

THRIVING KIDS, THRIVING SOCIETY

Honourable Margaret Norrie McCain

2020

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AUTHOR



Honourable Margaret Norrie McCain

The Honourable Margaret Norrie McCain is a champion for early childhood education. Together with her husband, Wallace and their four children, she founded the Margaret and Wallace McCain Family Foundation dedicated to preschool for all.

Margaret was born in northern Quebec. Her father was a prominent Quebec mining engineer and her mother was Senator Margaret Norrie of Truro, Nova Scotia. Margaret went on to receive a Bachelor of Arts in history from Mount Allison University and a Bachelor of Social Work from the University of Toronto.

Her activism was sparked by her concern about family violence which she recognized as a public health crisis long before it was more widely acknowledged. During her term as the 27th Lieutenant-Governor of New Brunswick (June 1994 to April 1997) Margaret became a founding member of the Muriel McQueen Fergusson Foundation – now the Fergusson Foundation - whose mission is to eliminate family violence in all its forms through public education and research.

Margaret's knowledge and understanding of early environments on children's development are evident in *Early Years Study 1, 2, 3* and now *Early Years Study 4: Thriving Kids, Thriving Society*.

CONTRIBUTORS



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Angela is a Manitoba Métis whose great-grandmother was a first cousin to Louis Riel. She moved to Yellowknife, Northwest Territories almost forty years ago, marrying into a Chipewyan Dene family, allowing her to learn the many similarities between her own Métis roots and her Dene family.

Angela’s journey from a classroom teacher to Aboriginal cultural camp coordinator, to an Aboriginal community school principal, to a NWT Leaders Program coordinator, and then as a Ministry of Education director, has transformed her from a teacher and educational leader to a new researcher and scholar.

With a story to tell, many narratives guiding her, and practicing the respect, responsibility and reciprocity that she promised the Creator, her Elders and Ancestors, she is sharing her knowledge and research results from her doctoral studies at Simon Fraser University.



JANE BERTRAND, Program Director at Margaret and Wallace McCain Family Foundation, is the research coordinator for the *Early Years Study* series.

Jane is an early childhood educator who blends what we know from research, policy and practice to design the best possible early childhood education experiences for young children.

Margaret and Wallace McCain Family Foundation recognizes the contributions of several Canadian academic researchers and policy-makers whose work and reviews have enriched *Early Years Study 4*.

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“What we envision will be a first ‘tier’ program for early child development, as important as the elementary and secondary school systems and the post-secondary education system.”

McCain, M. & Mustard, F. (1999) Early Years Study: Reversing the Real Brain Drain. Toronto, ON: Government of Ontario p.23

INTRODUCTION

Honourable Margaret Norrie McCain

Twenty years ago, the late Dr. Fraser Mustard asked me to co-chair his team, assembled at the request of the Ontario government, to advise on how to improve outcomes for young children. It was an exciting time for those with an interest in human development.

Great leaps were being made in our understanding of brain growth in young children. The nature versus nurture debate was settling as scientists agreed that both genes and environment not only impact developmental trajectories, but also play off one another. Economists were out front with concerns that schools were not preparing the next generation for the high-tech economy. The flight of Canada's high-profile talent to the United States dominated the media.

Fraser and I met with Canadian and international experts and reviewed the literature. The results were summarized in *Early Years Study: Reversing the Real Brain Drain* (1999).¹ It argued that Canada discards its best talent when children lack adequate nurturing and stimulation in early childhood. It called on governments to create “a first ‘tier’ program for early child development, as important as the elementary and secondary school systems and post-secondary education system.”²

Toronto First Duty, a partnership between Toronto Children's Services, the public school board and community agencies, took up the challenge to test-drive the recommendation.

Eight years later, in 2007, Fraser and I were joined by Dr. Stuart Shanker to produce *Early Years Study 2: Putting Science into Action*.³ It showed how early education could expand by building on public education. Ontario stepped up and implemented play-based, full-day kindergarten for all 4- and 5-year-old children using the lessons learned from Toronto First Duty.⁴ Other jurisdictions followed suit to expand early education within their schools.

In 2011, *Early Years Study 3: Making Decisions, Taking Action*⁵ launched a new monitoring tool, the Early Childhood Education Report (ECER). Developed by Kerry McCuaig, Atkinson Centre at the University of Toronto and our Foundation’s program director, Jane Bertrand, the tool assesses provincial and territorial ECE systems. They found that despite improvements, Canada lagged far behind most wealthy countries in offering early childhood education. Now produced every three years, governments use the ECER to inform policy and spending decisions.

All three studies gathered evidence documenting the benefits of early education for children, families and communities, including:

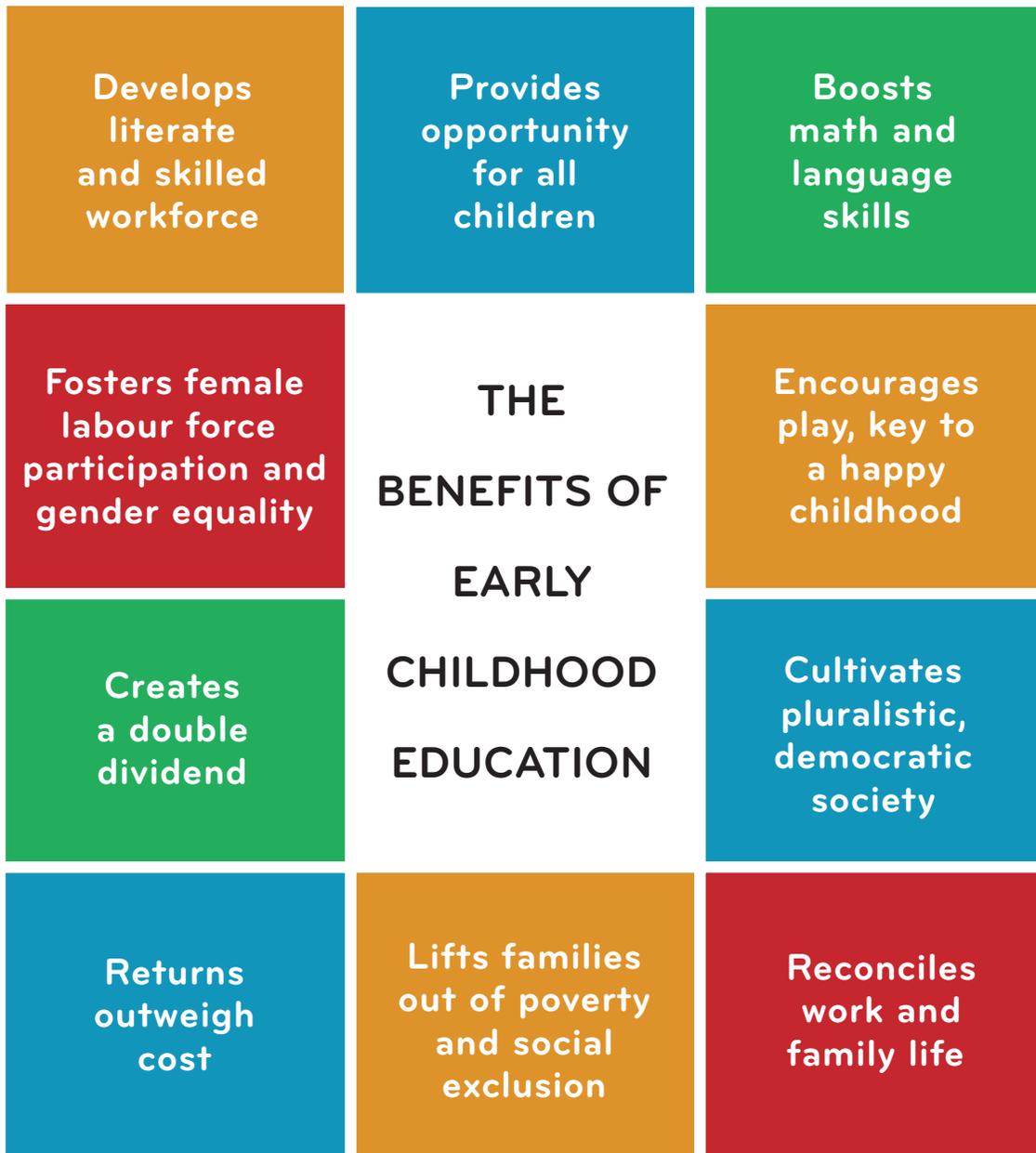
- Offering opportunities for all children
- Lifting children and their families out of poverty and social exclusion
- Reconciling work and family life
- Fostering female labour force participation and gender equity
- Developing a more literate and skilled workforce
- Cultivating a pluralistic, democratic society

Most important, early education gives children a space where play and friendships flourish, making for happier, healthier childhoods. Still, only one in two Canadian children aged 5 years and younger can access the opportunities offered by early education.

Early Years Study 4 calls on governments to offer early education to all preschool-aged children. The concept replaces outdated notions of daycare. Instead of “a place kids go while mom works”, today’s early childhood education provides a first tier of education that is as important as those that follow.

Moving towards early childhood education for all will require senior governments to make new investments devoting an additional \$8-billion in total to annual budgets. Quality early education will also need concerted attention to ensure equitable access and a qualified and resourced workforce. Although the payoffs are priceless, economists have done the math finding returns of up to \$6 for every dollar spent.⁶ The benefits are large, as are the costs of inaction. We cannot afford to squander the untold talents of another generation. When Canadian children thrive, Canada thrives.

