

## Position Statement

# Read, speak, sing: Promoting early literacy in the health care setting

Alyson Shaw

Canadian Paediatric Society, Early Years Task Force, Ottawa, Ontario, Canada

**Correspondence:** Canadian Paediatric Society, 100–2305 St Laurent Blvd, Ottawa, Ontario K1G 4J8, Canada. E-mail: [info@cps.ca](mailto:info@cps.ca), website [www.cps.ca](http://www.cps.ca)

All Canadian Paediatric Society position statements and practice points are reviewed regularly and revised as needed. Consult the Position Statements section of the CPS website [www.cps.ca/en/documents](http://www.cps.ca/en/documents) for the most current version. Retired statements and practice points are removed from the website.

### Abstract

This statement will help health care providers assess and advise on early literacy with families in almost any practice setting. It defines emergent literacy skills, including early language learning and storytelling, and explores the benefits of reading, speaking, and singing with infants and toddlers for both children and caregivers. Book sharing at bedtime and other language-related routines positively affect family, relational, and social-emotional health. Early exposure to any language, when spoken at home, can benefit literacy learning in other languages children may encounter. Specific recommendations for clinicians counselling families on early literacy are included.

**Keywords:** *Language; Literacy; Music; Shared reading; Song; Storytelling*

Babies develop in an environment of relationships, and the parent–child relationship most strongly affects emotional and behavioural functioning (1,2). ‘Serve-and-return’ interactions—such as responding with a smile and encouraging words when babies babble—are foundational for early relationships (3) and happen through close attention to babies’ cues and by speaking, singing, and reading with children from birth. These same interactions help foster emergent literacy skills, which are language-based, socially acquired, and involve cognitive and socio-emotional domains of learning that are crucial for healthy child development. Literacy is more strongly correlated with life-long health trajectories than either occupation or income (6–8), making it a practical focus for anticipatory guidance. The goal of promoting literacy in health care settings is not just to support school success or fluency in a particular language. The benefits of promoting early literacy in health settings through programs such as Reach Out and Read (ROR, USA) have been firmly established in the literature (9), which shows that:

- Parents follow the advice of health care providers when they promote early literacy.
- Health-based interventions can raise awareness, improve family literacy practices, and increase vocabulary in preschoolers—a particularly strong predictor of later school success (9–13).
- Parents referred by a paediatric care provider to their local library for support and education engage in richer, more frequent literacy practices with their infants and toddlers (14,15).

The human and economic costs of insufficient language exposure with a caring adult in the early years are significant. Low literacy is associated with chronic illness, low physical and mental health status, and high rates of acute health service use (8). A recent estimate suggests that a 1% increase in adult literacy levels could boost Canada’s GDP by about \$67 billion (16).

This statement focuses on the benefits of reading, speaking, and singing with infants and toddlers, with particular focus on

Received: September 18, 2020; Accepted: December 8, 2020

© Canadian Paediatric Society 2021. Published by Oxford University Press on behalf of the Canadian Paediatric Society. All rights reserved. For permissions, please e-mail: [journals.permissions@oup.com](mailto:journals.permissions@oup.com)

### Box 1. What is early literacy?

Early (or emergent) literacy development happens when adults are reading, speaking, or singing with babies and children—regardless of the language or skill level of the adult. The relationship between language and literacy is interactive, synergistic, and need not involve books. Sign language, music-making, and storytelling (4) are among the many pathways to literacy, particularly when they are experienced socially, connected to culture, and shared with family and community. In many First Nations, Inuit and Métis communities, language is inextricably linked to culture, and both are determinants of health (5).

family, relational, and social-emotional health. When ‘parent’ (singular or plural) is used, it includes any primary caregiver and every configuration of family. ‘Family’ refers to a child’s own household. Most literacy research has focused on mothers as the first and most consistent influence on children’s language and early literacy skills. However, a growing literature shows that involved fathers can positively influence school success and social-emotional well-being, regardless of income, ethnicity, or parental education level (17–21).

### THE ROLE OF EARLY OR EMERGENT LITERACY

Early (or emergent) literacy (Box 1) has been defined as ‘the skills, understandings, and attitudes that young children demonstrate before they are able to control conventional forms of reading and writing’ (22). Children living in culturally and language-rich environments develop important pre-literacy skills in their first 3 years of life that prepare them for learning to read, write, and succeed in school. These building blocks are best learned by direct experience, through face-to-face interactions with parents and caregivers, in language-rich, caring, engaging environments, and starting at home (14,23,24).

