counting and identifying geometric shapes is an important first step in acquiring early numeracy. This rhyme features simple numbers and a simple shape, both of which are emerging concepts that many children understand by age 3 (HealthLink BC, 2015). In addition, there is a rhyme scheme of ABCB; nursery rhymes often follow patterns, and patterning is the basis for math study (Kenney, 2005).

Conveniently, rhymes can also provide transitions to "teachable moments" in children's daily environments. For example, a caregiver can extend the concepts in "The Moon is Round" by pointing out familiar objects and saying, "The ball is round, as round can be." Or, a mother can point to her own body parts and say, "Let's count the other parts of our bodies: two ears, two arms, five fingers on one

hand."

Preschool children, who by now have grasped basic cognitive concepts, respond well to rhymes with more sophisticated language structures and complex information, as found in this rhyme:

> Ten galloping horses rode through the town.
> Five were white and five were brown.
> Five rode up and five rode down.
> Ten galloping horses rode through the town. (Cobb, 2007, p. 80)
>
> *Bounce your preschooler on your knee to the rhythm of the rhyme, making sure to emphatically differentiate the feeling of "up" and "down." In contrast to the steady iambic metre of "The Moon Is Round," she senses a beat that is not uniform. In each line, three trochaic feet are completed with a single stressed foot: TEN galloping HORses RODE through the TOWN (/u /u /u /), which better imitates a horse.*

The varied rhythm in the previous rhyme is mirrored by complex concepts. For example, it addresses the number ten. It also features colours and contrasting directions. Moreover, it demonstrates the concept of addition: five white horses and five brown horses equal ten horses. Even though many children do not fully understand this mathematical concept, they will nonetheless be exposed to the terminology.

In summary, language play exposes children to age-appropriate foundational skills on which to build their early reading and math knowledge, fostering their language and cognitive development. Rhymes can enhance young children's understanding of words, numbers, and concepts such as colours and directions.

Communication and general knowledge

According to the EDI, this domain "includes skills to communicate needs and wants in socially appropriate ways, symbolic use of language, storytelling, and age-appropriate knowledge about life and the world around" ("Domains and Subdomains," para. 5). Storytelling is a fundamental human activity that helps children with a number of important functions, such as understanding narrative architecture and sequencing, acquiring knowledge, and learning about others.

A child's experience with storytelling can begin with a simple rhyme shared with an adult. Celia Lottridge (1995), a cofounder of the Parent-Child Mother Goose Program™, says that "nursery rhymes are little stories for little people" (n.p.). Even if some children do not yet know the meaning of the words, they have been playfully introduced to a short drama and the building blocks of story: characters, plot, and setting. This well-known rhyme offers it all:

> Jack and Jill went up the hill
> To fetch a pail of water.
> Jack fell down and broke his crown.
> And Jill came tumbling after. (Cobb, 1996, p. 82)
>
> *Slowly lift your toddler as you say the first two lines, and then drop him for the last two. This helps his body to feel the contrasting movements. This classic rhyme features a boy and a girl, simple characters with whom he can begin to identify. The hill serves as a familiar setting, and there is a hint of conflict—person vs. nature—as both children tumble and fall.*

Preschoolers are increasingly able to sustain their attention. They also have more experience with narrative conventions and are developing active imaginations (HealthLink BC, 2015), which allows them to enjoy longer and more complex stories. This song has a cumulative story structure:

> I know an old lady who swallowed a fly.
> I don't know why she swallowed a fly.
> Perhaps she'll die.

I know an old lady who swallowed a spider.
It wiggled and jiggled and tickled inside her.
She swallowed the spider to catch the fly.
I don't know why she swallowed a fly.
Perhaps she'll die.

[The song continues with the old lady swallowing a bird, a dog, a goat. and a cow.]