FIGURE I.1



Jenkins, Boivin & Akbari, 2015

ENDNOTES

- 1 McCain M., & Mustard, F. (1999). *Early Years Study: Reversing the Real Brain Drain*. Toronto, ON: Government of Ontario. Retrieved from <http://www.earlyyearsstudy.ca>
- 2 McCain, M. & Mustard, F. (1999). *Early Years Study: Reversing the Real Brain Drain*. Toronto, ON: Government of Ontario. Retrieved from <http://www.earlyyearsstudy.ca> p. 23
- 3 McCain, M., Mustard, F. & Shanker, S. (2007). *Early Years Study 2: Moving Science into Action*. Toronto, ON: Council for Early Childhood Development. Retrieved from <http://www.earlyyearsstudy.ca>
- 4 Corter, C., Janmohamed, Z. & Pelletier, J. (2012). *Toronto First Duty: Phase 3 Report*. Toronto, ON: Dr. Eric Jackman Institute of Child Study & Atkinson Centre for Society and Child Development, OISE/University of Toronto. Retrieved from https://www.oise.utoronto.ca/atkinson/About_Us/What_We_Do/Toronto_First_Duty/
- 5 McCain, M., Mustard, F. & McCuaig, K. (2011). *Early Years Study 3. Making Decisions, Taking Action*. Toronto, ON: Margaret and Wallace McCain Family Foundation. Retrieved from <http://www.earlyyearsstudy.ca>
- 6 Alexander, C., Beckman, K., Macdonald, A., Renner, C., & Stewart, M. (2017). *Ready for Life: A Socio-Economic Analysis of Early Childhood Education and Care*. P. 19. Ottawa, ON: The Conference Board of Canada. Retrieved from <https://www.conferenceboard.ca/e-library/abstract.aspx?did=9231&AspxAutoDetectCookieSupport=1>

FIGURES

I.1 THE BENEFITS OF EARLY CHILDHOOD EDUCATION

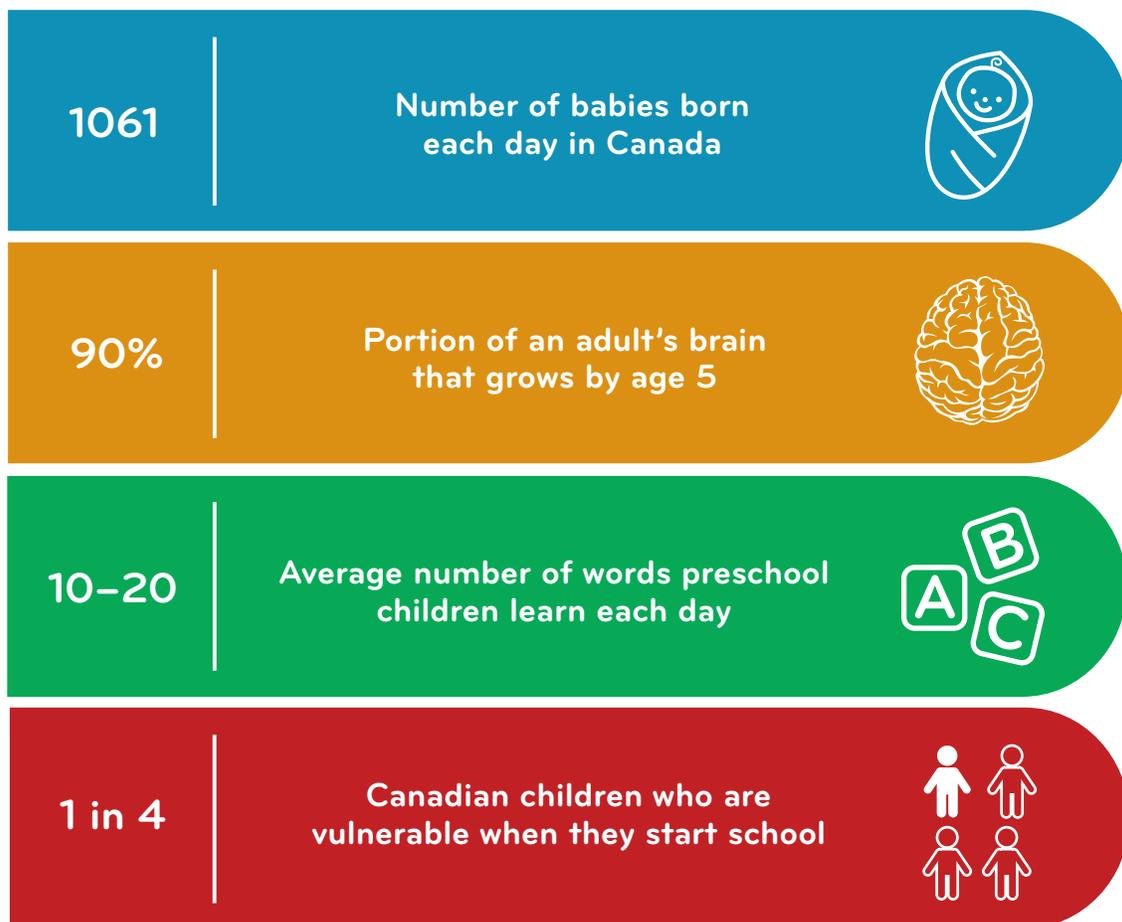
Jenkins, J., Boivin, M., & Akbari, E. (2015). *Empowering the Future: Best Evidence for Investing in Early Childhood*. Retrieved from http://www.ecincanada.ca/media/uploads/canadian_ece_open_letter_2015.pdf

1

AGE 2 TO 5 IS A UNIQUE TIME FOR LEARNING

HOW THE PRESCHOOL BRAIN BUILDS ON THE FOUNDATION FOR LIFELONG LEARNING

BY THE NUMBERS



1

AGE 2 TO 5 IS A UNIQUE TIME FOR LEARNING

HOW THE PRESCHOOL BRAIN BUILDS ON THE FOUNDATION FOR LIFELONG LEARNING

In Canada, most babies are born healthy.¹ Poor birth outcomes – low birthweight, preterm birth, infant mortality – occur in fewer than one in five births. By age 5, however, more than 25 percent of children are vulnerable at school entry.²

Research across disciplines shows that human development is an intricate dance between nature and nurture, genes and environment. Genes listen to the environment and the environment adapts to the genetic blueprint. Nurture, experiences and nutrition interact with genetic predispositions to sculpt the architecture and development of the brain, influencing learning, behaviour and physical and mental health. Although our brain grows to 90 percent of its adult weight by age 5, brain development is lifelong.³

The human brain is a most complex and profound object. It controls our thoughts and unconscious responses from adjusting the lens of our eyes to controlling the beating of our heart. It is the human brain that makes survival possible in virtually any physical or social environment.

THE INFANT BRAIN

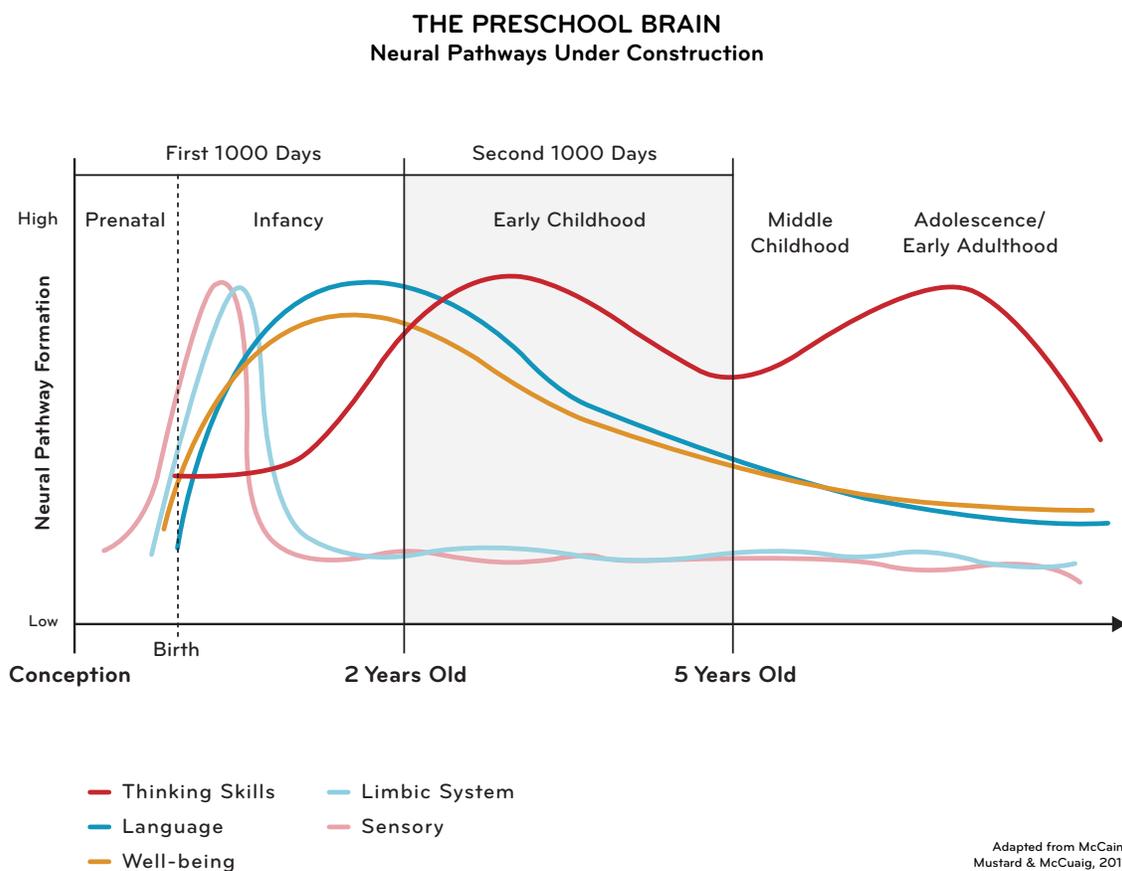
The first 1000 days – from conception to age 2 years – set a foundation for brain development.⁴ Neural networks for seeing, hearing, smelling, tasting and touching begin to form before babies are born and are well established by age 2. Closely connected to the brain's sensory circuits are its limbic system circuits for emotions, responding and connecting with others and managing stress.

The kind of nurturance an infant receives influences their immediate and longer-term ability to respond to and manage stimulation, novelty and challenges. Gentle voices, stroking and caresses, facial expressions and eye-contact regulate infants' capacity for arousal and recovery.

Infants' growing ability to understand language and use it in ways that can be understood by others adds much to their ability to learn and develop social relationships. They use gestures such as pointing and waving good-bye before they can talk. Babbling gradually becomes words that carry meaning. With expressive language, toddlers can tell others what they want or need and learn to use language to manage emotions, behaviour and attention. Similar developmental timelines are seen in infants who are hearing impaired.

THE PRESCHOOL BRAIN

FIGURE 1.1



The first 1000 days may set the foundation, but there is much more to come. During the second 1000 days from about age 2 to 5 years, elaborate, interconnected neural networks come online to support uniquely human capacities.⁵ Neural networks connecting the limbic system in the mid-brain (arousal, motor control) and the prefrontal cortex (planning, decision making, moderating social behaviour) at the front of the brain expand and become more intricate.

Human skills have adapted at a speed not possible solely through evolution. Knowledge and cultural tools are transferred from one generation to the next, building human capacity to transform our environments. As a result, communities and societies create physical tools, such as wheels, cars and telescopes and cognitive tools such as literacy and numeracy systems.

During the preschool years, brain circuits between the prefrontal cortex and other areas of the brain enable children to build the tightly connected well-being, thinking and language skills needed to acquire essential cultural tools for daily living.

WELL-BEING

Well-being is a combination of interconnected physical, social and emotional factors.

PHYSICAL WELL-BEING is about a healthy body that is well-nourished and rested.

It includes regular physical activity, motor and movement skills and growing physical independence. Higher physical activity levels in early life are more likely to extend into later childhood and adulthood.⁶ Physical well-being builds children's confidence, helps to manage anxiety and increases self-esteem.⁷ Physical activity also promotes emotional and social well-being by increasing children's autonomy and independence and their ability to get along with others.⁸

SOCIAL WELL-BEING is about forming relationships, getting along with others and developing a strong sense of self. It also involves taking the perspective of others and feeling and showing empathy with others, including those from diverse backgrounds and cultures. Social well-being encourages independence and autonomy, which is necessary if children are going to test out their physical skills and practise movements that build physical well-being.