Specific emergent literacy skills, such as knowing the alphabet or printing one’s name, predict later literacy, even after controlling for IQ or socioeconomic status. Historically, these are taught when children are very young (22). The practice of storytelling at home is increasingly recognized as a strong predictor of literacy, particularly for cultures with oral traditions (25,26). Children under the age of 4 who hear and tell stories at home are the most likely to have ease and interest in learning to read when they get to school (27,28).

There is a direct relationship between reading aloud to young children and school-readiness (12,13). Both brain science (23) and research on programs such as Reach Out and Read (10,11)

increasingly support reading aloud to infants from birth (15,29) to support attachment as well as emergent literacy. Child literacy depends on speaking and listening skills, and involves a wide array of understandings and competencies that lead to reading and writing (30).

### INFANT DEVELOPMENT AND EARLY LANGUAGE LEARNING

Language plays a pivotal role in literacy development, and infants learn about language long before they first speak. Live, social interactions are critical to this process. Interacting one-on-one, using infant-directed speech (sometimes called ‘parentese’)—which involves a higher tone of voice, exaggerated pitch contour, and a singsong quality (31)—heightens infant attention and reinforces the connection between words and what they represent in real life (32,33).

By 4 months of age, infants can distinguish their own native language(s) from rhythmically similar ones (34). At 6 months, infants are connecting the concrete nouns they hear with objects encountered or experienced in the home environment (32).

An infant’s language environment in the first 6 to 12 months is critical for developing the complex form and structure (syntax) of language (e.g., ‘Wh—’ question words, demonstratives, particles) (34). By 11 to 12 months, and provided sufficient language exposure (34), infants have a robust understanding for common words and native sounds in the language(s) spoken at home (31,32).

From age 12 to 20 months, children’s understanding of language meaning increases (32). Receptive language (what babies understand) generally precedes expressive language (what babies can say). Finally, after studying the sounds and words around them for nearly 2 years, children will typically produce their first two-word utterances by their second birthday. There is typically a dramatic increase in language use at about this age (23).

### MULTIPLE LANGUAGE LEARNING

Within hours of birth, newborns can distinguish their mother’s language, heard in utero, from a rhythmically unfamiliar one (31,34,35). Infants are born with the ability to discriminate among many (likely all) of the phonetic units (sounds) of the world’s languages. By 4 months of age, however, babies pay attention only to the sounds of the language(s) they are hearing around them (34,36).

Between 6 and 12 months, the brain undergoes physical changes that reinforce neuronal connections supporting the languages an infant hears regularly and prune away the connections that have been rarely used. This selective neuronal commitment in one or more languages is important because

it provides the foundation for many subsequent stages of language development, such as word learning and grammar. Infants exposed to two or more languages become native specialists for all the languages they are hearing (30,31), which benefits multiple language learning and important social competencies into preschool and beyond (6,37,38). Milestones of language development are the same for children who learn more than one language.

Children exposed to more than one language may split their time and attention unequally between them and hear fewer words and sentences in each overall than monolingual peers. But when combined across languages, the size of their vocabulary is usually equal to or greater than that of children learning one language. Bilingual children, for example, tend to catch up to monolingual norms in elementary grades, especially when support for both languages is provided at home and in school (31). A sound foundation in a first language creates optimal conditions for acquiring a second, because brain-based linguistic skills are transferrable (34,38).

## THE BENEFITS OF SPEAKING AND STORYTELLING

Day-to-day experience with spoken words is critical because the more infants hear labels for what they are looking at and attending to, the stronger their overall comprehension becomes (32). Until recently, it was believed that the *number* of words babies hear was key to growing expressive vocabulary (15,23). However, research increasingly supports conversational turn-taking—especially between 18 and 24 months—as the more important mechanism for language learning (23). Responsive back-and-forth (serve-and-return) interactions have been more highly correlated than word quantity with a wide range of later language and cognitive skills (23).

Personal storytelling—conversations with very young children about shared experiences—is a powerful driver of emergent literacy. Most children aged 24 to 30 months of age already know the rudiments of storytelling. They can, to varying degrees, sequence events, set an action in place and time, and organize a story around a central character (often themselves) (28). Very young children first learn and explore the narrative form by talking about the past with their parents. In many cultures, parents speak with their babies frequently and in depth about shared past and future events. Developmentally, young children begin using narrative structure during play even before they can do it with words (28).

Toddlers learn about stories when a parent or other caring adult describes a shared experience (26,28). They watch the narrator's face, collaborate by nodding or repeating a word to show interest or to keep the teller engaged, and respond with emotion (28). For cognitive and emotional reasons, children want to hear the same story over and over since repetition

allows them to internalize the story and master its pieces. As families relate experiences together, they construct a shared narrative, strengthen family bonds, and teach what makes a good story (28,37).