I know an old lady who swallowed a horse.
She died, of course! (Cobb, 1996, p. 99)

Sing this song slowly with your preschooler so that she is able to join in. If she can't sing all of the lyrics, pause at the end of the line so that she fills in the word. The repetition in this song quickly introduces her to many tenets of storytelling. She learns to create a story by adding details, characters, and events. She learns about first-person narration. She learns that rhythm and rhyme are memorable and pleasing to the ear. And she learns about the joy of hyperbole. Of course a woman can't swallow all of these animals, but isn't it fun to imagine?

As conduits of image and meaning, the words expressed in stories and rhymes directly relate to the domain of general knowledge. Both "Jack and Jill" and "I Know an Old Lady Who Swallowed a Fly" present information about the world: Water can be fetched and spiders catch flies. In fact, all of the rhymes discussed so far offer children opportunities to build their understanding about the world, from labelling body parts ("The Moon Is Round") to types of movement (see "The Ponies"). These latter examples demonstrate age-appropriate knowledge for babies and toddlers. Another example for this age group emphasizes the composition of a family:

This is my mother.
This is my father.
This is my brother tall.
This is my sister.
This is my baby.
Oh, how I love them all! (Cobb, 2007, p. 99)

Wiggle your toddler's thumb, and then move to each successive finger, or family member, until you reach the baby (pinkie). Finish by kissing his fingertips. Adapt this by using the specific family member names. You can also bring in the extended family: grandma, grandpa, uncle, auntie, and cousin.

Knowledge of animals is also age-appropriate for young children, from babies to preschoolers. Take my daughter, for example; "kitty" was the first word she communicated when she was about nine months. Numerous nursery rhymes, like the one below, respond to children's natural interest in animals:

Old MacDonald had a farm, E-I-E-I-O.
And on that farm he had a cow, E-I-E-I-O.
With a moo-moo here, and a moo-moo there.
Here a moo, there a moo, everywhere a moo-moo
Old MacDonald had a farm, E-I-E-I-O. (Cobb, 1996, p. 89)

When you sing this song with a group of toddlers, they join in by imitating your words and sounds, because the sounds and vowels are easy to say and fun to play with. Preschoolers demonstrate their knowledge by suggesting their favourite animals. You may not know how to vocalize some of them—dinosaurs, zebras, koala bears—but have fun imagining how they sound. It also works well to pair the song with visuals, such as pictures, toys, stuffed animals, or flash cards, to help children connect the name of an animal and its characteristics, such as its sounds, habitat, and diet.

In summary, language play fosters young children's communication and general knowledge. The narrative techniques and devices found in many rhymes model storytelling strategies. These rhymes also convey age-appropriate information about the world, such as nature and animals, which will be scaffolded in children's increasingly complex ways of knowing.

Social competence

The EDI's definition of the social competence domain is broad, including "curiosity about the world, eagerness to try new experiences, knowledge of standards of acceptable public behaviour, ability to control own behaviour, appropriate respect for adult authority, cooperation with others, following rules, and ability to play and work with other children" ("Domains and Subdomains," para. 2). Because language play requires interaction between an adult and child or group of children, it can gently immerse children in the social expectations about how to play and how to follow rules.

The social world of children begins with their families; their experiences predicate how they interact with others outside of the home. Language play models mores of social interaction. As babies' brains are formed to imitate behaviours (Hendrix, Palmer, Tashis, & Winner, 2013), they quickly learn conventions. For example, in Western culture, we value eye contact, which shows the need for children to participate in joint attention, that "mutual delight shared with another human being" (p. 6). The following rhyme elicits eye-to-eye engagement:

> Two little eyes to look around.
> Two little ears to hear each sound.
> One little nose to smell what's sweet.
> One little mouth that loves to eat! (Cobb, 2007, p. 92)
>
> *Cradle your baby with one arm so that you are face to face. With your other hand, lightly touch her corresponding body parts as you say them. You can also lay your baby on her back and give her a little face massage. This positive touch and eye contact foster overall brain development* (Cobb, 2007). *It is also a great rhyme to say while eating.*