EMOTIONAL WELL-BEING is about recognizing and expressing emotions, understanding how emotions influence behaviour and developing a sense of self-confidence. Emotional well-being also increases children's inclinations to be with friends.

THINKING

During the preschool years, humans develop the complex thinking skills that make it possible to pass along knowledge and tools.⁹ Preschool children learn to plan, assess and be aware of their own thinking and learning. They begin to understand the thoughts and motivations of others as distinct from their own. They learn information-processing skills that allow them to find, compare and sequence information. Inquiry skills allow preschool children to ask relevant questions, define problems, plan and predict outcomes and test ideas. Creative thinking skills enable preschool children to extend ideas and suggest hypotheses. They learn to evaluate information and develop criteria to judge their own ideas and the ideas of others. They also develop their capacity for counterfactual thinking – their ability to think about “what if” and contemplate alternatives.¹⁰

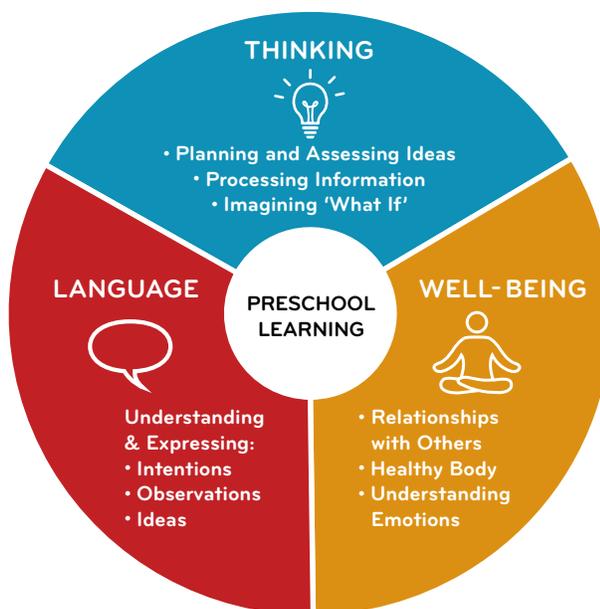
A suite of mental abilities and learning dispositions enables decision-making, problem-solving, imagination, creativity and perspective-taking, which underpin learning in the early years and beyond. Thinking skills are inextricably linked to and influenced by social and emotional well-being. The same biological arousal and recovery pathways that underlie the regulation of attention, are also anchors for thinking skills.

One essential group of thinking skills, often called executive function, includes the ability to remember, solve problems, focus on what is important or meaningful, see and exchange different points of view, make connections among ideas and objects and inhibit distracting thoughts and feelings to achieve a goal and plan ahead.

During early childhood, children's growing capacity to focus supports multiple thinking skills. As thinking skills develop and mature, children engage in symbolic activities such as pretend play, which provide opportunities for children to represent their ideas. Pretend play helps children become learners who are aware of how and what they learn before they enter formal schooling.

FIGURE 1.2

THINKING, WELL-BEING AND LANGUAGE



LANGUAGE

Human infants are primed to use language to communicate with each other and understand informal mathematics. Between birth and entry to formal schooling, children acquire the ability to use language to understand others and express their ideas, intentions, observations and emotions.

Language is a tool that mediates how children manage or regulate their feelings and attention and negotiate their behaviours with others. Language also helps build thinking skills.¹¹ Preschool children's growing ability to think symbolically is accompanied by the ability to communicate and represent feelings, intentions and actions with words.

Language is a powerful vehicle for relating with others. As children's ability to communicate with language increases, so does their capacity to have effective and sustained interactions with other children. They use language to negotiate with the world around them. Vocabulary helps children to understand their own thinking and that of others.¹² Children learn mental verbs such as think, know, guess, want, need, look, see and watch, which help them acquire an understanding of thoughts and beliefs.

Language development consolidates emerging thinking skills and enhances social-emotional well-being during the early years. It also reaches forward to influence learning, behaviour and health through to middle childhood, adolescence and adulthood.

Although literacy and numeracy are essential in most societies today, learning to read, write and calculate numbers is not part of human biology. Instead, once humans established symbolic systems to represent words, each generation passed these cultural tools along to the next. Preschool children acquire the prerequisites for literacy such as vocabulary and a sense of narrative along with print understanding and decoding skills such as letter-sound recognition. Children's informal numerical understanding appears early as they recognize the difference between "a lot" and "a little". Preschool children begin to understand the language of numbers by counting and using numerals.

SELF-REGULATION

Self-regulation refers to the human ability to manage our own thoughts, feelings and behaviours. It allows young children to learn to cope positively with challenges and novel experiences, form secure relationships and get along with others. At the intersection of self-regulation and social-emotional well-being are children's biological arousal and recovery systems for responding to positive and negative stress, challenges and novelty.

Children respond to challenges and stimulation and are aroused or energized – this is essential to learning. Just as important is their ability to recover from arousal and not become over-stimulated. When children are continually aroused, particularly by negative stress, the results can be damaging and carry forward to reduce physical and mental health and learning.¹³

FOURTH INDUSTRIAL REVOLUTION

The first Industrial Revolution used water and steam power to mechanize production. The second used electric power to create mass production. The third used electronics and information technology to automate production. Now a fourth Industrial Revolution building on the third consists of a digital revolution that has been occurring since the middle of the last century.¹⁴ It is characterized by a fusion of technologies that is blurring the lines between the physical, digital and biological spheres.

The fourth Industrial Revolution is bringing major technological change. Digital fluency, knowledge of STEM (science, technology, engineering and mathematics) and literacy are essential. So are the soft skills that enable people to leverage their uniquely human abilities such as getting along with others, adaptability, understanding and taking the perspective of others. All these skills can be grounded in the thinking, well-being and language skills acquired during the preschool years.¹⁵

FIGURE 1.3

TOP TEN 21ST CENTURY COMPETENCIES

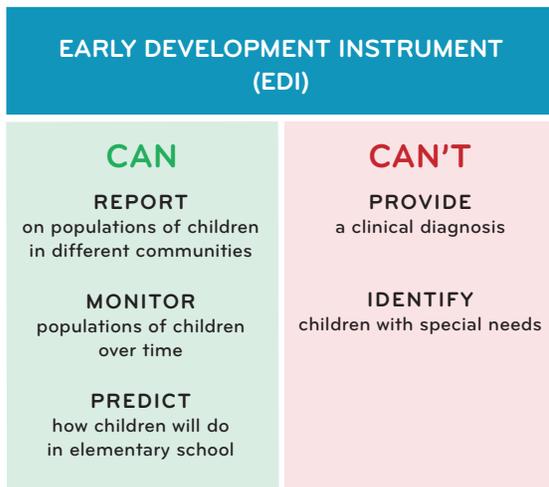


World Economic Forum, 2018

CHILDREN AT AGE 5 YEARS

Children who start school behind their peers often have difficulty acquiring these 21st century skills. Cognitive and language delays can accumulate over a lifetime. Cycles of vulnerability carry forward to subsequent generations with learning, behavioural and health consequences creating barriers to opportunity that are exacerbated by poverty, racism and other forms of marginalization.

FIGURE 1.4



Janus, Enns, Forer et al, 2018

Pan-Canadian assessment using the Early Development Instrument (EDI) shows gaps in children’s early development at age 5 years.¹⁶ Across Canada, more than one in four children is having difficulties.

Not surprisingly, there is a relationship between socioeconomic status and vulnerability. Children in low-income families are more likely to be vulnerable in one or more areas than those in middle-income families, while those in middle-income families are more likely to be vulnerable than those living in high-income families. But income is not a prescription.¹⁷ While children in the lowest quartile may be twice as

likely to be assessed as vulnerable at age 5, most children in low-income families are on-track. Vulnerability is spread more thinly across more affluent families and neighbourhoods. In fact, in total numbers, most of the vulnerable children live in moderate and middle-income families.

Understanding how children are doing in a community, neighbourhood, region or province/territory informs clear and effective policies for children and families. EDI data are used to:

- review public policies,
- consider how they can be changed or improved, and
- identify where additional efforts and resources are needed.

ENDNOTES

- 1 Brownell, M., Roos, N., Franson, R., et al. (2006). Is the Class Half Empty? A Population Based Perspective on Socioeconomic Status and Educational Outcomes. *IRPP Choices*, 12(5). Retrieved from <http://irpp.org/wp-content/uploads/assets/research/family-policy/is-the-class-half-empty/vol12no5.pdf>
- 2 Janus, M., Enns, J., Forer, B., Raos, R., Gaskin, A., Webb, S., Duku, E., Brownell, M., Muhajarine, N., & Guhn, M. (2018). A Pan-Canadian Data Resource for Monitoring Child Developmental Health: The Canadian Neighbourhoods and Early Child Development (CanNECD) Database. *International Journal of Population Data Science*. Retrieved from <https://ijpds.org/article/view/431/957>
- 3 Kolb, B., Whishaw, I. Q., & Teskey G. C. (2019). *An Introduction to Brain and Behavior* (6 ed.): Worth Publishers.
- 4 Kolb, B., Whishaw, I. Q., & Teskey G. C. (2019). *An Introduction to Brain and Behavior* (6 ed.): Worth Publishers.
- 5 Blair, C. (2002). School Readiness: Integrating Cognition and Emotion in a Neurobiological Conceptualization of Children's Functioning at School Entry. *American Psychologist*, 57(2), 111-127. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/11899554>
- 6 Bingham, D. D., Costa, S., Hinkley, T., Shire, K. A., Clemes, S. A., & Barber, S. E. (2016). Physical Activity During the Early Years: A Systematic Review of Correlates and Determinants. *American Journal of Preventive Medicine*, 51(3), 384-402. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/27378255>
- 7 Timmons, B. W., LeBlanc, A. G., Carson, V., Connor Gorber, S., Dillman, C., Janssen, I., & Tremblay, M. S. (2012). Systematic Review of Physical Activity and Health in the Early Years (aged 0–4 years). *Applied Physiology, Nutrition, and Metabolism*, 37. Retrieved from <https://doi.org/10.1139/h2012-070>
- Russell, B. S., Lee, J. O., Spieker, S., & Oxford, M. L. (2016). Parenting and Preschool Self-Regulation as Predictors of Social Emotional Competence in 1st Grade. *Journal of Research in Childhood Education: JRCE*, 30 (2), 153-169. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/PMC5015765/>
- 8 Becker, D. R., McClelland, M. M., Loprinzi, P., & Trost, S. G. (2014). Physical Activity, Self-Regulation, and Early Academic Achievement in Preschool Children. *Early Education & Development*, 25(1), 56-70. Retrieved from <https://doi.org/10.1080/10409289.2013.780505>
- 9 Zelazo, P. D., & Carlson, S. M. (2012). Hot and Cool Executive Function in Childhood and Adolescence: Development and Plasticity. *Child Development Perspectives* 6(4), 354-360. Retrieved from <https://doi.org/10.1111/j.1750-8606.2012.00246.x>
- 10 Taggart, G., Ridley, K., Rudd, P., & Benefield, P. (2005). *Thinking Skills in the Early Years: A Literature Review*. Retrieved from http://eprints.whiterose.ac.uk/73999/1/Thinking_skills_in_early_years.pdf
- 11 Vygotsky, L. S., Cole, M., John-Steiner, V., Scribner, S., & Souberman, E. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Cambridge, MA: Harvard University Press.
- 12 Astington, J. W. (2000). *Minds in the Making: Essays in Honour of David R. Olson*: Wiley.
- 13 McCain, M., Mustard, F., & McCuaig, K. (2011). *Early Years Study 3: Making Decisions, Taking Action*. Toronto, ON: Margaret and Wallace McCain Family Foundation. Retrieved from <http://www.earlyyearsstudy.ca>
- 14 World Economic Forum. (2018). *The Future of Jobs Report*. Geneva, Switzerland: Center for the New Economic and Society. Retrieved from http://www3.weforum.org/docs/WEF_Future_of_Jobs_2018.pdf
- 15 Brooks-Gunn, J., Markman-Pithers, L., & Rouse, C. E. (2016). Starting Early: Introducing the Issue. *The Future of Children*, 26(2), 3-19. Retrieved from <http://www.jstor.org/stable/43940578>
- 16 Janus, M., Enns, J., Forer, B., Raos, R., Gaskin, A., Webb, S., Duku, E., Brownell, M., Muhajarine, N., & Guhn, M. (2018). A Pan-Canadian Data Resource for Monitoring Child Developmental Health: The Canadian Neighbourhoods and Early Child Development (CanNECD) Database. *International Journal of Population Data Science*. Retrieved from <https://ijpds.org/article/view/431/957>
- 17 Lee, D., & Jackson, M. (2017). The Simultaneous Effects of Socioeconomic Disadvantage and Child Health on Children's Cognitive Development. *Demography*, 54(5), 1845-1871. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/28836169/>