Stories are also a passport into a child's own or another culture (26,28,30). Storytelling enlists all the social elements of language: Stories are told directly and expressively—often with vocal intonation, gestures, facial expressions, and body movement—and young listeners often better understand a story when it is told than when it is read (4,25).

## THE BENEFITS OF BOOK SHARING

While it is not yet clear whether shared reading from birth has direct developmental benefits (13), reading aloud together—early and often—appears to stimulate cognitive development more than other family activities. Shared reading is focused, immersive, and invites frequent, rich interactions and language exposures that positively predict language development (6,13).

Frequent mother–child book reading at home supports vocabulary and oral comprehension development in young children even when their home language is different from the one learned in school (39,40), and mothers tend to talk more with their children when reading than in other family contexts (14). Book sharing with children at any age helps to instill love of reading (41).

By conversing with infants and toddlers while book sharing (6,14), parents can enrich learning by adding language-building strategies such as serve-and-return, dialogic reading (asking questions to encourage a child's participation in story reading), and child-directed speech (e.g., exaggerating relevant phonetic differences). Research also suggests that quality parent–child exchanges during book sharing promote the emergence by school entry of cognitive skills that facilitate self-directed learning and successful interpersonal exchange (6,42).

### Social-emotional benefits

Early, routine, quality book sharing has significant relational benefits for both infants and parents (14). For infants, affect and shared reading have been linked to mother–child attachment security (15,41). Frequent, quality book sharing appears to promote secure attachment, sustain infant attention, and enhance prosocial behaviours (17). For parents, research has associated shared reading with improved parenting style (17), reduced maternal depression and stress levels (14,42,43), enhanced parental sense of competence and self-esteem (42,43), and improved parental responsiveness. Research is also showing how these relational factors are enhanced by behaviours associated with reading together, such as 'snuggling up' (Box 2) (6,41,42).

### Box 2. Parent behaviours that enhance the relational benefits of reading, speaking and singing

- Conversing while reading aloud, dialogic reading, relating story details to real life or a child's experiences (44).
- Taking the time to gaze or point at pictures, or to laugh over a favourite story moment (44).
- Repetition to help children learn, internalize, and re-create stories and songs (25,28).
- Inviting children to imitate an action in a picture or to say 'what comes next' (44).
- 'Snuggling up' to read or listen to a story, which may enhance cognitive properties such as attention, story engagement, and interactional warmth (6,41).
- Encouraging turn-taking to read, tell, or choose a book or story.
- Singing songs, reading signage aloud, or talking about surroundings while out of the home (19,30,45).
- Maintaining eye contact with children, and adapting stories for them (25,28).
- Inviting children's participation in storytelling, with repetitive phrases, unique words, or sound effects (4,37).
- Combining song, gesture, and movement for expressive, playful communication (45–48).

### Incorporating books into routines

There is strong evidence that early shared reading also reinforces positive family routines, with reading at bedtime (12) being a first, natural step (13). Ideally, bedtime reading should begin from birth because of its positive effects for child sleep and child–mother relationships (13). In one recent US survey, bedtime reading was strongly associated with reading as a favourite family activity and with reading aloud five or more times per week (13,14). Reading to infants from birth also provides bonding opportunities for siblings, non-breastfeeding parents, and fathers (13). Multiple studies have associated early, routine, quality book sharing with maternal responsiveness, school readiness, and positive cognitive outcomes (6).

### Printed versus e-books: Is there a difference?

With even the youngest toddlers regularly encountering digital technologies in their everyday lives, parents may wonder how e-book sharing compares with printed books (41). Although recent studies suggest that early learning is similar across the two media (49,50), evidence remains strong that even when parents are engaged and toddlers are attentive, sharing printed

books teaches early literacy and language skills and promotes relational bonding better than e-books (24,41,51,52):

- E-books and digital devices are not well designed for shared reading (41). Children tend to hold or gaze at tablets in the 'head-down' position typical of solo use, and parents tend to 'shoulder surf' rather than tucking their child under an arm or curling up, as with paper books.
- Children cannot run a finger under a line of text (41) or bat at a picture without disrupting the page, and digital features such as page-turning, sound effects, and animation can be distracting (24). Studies have shown that screen reading prompts more parent–child interactions about process and mechanics (e.g., page turns or screen touching) and fewer story-relevant comments (24,52).
- Children cannot practice book handling skills, such as pincer grasp for page turning or book orientation (52).
- When sharing a printed book, children need to decode what they are hearing and seeing, and develop their neural networks while doing so. E-books do much of this work for them, such that their brains are significantly less engaged (53).