As children grow, their scope of shared attention widens to include activities with people outside their families. Between 36 and 42 months, children are able to participate in circle games (Voress & Pearson, 2013). This interaction, in turn, supports their increasing capacity to understand others' thoughts and feelings, known as "theory of mind" (Robinson, 2007). This social building block is essential for children to successfully play/interact with each other and create friendships. The following circle game has delighted children for centuries:

> Ring around the rosie,
> A pocket full of posies.
> Husha, husha,
> We all fall down! (Cobb, 2007, p. 86)
>
> *Ask everyone in your group to hold hands and walk in a circle and then fall together for the last line. Children must work together to smoothly execute this rhyme. I am always delighted by the children's joy when we "all fall down."*

Besides joint attention, it is important for children to follow rules, for social and safety reasons. Preschoolers are able to follow two- to three-step directions (HealthLink BC, 2015), allowing them to take an active role in games that also require them to follow rules. This rhyme works well in the classroom:

> If you're wearing red today,
> Red today, red today,
> If you're wearing red today,
> Stand up and shout hurray. (Cobb, 1996, p. 55)
>
> *Sing this to the tune of "Mary Had a Little Lamb." It is easily adapted to help children transition between activities. For example, change the direction in the last line: "Line up to wash your hands." Children must practise self-control during this song. Waiting for the appropriate time to do the action may be challenging for those busy kids who like to leap into movement.*

In summary, the interactive nature of language play supports the building blocks of social competence. Babies learn about joint attention, which later helps them, as preschoolers, to play cooperatively with other children. Children are also required to follow rules, and rhymes and songs present directions in a fun and engaging way.

Emotional maturity

The EDI states that the domain of emotional maturity "includes the ability to think before acting, a balance between too fearful and too impulsive, an ability to deal with feelings at an age-appropriate level, and empathetic response to other people's feelings" ("Domains and Subdomains," para. 3). Any discussion of children's emotional lives must begin by recognizing the power of attachment, their affectional bond with caregivers (Music, 2016). Children feel more secure, and they are better able to self-regulate and understand emotions, if their parents/primary caregivers, from infancy, respond quickly and sensitively to their needs (Creighton, 2011). Thus, children's abilities to develop aspects of emotional maturity are dependent on how they are treated by the adults who take care of them. Language play fosters attachment and, by extension, positive feelings.

Studies suggest that babies innately respond to others' emotions. Lewis, Haviland-Jones, and Barrett (2013) point out that the "newborn reactive cry," whereby a baby cries when hearing another baby's cry, may be "the first instance of empathy without awareness" (p. 444). We can continue to foster this trait by modelling emotionally responsive behaviours that help children to develop self-esteem and prosocial behaviour. An obvious type of rhyme is the lullaby, a slow song to help soothe and calm an upset baby (and adults, too). The following nursery rhyme is popular as an action song, but works equally well as a lullaby:

> Twinkle twinkle little star,
> How I wonder what you are.
> Up above the world so high,
> Like a diamond in the sky.
> Twinkle, twinkle little star,
> How I wonder what you are. (Cobb, 2006, p. 28)
>
> *Rock your baby as you sing, letting the warmth and closeness of your bodies provide physical reassurance. Because this poem is so well known, it works well in family groups. When a child begins to cry, I start singing, and most parents automatically join in, sometimes adding the actions. The child often stops to listen or join in, soothed by both the song and the collective response to her distress. These actions acknowledge and affirm the child's feelings.*

Children's emotional development begins long before they understand and articulate their feelings. At three months, babies start expressing their feeling states through vocalization, facial expressions, and movement. By nine months, their emotions become more nuanced, with differences between joy and contentment, sadness and anger. Toddlers are known to be driven by their feelings, yet even though they experience a range of emotions, they do not yet have the ability to express their feelings in words; this ability does not typically develop until children are between 3 and 5 (Robinson, 2007). But language play can introduce toddlers and preschoolers to a solid vocabulary with which to start labelling their different feelings. The following song covers some key emotions:

> If you're happy and you know it, clap your hands.
> If you're happy and you know it, clap your hands.
> If you're happy and you know it and you really want to show it,
> If you're happy and you know it, clap your hands.
>
> 2nd verse: If you're sad and you know it, say boo-hoo.
>
> 3rd verse: If you're mad and you know it, stomp your feet. (Cobb, 1996, p. 37)
>
> *When you sing this song with your toddler, exaggerate your facial expressions and gestures to help him connect the emotional label with body language. You can also add feelings and actions to fit the current mood. For example, if your toddler does not want to go into a new place, sing, "If you're nervous and you know it, hold my hand."*

In summary, language play can help children to build emotional maturity. A song or rhyme thoughtfully chosen by a caring adult models empathy for children. As well, specific songs equip them with age-appropriate labels for their feelings.

Language Play in Practice

Examples of nursery rhymes, to this point, have been chosen to illustrate specific developmental subdomains for particular age groups. For example, "Two Little Dickie Birds" can be used to support toddlers' fine motor skills. Nursery rhymes, however, are very versatile, so they can be adapted to suit different age groups for a variety of purposes. For example, "Roly Poly," sung to the tune of Frère Jacques, is a rhyme I use with children up to age 6 in Parent-Child Mother Goose Programs™, daycares, and preschools:

> Roly poly, roly poly,
> Up up up, up up up.
> Roly roly poly, roly roly poly
> Down down down, down down down. (Cobb, 2007, p. 70)

"Roly Poly" with babies

During baby programs, I share the benefits of language play with parents. In particular, "Roly Poly," used repetitively, can support their babies' physical, social, and language development. To support their babies' motor skills, I ask parents to hold and roll their babies' hands to help them practice crossing the midline and using their hands together. When babies watch their caregivers sing with elongated syllables, they observe how their lips, tongue, and teeth create sounds. Regarding social competence, when caregivers look at their babies' eyes and hands during the song, they model eye contact and shared attention. As well, their babies' vocabularies grow as they learn words and their meanings, such as up/down and in/out.

"Roly Poly" with toddlers

During energetic circle times, I harness toddlers' need to move and vocalize in order to promote their social, cognitive, and motor skills. When their attention begins to wander, I help them to regulate by singing "Roly Poly," even if I am in the middle of a different activity. They redirect their focus, we sing a few verses together, and I then bring the group to a quiet state with "slow ... slow ... slow." Concerning cognition, toddlers now have a basic vocabulary, so the actions help them further expand their understanding of opposites. I include more sophisticated concepts like loud/quiet and front/back. Finally, toddlers still have a hard time rolling their hands smoothly, so this song provides a fun way to practice their motor skills. It works well to add movements, as the mood fits: "Roly poly, roly poly / Jump jump jump, Jump jump jump."

"Roly Poly" with preschoolers

Preschool classrooms offer children many opportunities to broaden their general knowledge about the world and each other. Because the words in lines two and four of "Roly Poly" do not need to rhyme, the song lends itself to supporting many areas of the curriculum, such as counting numbers one through ten. Visuals can be easily integrated as well. I once observed a practicum student cleverly adapt the words to reflect animals: "Cat cat cat, cat cat cat / Meow meow meow, meow meow meow." This song also translates easily. I ask parents, caregivers, and educators to teach the group words for "up" and "down" in other languages. For example, arriba and abajo reflect the concepts of up and down in Spanish. This helps children learn that words sound different in another language. It also celebrates and validates children who speak a language other than English. They are always very proud to hear their home language voiced in the classroom, if only a word or two.