BY THE NUMBERS

- 1061 Statista. (2018). *Number of Births in Canada from 2000 to 2018*. Retrieved from <https://www.statista.com/statistics/443051/number-of-births-in-canada/>
- 90% Kolb, B., Whishaw, I. Q., & Teskey G. C. (2019). *An Introduction to Brain and Behavior* (6 ed.): Worth Publishers
- 10 - 20 Biemiller, A. (2009). Research Review: Vocabulary Development (0 – 60 Months). In L.M. Phillips (Ed.), *Handbook of language and literacy development: A Roadmap from 0 – 60 Months*. [online], pp. 1 - 51. London, ON: Canadian Language and Literacy Research Network. Available at: *Handbook of Language and Literacy Development*
- 1 in 4 Janus, M., Enns, J., Forer, B., Raos, R., Gaskin, A., Webb, S., ... Guhn, M. (2018). A Pan-Canadian Data Resource for Monitoring Child Developmental Health: The Canadian Neighbourhoods and Early Child Development (CanNECD) Database. *International Journal of Population Data Science*. Retrieved from <https://ijpds.org/article/view/431/957>

FIGURES

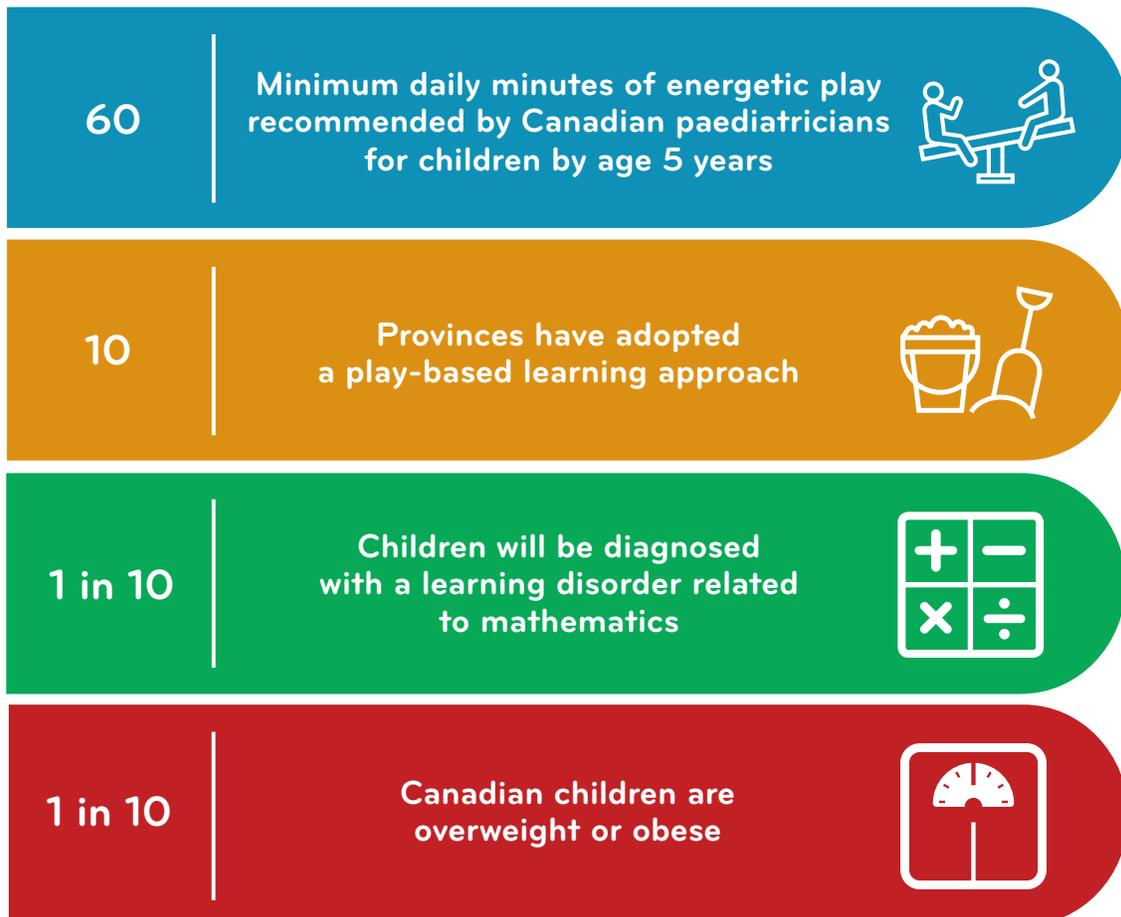
- 1.1 **THE PRESCHOOL BRAIN: NEURAL PATHWAYS UNDER CONSTRUCTION**
Adapted from McCain, M., Mustard, F., & McCuaig, K. (2011). *Early Years Study 3: Making Decisions, Taking Action*. Toronto, ON: Margaret and Wallace McCain Family Foundation. Retrieved from <http://www.earlyyearsstudy.ca>
- 1.2 **THINKING, WELL-BEING AND LANGUAGE**
[no references]
- 1.3 **TOP TEN 21ST CENTURY COMPETENCIES**
World Economic Forum. (2018). *The Future of Jobs Report*. Geneva, Switzerland: Center for the New Economic and Society. Retrieved from http://www3.weforum.org/docs/WEF_Future_of_Jobs_2018.pdf
- 1.4 **EARLY DEVELOPMENT INSTRUMENT (EDI)**
Janus, M., Enns, J., Forer, B., Raos, R., Gaskin, A., Webb, S., ... Guhn, M. (2018). A Pan-Canadian Data Resource for Monitoring Child Developmental Health: The Canadian Neighbourhoods and Early Child Development (CanNECD) Database. *International Journal of Population Data Science*. Retrieved from <https://ijpds.org/article/view/431/957>

2

PLAY WITH PURPOSE

EARLY CHILDHOOD EDUCATION IS PLAY

BY THE NUMBERS



2

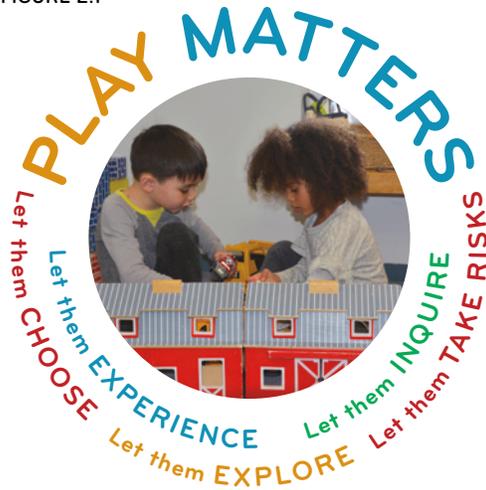
PLAY WITH PURPOSE

EARLY CHILDHOOD EDUCATION IS PLAY

The qualities developed through play are the same qualities required to succeed at school. Children who have strong oral communication skills are confident, are able to make friends and are persistent and creative in completing tasks and solving problems. They are excited to learn and they have pathways set for academic success.¹

Early childhood education (ECE) is not an extension of school; rather it is an extension of play that engages and delights young children. The play of preschool children is intense and powerful. Verbal skills, making friends, persistence, creativity, investigating and problem-solving launch children on positive trajectories for learning. Early childhood education *is* play.

FIGURE 2.1



ECE: THE 21ST CENTURY MEETING PLACE FOR YOUNG CHILDREN

Play with other children offers opportunities for the best possible childhood. Play during the preschool years is intense and powerful. Children take pleasure from being together and friendships matter to them. ECE offers opportunities to make friends through play and shared spaces that are outside of home and family life. It provides a safe place for preschool children to spend time together. As families have fewer children and often live far away from cousins and other relatives, ECE offers children a place where they can build important friendships with each other.²

A lot of learning happens when children negotiate and share with each other in a space designed to accommodate their play. They become friends who share imaginary worlds, discover how things work and create art together. Children benefit from relationships and interactions with each other, which is referred to as the peer effect. These rich settings fuel children's natural curiosity and learning soars.

WHY IS PRESCHOOL PLAY IMPORTANT?

Play builds brains for language, thinking and well-being.³ The changes taking place in the human cortex between the ages of 2 and 7 years make children particularly responsive to available experiences and extended opportunities for play in early childhood education settings.⁴

High quality ECE environments have the following features:

- They are filled with conversations, not only between educators and children, but also between and among children who bring their own experiences and their own repertoire of words. Children begin the journey from oral language to print and numerals in ECE settings. Educators engage in reciprocal (or back and forth) conversations that are meaningful to children and regularly introduce new vocabulary.
- They challenge children to persist and figure things out. Educators pay attention to children's ideas and ask questions that provoke children to explore, experiment and seek out additional information. Children are not born with thinking skills that enable planning and problem-solving. Play experiences provide the time and space to evolve and build those capacities.
- They embed social and emotional learning into daily routines and play experiences. Physically active play is central and takes advantage of indoor and outdoor spaces. Children who play together learn to care about each other and develop empathy. Educators pay attention to their own well-being, model social-emotional skills and are physically active with the children.