The simpler the technology, the better it is for early brain development.

### THE BENEFITS OF SINGING

One recent US cohort study revealed that, in the newborn period, many families do not consider shared reading to be a 'favourite' activity, but they do enjoy singing to their newborn (13). Singing and speaking to babies both appear to increase infant attention via pitch contours, a consistent musical and linguistic structure, and tone (54). Singing is akin to rhyming, and for infants, rhyme and rhythm may resonate even more than speech. While lullabies and children's songs are often used to soothe or play, their simple, repetitive structure and sound may also promote early language development (54). However, this powerful form of communication typically declines rapidly once children turn 2 (45).

An early, significant link between pitch and phonological awareness (the ability to recognize and work with sounds) reinforces the close links between music and literacy learning (45,55). One study has suggested that rhythmical exercises and combining rhythm and song lyrics in children's play help prepare the brain to learn to read and write (56).

Song, fingerplay ('Itsy-bitsy Spider'), and clapping games as literary practices can be incorporated into play, story times, and interactions with young children in ways that support diversity, creativity, and self-confidence (47,57). Using song-based picture books to support and prolong singing/reading activities has been found to motivate and relax both parents and children, engage young children and siblings in synergistic learning, and enhance preschool oral language and vocabulary development, phonemic awareness, and phonological memory (45,46).

Communal musical activities (like a story time at the library or gathering to sing at an early years centre) encourage attentive listening and holding patterns in memory, both precursors to developing reading skills (46,47). Children's songs can teach language and basic spelling patterns, rhyming, sentence patterns and parts of speech, new vocabulary, and a sense of story and sequencing (47). Using singing and movement together has helped teach pre-reading skills, such as letter sounds and medial phoneme skills (the middle sound of a word) and early word reading to kindergarteners (30,58). Moreover, these skills are acquired in meaningful, active, and expressive contexts (48). Music can be an entry point to a new language for children, who may be more socially comfortable singing along than speaking out (48). Rather than getting stuck on words while reading, familiar melodies can help young children (or their parents) guess the right word, 'go with the flow', or 'sing through' new vocabulary, experiences that help build confidence, phonological memory, and oral fluency (45).

## PROMOTING LITERACY IN HEALTH SETTINGS

Health care providers can promote and support early child literacy with every family they see in practice. A family-centred approach to literacy development means working with parents, building on each family's strengths, and connecting with community resources like public libraries (37).

The Reach Out and Read (US) program encourages clinicians to:

- **Assess** child and parent reactions and interactions around a book that is offered during the visit (9). Giving young children a new book at every well-child visit can help providers watch for behaviours such as: (37)
  - The kinds of questions parents ask their children and the responses they accept or encourage.
  - Patterns of interaction between adults and children (e.g., whether children are encouraged to take the lead in conversations).
  - Accepted behavioural roles (e.g., associated with gender).
  - Customary style and manner of response (e.g., insistence on or avoidance of eye contact while speaking) (37).
- **Bring a book in at the beginning** of a visit to help with developmental surveillance and counselling (9,13,37). Talking with parents about literacy-related routines and practices at home is a window on developmental milestones, family relational health and resources, and how best to help with advice, education, or referrals.
- **Connect families with community** (8). Research shows that literacy promotion works best when it happens across more than one platform or context (14). Libraries and community centres offer incentives and opportunities for parents

to read more frequently, from a wider variety of books, and more interactively with children (14). Many local library websites offer live-streamed reading events, virtual learning opportunities, and supportive resources. Families can typically get a library card even when they cannot provide proof of residency.

Clinicians can support the home cultures of their patients and families by being mindful of their own beliefs and biases, culturally aware, and welcoming diversity in the care setting (Box 3) (37,59).

### Box 3. Mobilize culture and community to support literacy learning (37)

- Learn about the communication styles of the families you see in practice. Remember to pause and listen during conversations with parents (30).
- Find out what families expect when it comes to their child's language and literacy development. Find specific goals to work toward (30).
- Introduce books that reduce—rather than perpetuate—stereotypes (37,59) to help create a diverse, culturally safe, and trauma-informed environment for children and families (60).
- Recognize and build on the role of fathers and other caregivers whenever possible (18).
- Focus on families' strengths to support children's learning, rather than on perceived deficits (e.g., the benefits of communicating in one's own language as opposed to a parent's lack of proficiency in the majority language) (37).
- Learn how extended family networks or cultural community groups can help support children's literacy development (37).