Conclusion

Children benefit greatly when adults interact with them using the nursery rhymes and songs of language play (Cobb, 2007). Drawing on domains defined by the Early Development Instrument, I have carefully chosen several rhymes and described how adults can utilize them to support children's development in different domains. When children physically participate in the actions, they practise their motor skills and hand-eye coordination. The content within the rhymes and songs introduces children to words, numbers, and concepts, aiding their language and cognitive development. Through simple stories woven into the rhymes, children become familiar with narrative elements and they also gain knowledge about their world. The shared experience of rhyming and singing helps to prepare children to play cooperatively with others, and some of the material also creatively presents them with rules to follow. And, importantly, language play contributes to children's emotional development. Nursery rhymes can serve as a tool to teach children about feelings. Furthermore, children who have strong, positive relationships with their primary caregivers experience a world in

which their needs are valued, and so they can become equipped to show empathy to others.

Early childhood educators and practitioners are in the position to promote, encourage, and model language play with families and children. These centuries-old, tried-and-true nursery rhymes and songs support children's overall development in meaningful and engaging ways. Forms of language play exist in all cultures, plus they are orally disseminated, making them accessible to all families, regardless of their socioeconomic status or level of education. It would be especially beneficial to help parents and caregivers understand how language play can further strengthen emotional bonds, for it is only on a solid foundation of attachment that *all* children's relationships and developmental learning are built (Cobb, 2007).

References

Brook, G., Wagenfield, A., & Thompson, C. (n.d.). *Fine motor development and early school performance*. Retrieved from: http://www.fingergym.info/downloads/Finemotordevpp1-4.pdf

Bryant, P. E., Bradley, L., Maclean, M., & Crossland, J. (1989). Nursery rhymes, phonological skills, and reading. *Journal of Child Language*, *16*, 404–428. doi: 10.1017/S0305000900010485

Cardanay, A. B. (2013). Nursery rhymes in music and language literacy. *General Music Today*, *26*, 30–36. http://dx.doi.org/10.1177/1048371312462869

Carroll, A. C. (2005). *Parents' perceptions of the effects of the Parent-Child Mother Goose Program (PCMGP) on their parenting practices* (Unpublished doctoral dissertation). University of British Columbia, Vancouver, BC.

Cobb, J. (1996). *I'm a little teapot: Presenting preschool storytime.* Vancouver, BC: Blacksheep Press.

Cobb, J. (2007). *What'll I do with the baby-o? Nursery rhymes, songs, and stories for babies*. Vancouver, BC: Blacksheep Press.

Cole, J., & Calmenson, S. (1991). *Eentsy weentsy spider: Fingerplays and action rhymes.* New York, NY: William Morrow and Company.

Creighton, A. (2011). Mother–infant interaction and emotional communication: A literature review. *Australian Journal of Music Therapy*, *22*, 37–56. http://dx.doi.org/900792949

Dunst, C. J., Meter, D., & Hamby, D. W. (2011). Relationship between young children's nursery rhyme experiences and knowledge and phonological and print-related skills. *CELLReview, 4*(1), 1–12. Retrieved from: http://www.earlyliteracylearning.org/cellreviews/cellreviews_v4_n1.pdf

Early Development Instrument. (2016a). Domains and subdomains. Retrieved from: https://edi.offordcentre.com/researchers/domains-and-subdomains/

Early Development Instrument. (2016b). What is the EDI? Retrieved from: https://edi.offordcentre.com/about/what-is-the-edi/

Early Development Mapping Project Alberta. (2014). *How are our young children doing: Final report of the early childhood mapping project.* Retrieved from: http://www.ecmap.ca/images/results/ECMap_Final_Report_20141118.pdf

Frost, J. L., Wortham, S., & Riefel, S. (2008). *Play and child development*. Upper Saddle River, NJ: Merrill, Prentice Hall.