FIGURE 2.2



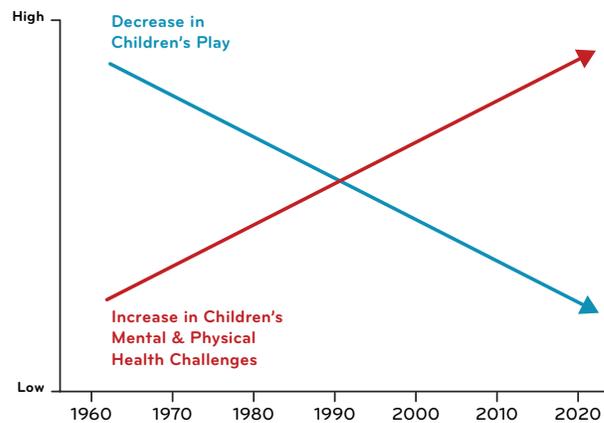
DOCTORS PRESCRIBE PLAY

The Canadian Paediatric Society recommends daily physically active play for all preschool children.

Canadian Paediatric Society, 2015

FIGURE 2.3

DECREASE IN PLAY RESULTS IN INCREASE IN MENTAL AND PHYSICAL HEALTH CHALLENGES



Hewes, 2014; Yogman, Garner, Hutchinson et al, 2018; Garvis & Pendergast, 2017

LESS TIME TO PLAY

Over the past 60 years, the time children spend playing with each other has diminished, particularly time spent in active, free play that is unstructured and led by children.⁵ Over the same time period, doctors, teachers and others have reported increased challenges to young children's and adolescents' well-being.^{6,7} Rates of obesity, anxiety and behavior challenges have increased. Screen time, structured activities and less time outdoors reduce the opportunity for children to engage in play with each other.

THE PLAY – LEARN CONNECTION

Although play is now broadly accepted as a good thing and a way for children to learn, what we mean by 'play' and what constitutes play are often debated. Some champion play-based learning to mean unstructured play opportunities without educator influence or involvement. Adult involvement may therefore be considered as hijacking children's play. Others view play-based learning as an opportunity for educators to structure and direct children's play keeping in mind specific learning goals to be met.

Play is many things. Different types of play provide a variety of opportunities that lead to diverse learning outcomes. Children share the focus of attention in their play with each other. ECE embraces different play-based learning approaches that share a common view of children as active, competent, creative and inquisitive learners.⁸

ECE IS PLAY-BASED LEARNING

Dr. Angela Pyle and her colleagues at University of Toronto have designed the Continuum of Play consisting of five broad categories ranging from child-directed play to play that is structured by educators.⁹

Visit Angela's Play Learn Lab at: <https://www.playlearninglab.ca/resources>

FREE PLAY is organized by children who are actively involved and directing the play. Free play often takes the form of pretend play or physically active play. In pretend play, children establish a shared imagined world. They negotiate, coordinate, resolve disputes, plan together and update the plan as play progresses. As the play unfolds, children will switch between pretend play talk

FIGURE 2.4

CONTINUUM OF PLAY-BASED LEARNING

CHILD DIRECTED	EDUCATOR GUIDED			EDUCATOR DIRECTED
FREE PLAY Children initiate and direct their own play. Educators observe and facilitate the environment.	INQUIRY PLAY Children ask questions and explore ideas. Educators offer resources and nudge children to go deeper.	COLLABORATIVE PLAY Educators co-design play with children and may join their play.	PLAYFUL LEARNING Educators set up experiences that children explore to meet specific learning objectives.	LEARNING GAMES Children follow the rules of prescribed learning activities designed by educators to promote specific skills.
↓	↓	↓	↓	↓
Running, jumping, make-believe, drawing, building with materials, reading	Making instruments with elastic bands, investigating how worms move and simple machines work	Playing restaurant or grocery store with pretend money	Rehearsing and performing a scripted play, doing a scavenger hunt, baking cookies with a large illustrated recipe poster	Matching and number line games, word bingo, rhyming word games, Simon Says, games using dice

Adapted Pyle & Danniels, 2017

and out-of-play or meta-talk to coordinate the play narrative. Sociodramatic play is a more complex form of pretend play. It requires imagining what others are thinking and allows children to try out emotions. Pretend play builds children’s sense of narrative which carries forward to reading comprehension. Children incorporate what they know about tools (such as cutlery and computers) and symbols (such as letters and numerals) that are part of their lives.

Educators closely observe children to learn what they know and can do. This helps educators reflect on children’s abilities and preferences for learning and gain insights into children’s thinking, knowledge and understanding. Educators facilitate the environment by scheduling time that is uninterrupted and allows for the play to evolve. They also ensure there is space conducive to children’s play and the environment has lots of open-ended materials that children can use and adapt as the play evolves.

Children’s free-form physically active play is often wild, exuberant and outdoors. Running, jumping, climbing, chasing and often wrestling or play fighting with each other dominate. Children are testing what is possible and what they can do.

INQUIRY PLAY begins with child-initiated explorations where children are figuring out how something works. Ideas and questions lead to in-depth investigations. Educators seek out entry points in children’s play to extend child-initiated ideas and explorations through questions and provocations. They encourage children to try something new, persist and find alternative solutions.

Children practise problem-solving, critical thinking, innovation and communication skills and abilities. They often think and conceptualize in mathematical and scientific terms.

COLLABORATIVE PLAY is child-directed and educator-guided. It leverages opportunities in free play to insert ideas and information that may extend children’s understanding. Educators bring a specific learning focus into children’s play while respecting the children’s lead in the play. Targeted learning outcomes can be incorporated into children’s play to extend learning. Educators introduce and reinforce specific skills that children are ready to learn and can offer information or provide resources that also extend children’s learning. Children expand their skills and knowledge through the co-design of play with peers and educators.

PLAYFUL LEARNING is planned play that is relevant to children’s interests and abilities and organized around specific learning objectives. Educators focus on targeted skills that can incorporate children’s play narratives and other learning experiences. Educators intentionally set up the environment and learning experience to focus children’s exploration and interactions. Children can evaluate what they have accomplished, set new goals and adapt their learning. This helps cultivate meta-cognition abilities as well as specific skills such as planning and problem-solving.

LEARNING GAMES are prescribed learning experiences that have specific rules and structure. They often introduce and consolidate literacy, mathematical and inquiry skills, specific physical movement skills, social-emotional learning and general knowledge. Educators identify specific learning outcomes that are appropriate for an individual or group of children and prepare structured activities that are typically designed as games. The games incorporate discrete skills that are the building blocks for specific skill areas including literacy, numeracy, functional physical movement or social-emotional learning. Educators can readily assess children’s learning of specific skills and plan follow-up accordingly. When children are ready to acquire a skill, practice and encouragement, as well as quality instruction, help them quickly acquire the particular skill. In addition to mastering specific discrete skills, children practise taking turns and resolving differences with friends while playing structured learning games with each other.

QUALITY MATTERS

Research evidence about the impact of ECE on children’s outcomes points to the essential elements of quality.¹⁰ At the top of the list are the educators themselves.¹¹ Effective educators intentionally guide and construct opportunities to extend and expand children’s learning.¹² They use a repertoire of strategies that include: sustained shared thinking and guided learning; investigation and exploration; modelling and demonstrating; open questioning, speculating and explaining; and explicit or direct instruction.

The learning environment in ECE settings includes time, space, people and things:¹³

TIME: Daily schedules are organized to maximize children’s play with each other and minimize time spent in large groups or in transitions from indoors to outdoors or from one activity to another. Daily schedules feature small groups for much of the day. Routines are predictable and can adapt to accommodate children’s needs.

FIGURE 2.5

EARLY LEARNING ENVIRONMENTS



Nash, 1989

SPACE: Indoor and outdoor play areas are learning places that children can organize. They are not static spaces that are designed for children. The spaces include sand and water tables, creative art and block centres, dress-up nooks, miniature kitchens and soft places to cuddle up with a book or take a nap. Children move things around to create spaces they need for their play. Learning extends outdoors to allow for more expansive play and to introduce new concepts such as climatology and biology.

PEOPLE: ECE learning environments include educators with specialized professional education who pay attention and respond to how children feel and think. Educators use a suite of strategies to maximize play's learning potential, to nurture children's friendships with each other and support their play together.

THINGS: ECE environments include a wide array of materials to explore, manipulate, design, count, measure, rearrange and re-purpose. Some are open-ended, such as blocks and stones, while others are structured such as puzzles. Clay, paint, quality paper and markers, glue, cardboard boxes and tubes are visible and available to be transformed into drawings, paintings and collages or rocket launch pads, houses or barns.

The question of quality is like the question of beauty – often it is in the eye of the beholder. Designing the physical and social environments for children’s play, often *with* children, is subjective and personal. The community context and the values of families plus educators’ experiences influence what matters most to defining how to bring to life the elements of quality in ECE environments.

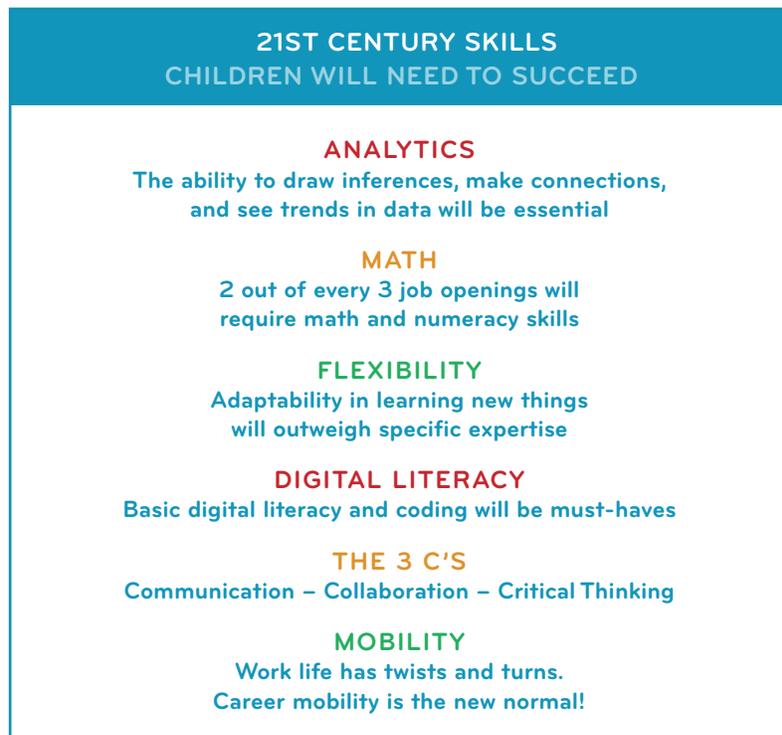
Custodial care in private homes or in centres is not early childhood education. It is care that aims to keep children safe, fed and comforted. Custodial care does not boost children’s language or thinking skills.

Some of the most powerful evidence we have of this are the voices of children who passionately care about their play with each other. Researchers have studied what matters to preschool children about their ECE programs by asking structured questions and having children draw images.¹⁴ Across multiple programs, children overwhelmingly report that they most enjoy play and their friends. Their examples include play that is structured and play that is unstructured.