## RECOMMENDATIONS

Talking to parents about the benefits of reading, speaking, and singing with their children from birth is something health care providers can do in virtually any context (e.g., at prenatal and well-child visits, during a hospitalization, or in a continuity clinic). The intervention can be brief yet meaningful, and expanded upon as the relationship with the family grows.

By providing information to families about brain development and serve-and-return interactions, clinicians can reinforce how everyday actions by parents can make lasting and positive differences for children and families:

1. Incorporate literacy promotion into everyday practice.
  - Promote literacy with young families early, even before children are born, by helping them understand how language develops.
  - Inquire regularly about stressors, schedules, or barriers that may interfere with one-on-one time with young children. This may include questions about digital media exposure, use, and access (24).
  - Convey simply and clearly the nature and purposes of emergent literacy for ensuring a child's optimal development (30), while respecting multiple forms of literacy and multiple pathways for promoting children's literacy (30).
  - Incorporate books into well-child visits whenever possible, and model how book sharing helps babies build relationships with both their parents and books.
  - Link literacy milestones to other developmental milestones and anticipatory guidance (e.g., babies mouth their first books, use a pincer grasp to turn pages, and sit independently to hold a book).
  - Create a language-rich environment in exam/waiting rooms and other health care spaces, using books, posters, or other tools that promote communication between parents and children.
2. Help families develop literacy-promoting habits.
  - Assess parents' own comfort level with reading aloud, and encourage those who lack confidence or skill to sing, talk, and tell stories with children.
  - Encourage daily book sharing with all families, as a readily modifiable activity (12,14) that can lead into more interactive, responsive parent-child relationships, greater parental involvement in developing literacy skills, and healthier family routines (e.g., at bedtime).
  - Encourage families to tell stories, speak, and sing in their home language.
  - Connect families with community resources, such as local library programs, book-gifting programs, and early years centres, for literacy support and education.

## RESOURCES

- **Early literacy resources:** Canadian Paediatric Society
- **Canadian Children's Literacy Foundation**
- **Serve and Return:** Alberta Family Wellness Initiative
- **Serve and Return:** Harvard University Center on the Developing Child
- **Language Acquisition in Immigrant and Refugee Children:** First language use and bilingualism: Caring for Kids New to Canada, Canadian Paediatric Society

## Acknowledgements

This statement was reviewed by the Community Paediatrics and First Nations, Inuit and Métis Health Committees of the Canadian

Paediatric Society, and by the CPS Social Paediatrics Section. Special thanks to Roxana M. Barbu, PhD, for reviewing the literature, to Jackie Van Lankveld for her thoughtful comments, and to Jennie Strickland, for statement drafting.

*Funding:* Our thanks also to the Canadian Children's Literacy Foundation for their support of the literature review.

*Potential Conflicts of Interest:* Dr. Shaw reports participation as a volunteer member of the Canadian Children's Literacy Foundation during the conduct of the position statement. Outside the submitted work, Dr. Shaw reports that she will receive a small honorarium from the Canadian Paediatric Society for participating in the development of the early literacy learning module in collaboration with the Canadian Children's Literacy Foundation. The author has submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest. Conflicts that the editors consider relevant to the content of the manuscript have been disclosed.