Haring, H. (2015). What's so important about crawling? *Ohio Health.* Retrieved from: http://www.medcentral.org/Main/Whatssoimportantaboutcrawling.aspx

HealthLink BC. (2015). Milestones for 3-year-olds. Retrieved from: https://www.healthlinkbc.ca/health-topics/ue5314

Hendrix, R. E., Palmer, K. Z., Tashis, N., & Winner, M. G. (2013). *The incredible flexible you: A social thinking curriculum for the*

preschool and the early elementary years. San Jose, CA: Think Social.

Kenney, S. (2005). Nursery rhymes: Foundation for learning. *General Music Today*, *19*, 28–31. doi: 10.1177/10483713050190010108

Lewis, M., Haviland-Jones J. M., & Barrett, L. F. (2008). *Handbook of emotions* (3rd ed.) New York, NY: The Guildford Press.

Lottridge, C. B. (Performer). (1995). *Parents, kids, & Mother Goose* [training DVD]. Toronto, ON: Parent-Child Mother Goose Program & Health Canada.

Makovichuk, L., Hewes, J., Lirette, P., & Thomas, N. (2014). *Play, participation, and possibilities: An early learning and child care curriculum framework for Alberta*. Retrieved from: http://childcareframework.com/

McGinty, A. S, & Justice, L. M. (2010.) Language facilitation in the preschool classroom. In M. McKenna, S. Walpole, & K. Conradi (Eds.), *Promoting early reading: Research, resources, and best practices* (pp. 9–36). New York, NY: The Guildford Press.

Music, G. (2016). *Nurturing natures: Attachment and children's emotional, sociocultural, and brain development* (2nd ed.). New York, NY: Routledge.

Nodelman, P. (2008). The nursery rhymes of Mother Goose: A world without glasses. In A. S. Wyile & T. Rosenberg (Eds.), *Considering children's literature: A reader* (pp. 129–147). Peterborough, ON: Broadview Press. (Original work published 1989)

Opie, I., & Opie, P. (Eds.). (1997). *The Oxford dictionary of nursery rhymes* (new ed.). Oxford, England: Oxford University Press.

Parent-Child Mother Goose Program. (n.d.) Mission, vision, and values: Values. Retrieved from: http://nationalpcmgp.ca/about/history/

Robinson, M. (2007). *Child development and behaviour 0 to 8: A journey through the early years.* Maidenhead, England: Open University Press.

Scharfe, E. (2011). Benefits of Mother Goose: Influence of a community-based program on parent-child attachment relationships in typical families. *Child Welfare, 90*(5), 9–26.

Terrett, G., White, R., & Spreckley, M. (2012). Preliminary evaluation of the Parent-Child Mother Goose Program in relation to children's language and parenting stress. *Journal of Early Childhood Research*, *11*, 16–26. doi: 10.1177/1476718X12456000

Voress, J. K., & Pearson, N. A. (2013). *Early childhood development chart* (3rd ed.). Austin, TX: Pro-Ed.

(Endnotes)

1 My endeavours to find scholarly research about nursery rhymes have proven diverse, but limited in scope. Folklorists and literary scholars have looked at versions of nursery rhymes across time, exploring their origins and socio-political contexts (Opie & Opie, 1997; Nodelman, 1989/2008). Attention has also been given to the illustration of rhymes (Nodelman, 1989/2008). While these examples focus on content, a parallel body of work exists that examines the relationship between nursery rhymes and their intended audience of young children. Largely, this research explores the connection between children's exposure to nursery rhymes and their acquisition of literacy skills (Bryant et al., 1989; Dunst et al., 2011). Academic approaches to nursery rhymes are also appearing in the context of music education (Cardanay, 2013), parent-child attachment (Scharfe, 2011), and parenting strategies (Carroll, 2005; Terrett, White, & Spreckley, 2012). In general, research tends to focus on one developmental domain, such as literacy, or offer a very brief treatment of a few domains (Kenney, 2005). However, I have discovered a need for scholarship concerning the relationship between nursery rhymes and multiple domains of child development.