PLAY IS THE ANCHOR FOR ECE AND LIFELONG LEARNING

Regular play opportunities with other children build a solid foundation for adapting and developing new skills and sets the foundation for lifelong learning. A recent report from Royal Bank of Canada highlights the skills needed for lifelong learning in the 21st century.¹⁵

FIGURE 2.6



Royal Bank of Canada, 2018

ECE is a powerful tool for preparing tomorrow's workforce and shaping a society that must navigate the fourth Industrial Revolution. The impacts of changing technologies and economies require revised education policies beginning in the preschool years. Efforts to re-skill and upskill that build on a solid foundation formed in preschool will be more effective and productive.

Preschool children are exquisitely designed to explore and innovate, to investigate and test hypotheses, to change and create and to learn. The most valuable human accomplishments are possible because all adults were once children who actively engaged in the world around them.¹⁶

Childhood explorations, investigations, creations and representations carry forward into adult pursuits. When children's learning environments are organized to value and encourage these endeavors in the early years and beyond, learning soars.

ENDNOTES

- 1 McCain, M., Mustard, F., & Shanker, S. (2007). *Early Years Study 2: Putting Science into Action*. Toronto, ON. P. 49 Retrieved from <http://www.earlyyearsstudy.ca>
- 2 Theobald, M., Danby, S., Thompson, C., & Thorpe, K. (2017). Friendships. In S. Garvis & D. Pendergast (Eds.), *Health and Wellbeing in Childhood* (pp. 141-160). Cambridge: Cambridge University Press. doi: 10.1017/9781316780107.011
- 3 Case, R., Griffin, S., & Kelly, W. M. (1999). Socioeconomic Gradients in Mathematical Ability and Their Responsiveness to Intervention During Early Childhood. In D. Keating & C. Hertzman (Eds) *Developmental Health and the Wealth of Nations: Social, Biological, and Educational Dynamics*. (pp. 125-149). New York, NY, US: The Guilford Press
- 4 Harari, Y. N. (2014). *Sapiens: A Brief History of Humankind*: London, UK: Signal
- 5 Hewes, J. (2014). Seeking Balance in Motion: The Role of Spontaneous Free Play in Promoting Social and Emotional Health. *Early Childhood Care and Education*. *Children 1*, 280-301. Retrieved from <https://doi.org/10.3390/children1030280>
- 6 Yogman, M., Garner, A., Hutchinson, J., Hirsh-Pasek, K., & Golinkoff, R. M. (2018). The Power of Play: A Pediatric Role in Enhancing Development in Young Children. *Pediatrics*, 142(3), e20182058. DOI: 10.1542/peds.2018-2058
- 7 Garvis, S., & Pendergast, D. (Eds.). (2017). *Health and Wellbeing in Childhood*. (pp. 141-160). Cambridge: Cambridge University Press. Retrieved from doi: 10.1017/9781316780107
- 8 Leseman P. (2012) Preschool and Learning-Related Skills. In: Tremblay RE, Boivin M, Peters RDeV, eds. Melhuish E, topic ed. *Encyclopedia on Early Childhood Development* [online]. Retrieved from <http://www.child-encyclopedia.com/preschool-programs/according-experts/preschool-and-learning-related-skills>
- 9 Pyle, A., & Danniels, E. (2017). A Continuum of Play-Based Learning: The Role of the Teacher in Play- Based Pedagogy and the Fear of Hijacking Play. *Early Education and Development*, 28(3), 274-289 Retrieved from <https://www.tandfonline.com/doi/abs/10.1080/10409289.2016.1220771>
- 10 Bertrand, J. (2012). Preschool Programs: Effective Curriculum. Comments on Melhuish and Barnes, Kagan and Kauerz, Schweinhart, and Leseman. In: Tremblay RE, Boivin M, Peters RDeV, eds. Melhuish E, topic ed. *Encyclopedia on Early Childhood Development* [online]. Retrieved from <http://www.child-encyclopedia.com/sites/default/files/textes-experts/en/824/preschool-programs-effective-curriculum.-comments-on-melhuish-and-barnes-kagan-and-kauerz-schweinhart-and-leseman.pdf>
- 11 Brooks-Gunn, J., Markman-Pithers, L., & Rouse, C. E. (2016). Starting Early: Introducing the Issue. *The Future of Children*, 26(2), 3-19. Retrieved from <http://www.jstor.org/stable/43940578>
- 12 Sylva, K., Melhuish, E., Sammons, P., Siraj, I., & Taggart, B. (2008). *Effective Pre-school and Primary Education 3-11 Project (EPPE 3-11): Final Report from the Primary Phase: Pre-school, School and Family Influences on children's development during Key Stage 2 (7-11)*. London, United Kingdom: Department for Children Schools and Families. Retrieved from <https://ro.uow.edu.au/cgi/viewcontent.cgi?article=3434&context=sspapers>
- 13 Nash, C. (1989). *Learning Environment*. Toronto, ON: Collier Macmillan Canada
- 14 Heagle, K., Timmons, K., Hargreaves, F., & Pelletier, J. (2017). The Social Kindergartener: Comparing Children's Perspectives of Full- and Half-Day Kindergarten. *Early Child Development and Care*, 187(5-6), 978-989

- 15 Royal Bank of Canada. (2018). *Humans Wanted: How Canadian Youth Can Thrive in the Age of Disruption*. Retrieved from https://www.rbc.com/dms/enterprise/futurelaunch/humans-wanted-how-canadian-youth-can-thrive-in-the-age-of-disruption.html?utm_source=vanity&utm_medium=internal&utm_campaign=students_futurelaunch_humanswanted2018&utm_content=rbc_humanswanted
- 16 Gopnik, A. (2016). *The Gardener and the Carpenter: What the New Science of Child Development Tells Us About the Relationship Between Parents and Children*. New York, NY: Farrar, Straus and Giroux

BY THE NUMBERS

- 60 Canadian Paediatric Society. (2015). *How Much for Preschoolers?*. Ottawa, ON: Author Inc. Retrieved from <https://www.cps.ca/en/active-actifs/how-much-for-preschoolers>
- 10 Akbari, E., & McCuaig, K. (2018a). *Early Childhood Education Report 2017 [Online]*. Toronto, ON: Atkinson Centre for Society and Child Development, OISE/University of Toronto. Retrieved from <http://ecereport.ca/en/>
- 1 in 10 Numeracy: Synthesis. In: Tremblay RE, Boivin M, Peters RDeV, eds. Bisanz J, topic ed. (2011). *Encyclopedia on Early Childhood Development* [online]. Retrieved from <http://www.child-encyclopedia.com/numeracy/synthesis>
- 1 in 10 Obesity Canada (2019). *What Causes Obesity?* Edmonton, AB: Author. Retrieved from <https://obesitycanada.ca/understanding-obesity/>

FIGURES

2.1 PLAY MATTERS

[no references]

2.2 DOCTORS PRESCRIBE PLAY

Canadian Pediatric Society (2015). *How Much Time for Preschoolers?* Ottawa, ON: Author Inc. Retrieved from <https://www.cps.ca/en/active-actifs/how-much-for-preschoolers>

2.3 DECREASE IN PLAY RESULTS IN INCREASE IN MENTAL AND PHYSICAL HEALTH CHALLENGES

Hewes, J. (2014). Seeking Balance in Motion: The Role of Spontaneous Free Play in Promoting Social and Emotional Health in Early Childhood Care and Education. *Children* 1, 280-301. Retrieved from <https://doi.org/10.3390/children1030280>

Yogman, M., Garner, A., Hutchinson, J., Hirsh-Pasek, K., & Golinkoff, R. M. (2018). The Power of Play: A Pediatric Role in Enhancing Development in Young Children. *Pediatrics*, 142(3), e20182058. DOI: 10.1542/peds.2018-2058

Garvis, S., & Pendergast, D. (Eds.). (2017). *Health and Wellbeing in Childhood*. (pp. 141-160). Cambridge: Cambridge University Press. Retrieved from doi: 10.1017/9781316780107

2.4 CONTINUUM OF PLAY-BASED LEARNING

Pyle, A., & Danniels, E. (2017). A Continuum of Play-Based Learning: The Role of the Teacher in Play-Based Pedagogy and the Fear of Hijacking Play. *Early Education and Development*, 28(3), 274-289. DOI: 10.1080/10409289.2016.1220771

2.5 EARLY LEARNING ENVIRONMENTS

Nash, C. (1989). *Learning Environment*. Toronto, ON: Collier Macmillan Canada

2.6 21ST CENTURY SKILLS CHILDREN WILL NEED TO SUCCEED

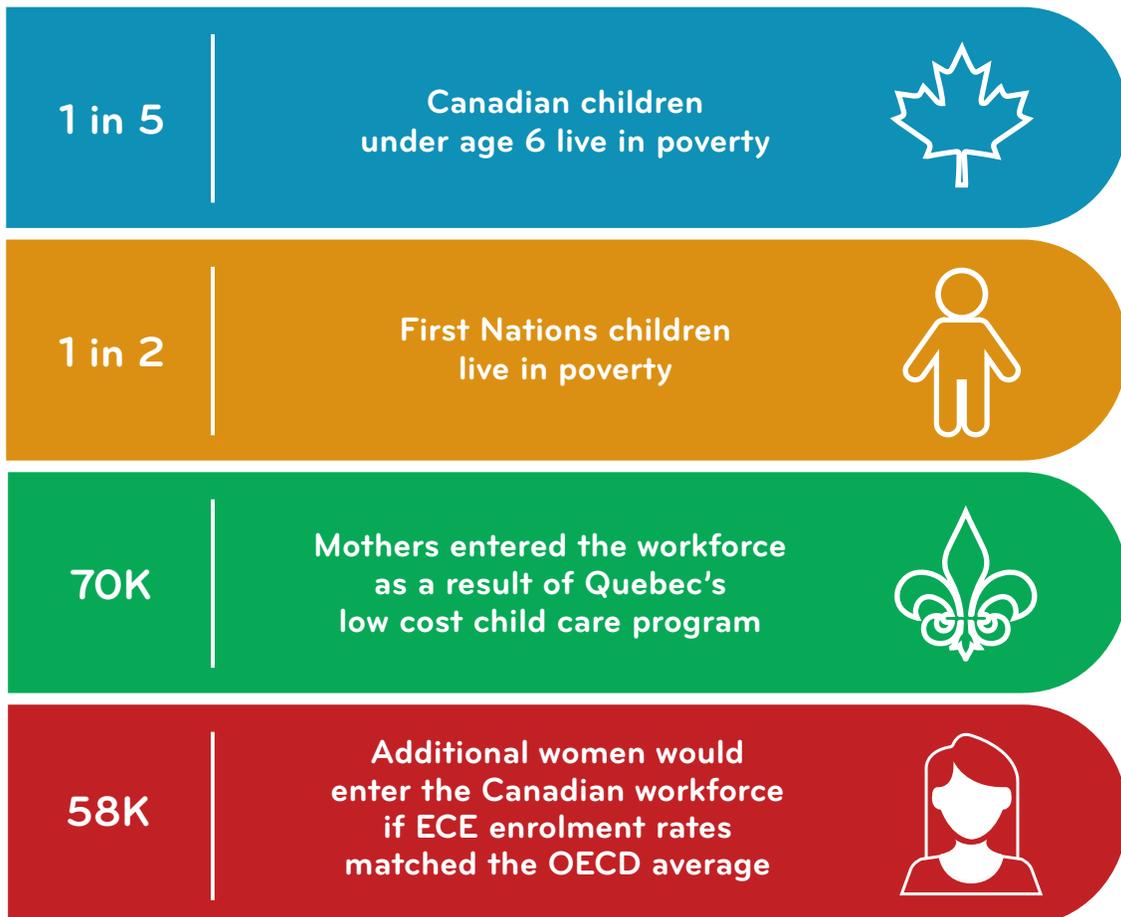
Royal Bank of Canada. (2018). *Humans Wanted: How Canadian Youth Can Thrive in the Age of Disruption*. Toronto, ON: Author Inc. Retrieved from https://www.rbc.com/dms/enterprise/futurelaunch/humans-wanted-how-canadian-youth-can-thrive-in-the-age-of-disruption.html?utm_source=vanity&utm_medium=internal&utm_campaign=students_futurelaunch_humanswanted2018&utm_content=rbc_humanswanted