## References

1. National Scientific Council on the Developing Child. Children's Emotional Development Is Built into the Architecture of Their Brains: Working Paper No. 2. Center on the Developing Child at Harvard University, 2004. [www.developingchild.net](http://www.developingchild.net) (Accessed September 10, 2020).
2. Williams RC, Biscaro A, Clinton J; Canadian Paediatric Society, Early Years Task Force. Relationships Matter: How Clinicians can Support Positive Parenting in the Early Years. <https://www.cps.ca/en/documents/position/positive-parenting> (Accessed January 5, 2020).
3. Harvard University, Centre on the Developing Child, Serve and Return. <https://developingchild.harvard.edu/science/key-concepts/serve-and-return/> (Accessed January 5, 2020).
4. Miller S, Pennycuff L. The power of story: Using storytelling to improve literacy learning. *J Cross-Disciplinary Perspectives in Education* 2008;1(1):36-43.
5. National Collaborating Centre for Aboriginal Health. Culture and Language as Social Determinants of First Nations, Inuit and Métis Health. Prince George, BC: NCCA, 2016. [www.nccih.ca/495/Culture\\_and\\_language\\_as\\_social\\_determinants\\_of\\_First\\_Nations\\_Inuit\\_and\\_Métis\\_health.nccih?id=15](http://www.nccih.ca/495/Culture_and_language_as_social_determinants_of_First_Nations_Inuit_and_Métis_health.nccih?id=15) (Accessed November 7, 2020).
6. Browne DT, Wade M, Prime H, Jenkins JM. School readiness amongst urban Canadian families: Risk profiles and family mediation. *J Educational Psych* 2018;110(1):133-46.
7. Raphael D. Social Determinants of Health. Canadian Perspectives, 3rd edn. Toronto, Ont.: Canadian Scholars Press, 2004.
8. Navsaria D, Sanders LM. Early literacy promotion in the digital age. *Pediatr Clin North Am* 2015;62(5):1273-95.
9. American Academy of Pediatrics, Council on Early Childhood. Policy statement: Literacy promotion; An essential component of primary care pediatric practice. *Pediatrics* 2014;134(2):404-9.
10. Needlman RD, Dreyer BP, Klass P, Mendelsohn AL. Attendance at well-child visits after Reach Out and Read. *Clini Pediatr (Phila)* 2019; online ahead of print: DOI: 10.1177/0009922818822975.
11. Needlman R, Tokar KH, Dreyer BP, Klass P, Mendelsohn AL. Effectiveness of a primary care intervention to support reading aloud: A multicenter evaluation. *Ambul Pediatr* 2005;5(4):209-15.
12. Rikin S, Glatt K, Simpson P, Cao Y, Anene-Maidoh O, Willis E. Factors Associated with increased reading frequency in children exposed to Reach Out and Read. *Acad Pediatr* 2015;15(6):651-7.
13. Sinclair EM, McCleery EJ, Koepsell L, Zuckerman KE, Stevenson EB. Shared reading practices and early literacy promotion in the first year of life. *J Dev Behav Pediatr* 2019;40(7):538-46.
14. Canfield CF, Seery A, Weisleder A, et al. Encouraging parent-child book sharing: Potential additive benefits of literacy promotion in health care and the community. *Early Child Res Quarterly* 2020;50(Pt 1):221-9.
15. Jacob G, Ford-Jones L, Wong PD, Warman D, Lovett MW. Literacy promotion by health care professionals: A comprehensive biomedical and psychosocial approach. *Paediatr Child Health* 2018;23(1):6-11.
16. Deloitte. An Economic Overview of Children's Literacy in Canada, November 2020. <https://childrensliteracy.ca/cclf/media/PDFs/Deloitte-Report-An-Economic-Overview-of-Children-s-Literacy-in-Canada.pdf> (Accessed December 7, 2020).