3

A STEP UP FOR ALL

ECE HELPS CHILDREN, FAMILIES AND COMMUNITIES THRIVE

BY THE NUMBERS

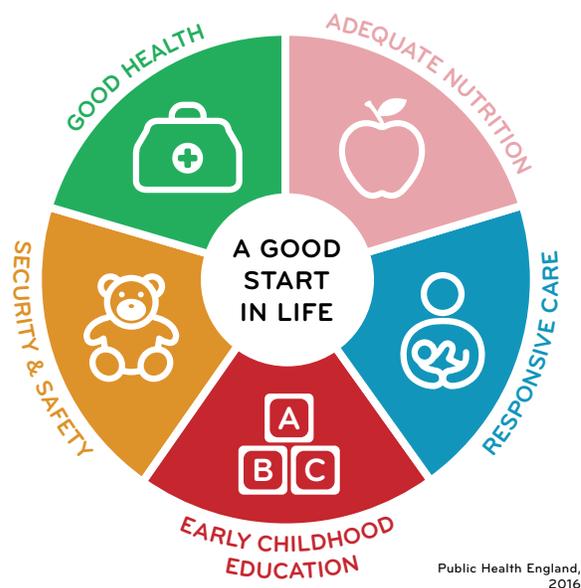


3

A STEP UP FOR ALL

ECE HELPS CHILDREN, FAMILIES AND COMMUNITIES THRIVE

FIGURE 3.1



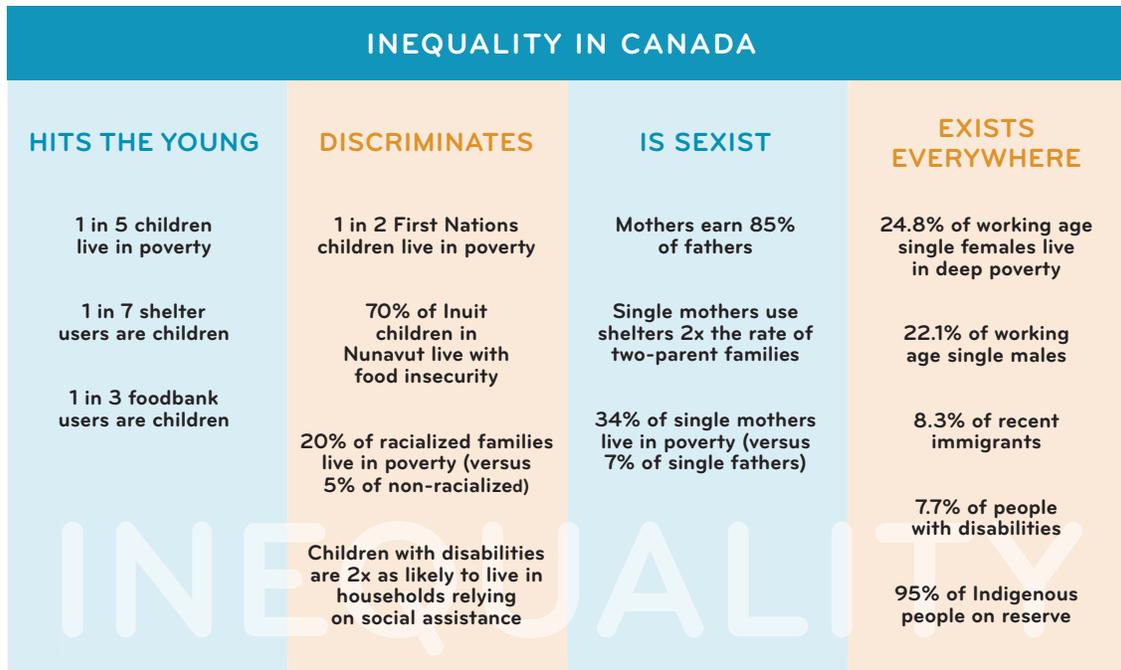
Children flourish in environments where they are loved, nurtured and stimulated. Parents strive to provide the best for their children, but many struggle to meet even the most basic needs. Poverty, hunger, inadequate housing and violence can undermine children's development and life prospects. Thankfully, early education can alter children's life chances. When organized to facilitate parents' work, it reduces gender and income inequality. Early education

also helps children develop better cognitive abilities with improved academic and social outcomes, higher graduation rates, greater earnings and more successful relationships as adults.

INEQUALITY IN CANADA

Compared to other wealthy countries, the rate of inequality in Canada is high and the response lacking. UNICEF rated Canada 17th out of 29 wealthy countries due to the number of children living in poverty and 26th out of 35 wealthy countries for overall child inequality.¹

FIGURE 3.2



1.9 million Canadians were in deep income poverty in 2016

Campaign 2000, 2016 Employment and Social Development Canada, 2018 Canadian Association for Community Living, 2017 Food Bank Canada, 2018 Homeless Hub, 2018 Proof, 2018 Statistics Canada Census, 2017, 2018 UNICEF Canada, 2013

INEQUALITY CHALLENGES US ALL

Inequality is dangerous. It can make citizens distrust governments, institutions, employers and each other. It undermines the fairness of democratic institutions when citizens perceive that politicians favour corporations and the wealthy at their expense. Citizens become frustrated when those with money have preferable access to bank loans to enhance their housing, business or educational opportunities, while they are turned away or charged usury rates. Social cohesion breaks down as people resent paying for the social good through their taxes when they sense others unfairly benefit.

Inequity is a growing problem in Canada. Wealthy Canadians saw their incomes grow sharply over the past decade, while the incomes of the bottom 60 percent stagnated.² In fact, Canada ranked 20th among 34 wealthy nations in managing income inequality.³

The figures are stark. The median wage rose 5.9 percent between 2005 (\$31,798) and 2015 (\$33,684). Meanwhile, the lowest 10 percent of earners saw their incomes fall by 10.5 percent (\$2,961). Yet in one year alone, 2014 to 2015, earnings for the top 0.1 percent grew by 33 percent to \$3.6 million.⁴

RISKS FACTORS FOR INEQUALITY

Inequality among families with children is connected to parental employment, health and education, marital status, family size, race, immigration status and community. The age of children in the family and childhood health are also contributing factors.

Marital status and maternal employment are major contributors to family income. More than a third of children in lone-parent families live in poverty (34 percent) compared to 10.3 percent in two-parent families with one earner and 3 percent in two-parent/two-earner families.⁵

Family size adds to risk factors. Two-parent families with three or more children younger than age 17 are almost twice as likely to be poor (16.4 percent) as families with one child (9 percent). For lone-parent families, the poverty rate jumps from 30 percent for families with one child to 55 percent for those with three or more children.⁶

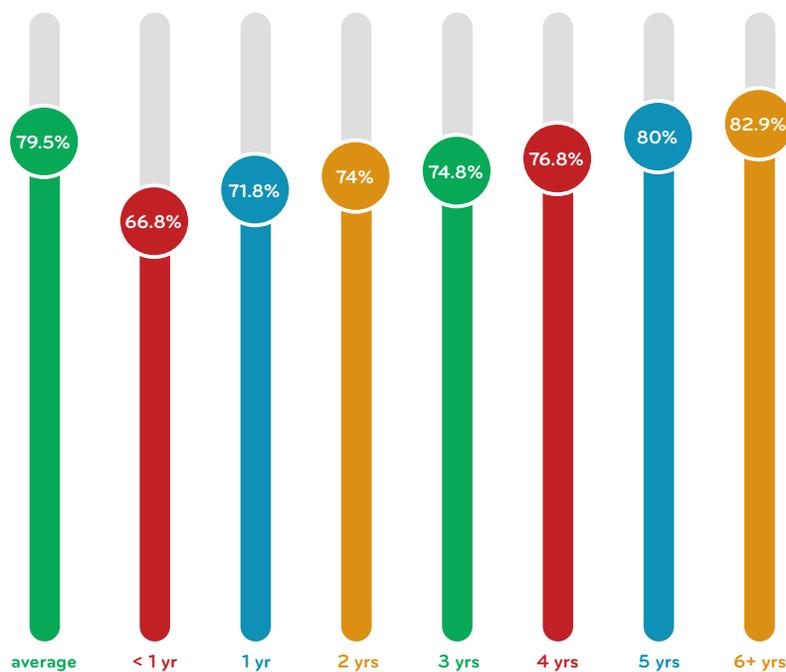
AGE OF CHILDREN, EDUCATION LEVELS IMPACT WOMEN'S EMPLOYMENT

More women in the workforce reduces the equity gap, but women's employment and earnings are heavily influenced by the presence of children in the household. Lone parenthood negatively affects the likelihood of employment. Women lead four out of five lone-parent families, and while nearly 72 percent are in the workforce, this is below the 75.8 percent rate for mothers in two-parent families.⁷

In addition, the younger the child, the less likely it is that mothers are employed. The average hourly earnings of mothers who do work outside the home are generally 15 percent less than for fathers. Among all working women, mothers earn 12 percent less than their childless counterparts.⁸

FIGURE 3.3

MATERNAL LABOUR FORCE PARTICIPATION BY AGE OF YOUNGEST CHILD



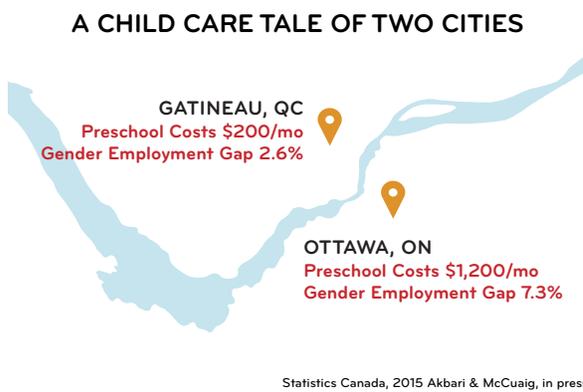
Akbari & McCuaig, in press

Educational attainment has an impact on women’s employment. The difference in employment rates between women and men is 18.2 percentage points among those with less than high school education (49.0 percent vs. 67.2 percent, respectively), but a gap exists even for university graduates (83.1 percent vs. 89.9 percent).⁹ Stay-at-home mothers tend to be younger than and have lower levels of education and more children than most working mothers.