17. Jimenez ME, Mendelsohn AL, Lin Y, Shelton P, Reichman N. Early shared reading is associated with less harsh parenting. *J Dev Behav Pediatr* 2019;40(7):530–7.
18. Morgan A, Nutbrown C, Hannon P. Fathers' involvement in young children's literacy development: Implications for family literacy programmes. *Brit Educ Res J* 2009;35(2):167–85.
19. Ortiz RW, Stile S, Brown C. Early literacy activities of fathers: Reading and writing with young children. *Young Child* 1999;54(5):16–8.
20. Ortiz RW. The many faces of learning to read: The role of fathers in helping their children to develop early literacy skills. *Multicult Perspect* 2000;2(2):10–7.
21. Bernal V, Gilmore LA, Mellgren L, Melendez J, Seleme-McDermott C, Vazquez V. Hispanic Fathers and Family Literacy: Strengthening Achievement in Hispanic Communities. Washington, DC: U.S. Department of Health and Human Services, 2000. [https://archive.org/stream/hispanicfathers00usde/hispanicfathers00usde\\_djvu.txt](https://archive.org/stream/hispanicfathers00usde/hispanicfathers00usde_djvu.txt) (Accessed September 10, 2020).
22. Family and Community Engagement (FACE) Research Compendium. Early Literacy (based on National Institute of Literacy, Developing Early Literacy: Report of the National Early Literacy Panel, 2008):9–33. <http://teacher.scholastic.com/products/face/pdf/research-compendium/early-literacy.pdf> (Accessed September 10, 2020).
23. Gilkerson J, Richards JA, Warren SE, Kimbrough Oller D, Russo R, Vohr B. Language experience in the second year of life and language outcomes in late childhood. *Pediatrics* 2018;142(4):e20174276.
24. Canadian Paediatric Society, Digital Media Task Force. Screen time and young children: Promoting health and development in a digital world. *Paediatr Child Health* 2017;22(8):461–8. <https://www.cps.ca/en/documents/position/screen-time-and-young-children>.
25. Isbell RT; National Association for the Education of Young Children. Telling and retelling stories: Learning language and literacy. *Young Child* 2002;26–30. [https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/resources/pubs/isbell\\_article\\_march\\_2002.pdf](https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/resources/pubs/isbell_article_march_2002.pdf) (Accessed September 10, 2020).
26. McKeough A, Bird S, Tourigny E, et al. Storytelling as a foundation to literacy development for Aboriginal children: Culturally and developmentally appropriate practices. *Can Psych* 2008;49(2):148–54.
27. Wells G. Describing children's linguistic development at home and at school. *Brit Educ Res J* 1979;5(1):75.
28. Engel S. The emergence of story telling during the first three years. Edited from the Zero to Three Journal, December 1996/January 1997. [http://caeyc.org/main/caeyc/proposals-2015/pdfs/Storytelling%20Strategies\\_Fraties-Sat-92-B.pdf](http://caeyc.org/main/caeyc/proposals-2015/pdfs/Storytelling%20Strategies_Fraties-Sat-92-B.pdf) (Accessed September 10, 2020).
29. Mendelsohn AL, Huberman HS, Berkule SB, Brockmeyer CA, Morrow LM, Dreyer BP. Primary care strategies for promoting parent-child interactions and school readiness in at-risk families: The Bellevue Project for Early Language, Literacy, and Education Success. *Arch Pediatr Adolesc Med* 2011;165(1):33–41.
30. Ball J. Promoting Young Indigenous Children's Emergent Literacy in Canada. Ottawa, ON: Canadian Child Care Federation, 2010. [www.ecdip.org/docs/pdf/Emergent%20literacy%20Revised%20Apr%202011.pdf](http://www.ecdip.org/docs/pdf/Emergent%20literacy%20Revised%20Apr%202011.pdf) (Accessed December 2, 2020).
31. Ramirez NF, Kuhl P. The brain science of bilingualism. *Young Child* 2017;38–44. [http://ilabs.uw.edu/sites/default/files/2017\\_FerjanRamirez\\_Kuhl\\_NAEYC.pdf](http://ilabs.uw.edu/sites/default/files/2017_FerjanRamirez_Kuhl_NAEYC.pdf) (Accessed September 10, 2020).
32. Bergelson E, Aslin RN. Nature and origins of the lexicon in 6-mo-olds. *Proc Natl Acad Sci USA* 2017;114(49):12916–21.
33. Liu HM, Kuhl PK, Tsao FM. An association between mothers' speech clarity and infants' speech discrimination skills. *Dev'tl Sci* 2003;6(3):F1–10.
34. Friedmann N, Rusou D. Critical period for first language: The crucial role of language input during the first year of life. *Curr Opin Neurobiol* 2015;35:27–34.
35. Moon C, Lagercrantz H, Kuhl PK. Language experienced in utero affects vowel perception after birth: A two-country study. *Acta Paediatr* 2013;102(2):156–60.
36. Kuhl PK, Stevens E, Hayashi A, Deguchi T, Kiritani S, Iverson P. Infants show a facilitation effect for native language phonetic perception between 6 and 12 months. *Dev Sci* 2006;9(2):F13–21.
37. Parlakian R, Sánchez SY. Cultural Influences on Early Language and Literacy Teaching Practices. Zero to Three 2006. [http://pottsfamilyfoundation.org/wp-content/uploads/2010/09/ZIT27-1\\_ParlakianI.pdf](http://pottsfamilyfoundation.org/wp-content/uploads/2010/09/ZIT27-1_ParlakianI.pdf) (Accessed September 10, 2020).
38. Bélanger R, Kalaci O, eds.; Canadian Paediatric Society; Caring for Kids New to Canada. Language Acquisition in Immigrant and Refugee Children: First language use and bilingualism. [www.kidsnewtocanada.ca/screening/language-acquisition](http://www.kidsnewtocanada.ca/screening/language-acquisition) (Accessed January 5, 2020).
39. Lewis K, Sandilos LE, Hammer CS, Sawyer BE, Méndez LI. Relations among the home language and literacy environment and children's language abilities: A study of Head Start dual language learners and their mothers. *Early Educ Dev* 2016;27(4):478–94.
40. Farver JAM, Xu Y, Eppe S, Lonigan CJ. Home environment and young Latino children's school readiness. *Early Child Res Q* 2006;21(2):196–212.
41. Yuill N, Martin AF. Curling up with a good e-book: Mother-child shared story reading on screen or paper affects embodied interaction and warmth. *Front Psychol* 2016;7(1951):1–2.
42. Puglisi ML, Hulme C, Hamilton LG, Snowling MJ. The home literacy environment is a correlate, but perhaps not a cause, of variations in children's language and literacy development. *Sci Stud Read* 2017;21(6):498–514.
43. Xie QW, Chan CHY, Qingying J, Chan CLW. Psychosocial effects of parent-child book reading interventions: a meta-analysis. *Pediatrics* 2018;141(4):e20172675.
44. Zero to Three. Early Literacy: What We Know about Early Literacy and Language Development. [www.zerotothree.org/resources/300-what-we-know-about-early-literacy-and-language-development#downloads](http://www.zerotothree.org/resources/300-what-we-know-about-early-literacy-and-language-development#downloads) (Accessed September 10, 2020).
45. Montgomery AP, Smith KM. Together in song: Building literacy relationships with song-based picture books. *Lang Lit* 2014;16(3):27–53.
46. Heydon R, McKee L, O'Neill S. Singing Our Song: The Affordances of Singing in an Intergenerational, Multimodal Literacy Program. *Education Publications* 2017;62:1–25. <https://ir.lib.uwo.ca/cgi/viewcontent.cgi?article=1065&context=edupub> (Accessed September 10, 2020).
47. Bintrim L. Reading to the Beat: Music Enhances Early Literacy. Upstart. Demco, 2014. <https://ideas.demco.com/blog/reading-to-the-beat/> (Accessed January 5, 2021).
48. Strom A. "Observations of music and literacy in early childhood education." University of Iowa Honours program thesis. Dec. 2016. [scholarworks.uni.edu/hpt/253](http://scholarworks.uni.edu/hpt/253) (Accessed January 5, 2021).
49. Neuman SB, Wong KM, Kaefer T. Content not form predicts oral language comprehension: The influence of the medium on preschoolers' story understanding. *Read Writ* 2017;30:1753–71.
50. O'Toole KJ, Kannass KN. Emergent literacy in print and electronic contexts: The influence of book type, narration source, and attention. *J Exp Child Psychol* 2018;173:100–15.
51. Evans MA, Nowak B, Willoughby D. The effect of alphabet eBooks and paper books on preschoolers' behaviour: An analysis over repeated readings. *Early Child Res Q* 2017;40:1–12.
52. Moody AK, Justice LM, Cabell SQ. Electronic versus traditional storybooks. *J Early Child Lit* 2010;10(3):294–313.
53. Hutton JS, Phelan K, Horowitz-Kraus T, et al. Shared reading quality and brain activation during story listening in preschool-age children. *J Pediatr* 2017;191:204–11.e1.
54. Schön D, Boyer M, Moreno S, Besson M, Peretz J, Kolinsky R. Songs as an aid for language acquisition. *Cognition* 2008;106(2):975–83.
55. Tomlinson MM. Literacy and music in early childhood: Multimodal learning and design. *SAGE Open* 2013;3(3):1–10. <https://journals.sagepub.com/doi/full/10.1177/2158244013502498> (Accessed September 10, 2020).
56. Degé F, Schwarzer G. The effect of a music program on phonological awareness in preschoolers. *Front Psychol* 2011;2:124.
57. Wiggins DG. Pre-K Music and the emergent reader: Promoting literacy in a music-enhanced environment. *Early Childhood Educ J* 2007;35(1):55–64.
58. Walton PD. Using singing and movement to teach pre-reading skills and word reading to kindergarten children: An exploratory study. *Lang Lit* 2014;16(3):54–77.
59. Wolpert E. Redefining the Norm: Early Childhood Anti-bias Strategies. [https://www.teachingforchange.org/wp-content/uploads/2012/08/ec\\_redefiningthenorm\\_english.pdf](https://www.teachingforchange.org/wp-content/uploads/2012/08/ec_redefiningthenorm_english.pdf) (Accessed September 10, 2020).
60. Giroux R, Blackstock C, Jetty R, Bennet S, Gander S. COVID-19 and Indigenous Children in Canada: What Can Paediatricians Do? [www.cps.ca/en/blog-blogue/covid-19-indigenous-children-in-canada-what-can-paediatricians-do](http://www.cps.ca/en/blog-blogue/covid-19-indigenous-children-in-canada-what-can-paediatricians-do) (Accessed May 27, 2020).

## EARLY YEARS TASK FORCE OF THE CANADIAN PAEDIATRIC SOCIETY

**Members:** Sanjeev Bhatla MD (College of Family Physicians of Canada); Jean Clinton MD; Andrea Feller MD; Emmett Francoeur MD; Kassia Johnson MD; Katherine Matheson MD (Canadian Academy of Child and Adolescent Psychiatry); Annie Murphy Savoie MD; Alyson Shaw MD; Robin Williams MD (Chair)

**Principal author:** Alyson Shaw MD