MATERNAL EMPLOYMENT AND THE COST OF CHILD CARE

Toronto and Vancouver are the two cities with the highest child care costs in Canada. The gap between the percentage of men who work and women who work is also larger in these cities.

FIGURE 3.4



In Toronto, 12.6 percent more men than women are employed, while in Vancouver 11.8 percent more men work than women, compared to the national average difference of 7.3 percent.¹⁰

The dampening effect of child care costs on maternal employment is also evident in the nation’s capital. In Ottawa, preschool child care costs \$1,200 per month and the gender employment gap is 7.3 percent. Directly across the river in Gatineau, Quebec, preschool child care costs less than \$200 per month. The

gender employment gap is 2.6 percent and a higher percentage of women work in Gatineau compared to Ottawa.¹¹

The impact of low-cost child care can be found even in remote areas. Where Quebec’s program was found to have a positive impact on female labour force participation in general, the availability of child care was also found to increase the workforce participation of Inuit women living in northern and remote areas of the province. In addition, Quebec’s low-cost child care was associated with improvements in high school graduation rates and increased participation of men in child care. Importantly, formal child care had no negative effects on the ability of children to speak Inuktitut.¹²

FIGURE 3.5

PIERRE FORTIN, ECONOMIST

“ The impact of low-cost child care on women’s labour force participation in Quebec has been huge. Young women’s labour force participation in Quebec is the highest worldwide now — 86 percent in 2017, exceeding Switzerland and Sweden — two countries with generous leave packages and high rates of workplace equality. ”

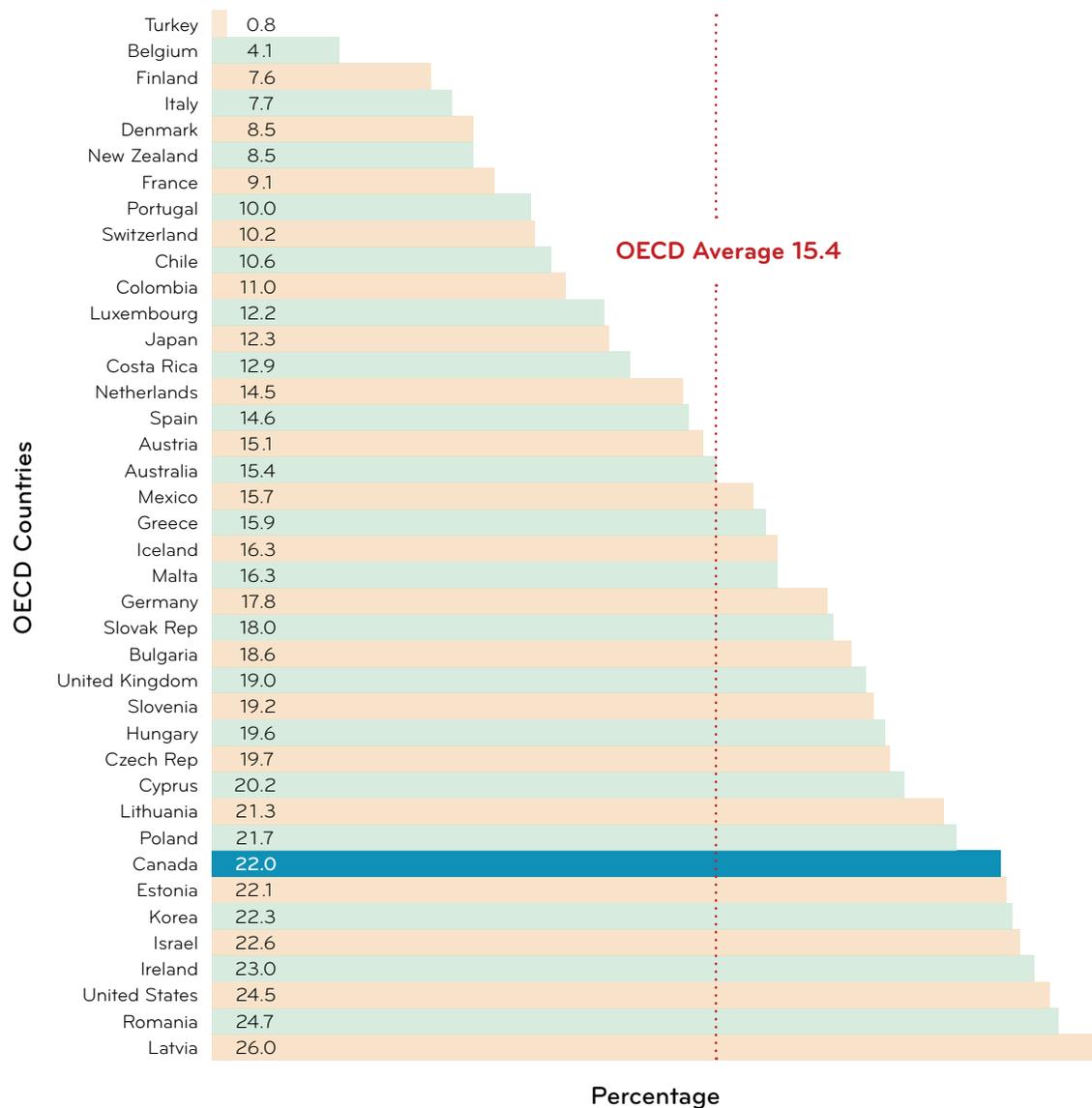


RISE IN LOW-PAID EMPLOYMENT

Caregiving restricts women’s access to the workforce contributing to their preponderance in contract, temporary or part-time jobs. The groups most affected by precarious work are women newcomers to Canada, women with disabilities and Indigenous and racialized women. These factors, combined with the absence of affordable ECE, contribute to gender and income inequality. Among developed nations, Canada has one of the highest rates of low-paid employment.¹³

FIGURE 3.6

CANADA DOES NOT FARE WELL COMPARED TO OTHER OECD COUNTRIES IN RATES OF LOW WAGE EMPLOYMENT



Incidence of low wage refers to the share of workers earning less than 2/3 of median earnings

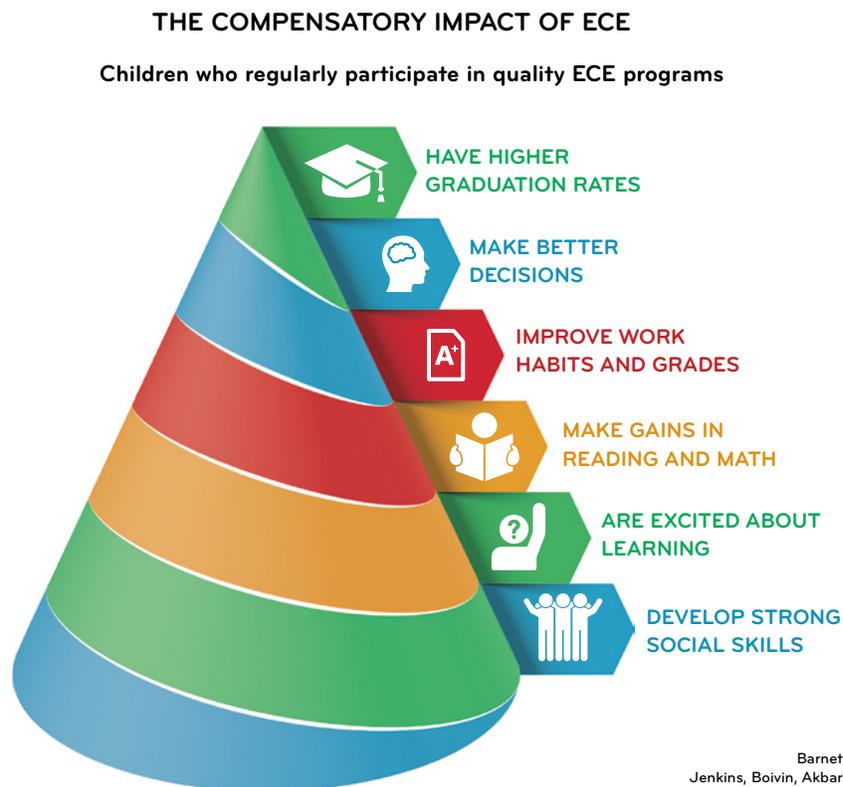
OECD, October, 2019

THE IMPACT OF ECE ON EQUITY

Families with few opportunities often find it difficult to set their children up for success. As a result, poverty is passed on, and the entire country develops more slowly. Quality early education, complemented by quality schooling, can break this cycle.

When children from all socioeconomic backgrounds receive equal educational opportunities, inequities are reduced. This begins with quality ECE. Children who are prepared for school create a more productive learning environment for teachers and other students alike. The most enduring benefits are derived from what children learn from each other—how to be patient, to share, to consider the feelings of others, to listen and to contribute. The nurturing, stimulation and social connections provided by quality ECE complements the development of children living in advantaged homes and compensates children from disadvantaged backgrounds.

FIGURE 3.7



A large UK study found that ECE quality has a larger effect for children whose parents have lower rates of education compared to those with better-educated parents. Beneficial effects were found in both math and English scores suggesting that high-quality ECE can help narrow the equity gap in children’s achievement. High-quality ECE was also linked to better self-regulation and pro-social behaviour at age 16.¹⁴

Numerous studies document how expanding early education and care would provide sizable benefits, particularly in terms of reducing gender and income inequality.

Most 5-year-olds in Canada have access to ECE through kindergarten programs, but enrolment for children younger than 5 years of age falls substantially below the Organisation for Economic Co-operation and Development (OECD) average. For children between the ages of 2 and 4 years, about half attend an ECE program. This is significantly below the OECD average of three out of four children and far behind countries such as France and Belgium, where enrolment exceeds 90 percent.¹⁵

According to a report by the Conference Board of Canada, increasing ECE enrolment rates to match the OECD average would allow an additional 58,000 women to enter the workforce. If enrolment reached the top-performing levels in the OECD, an additional 76,500 women could join the workforce. Their earnings would lift an estimated 23,000 Canadian families—many of them single-parent families—out of poverty.¹⁶ Similarly, low-cost child care has moved Quebec to the forefront in women’s labour force participation, outranking even the Nordic countries.¹⁷

ECE IS A GAME CHANGER

High-quality ECE is generally thought to accelerate cognitive and language development in the short term, but research has found its effects can be detected even in late secondary school. An analysis of 22 experimental studies found that ECE reduces special education placement by 8.1 percent, lessens grade repetition by 8.3 percent and increases high school graduation rates by 11.4 percent.¹⁸ These results support ECE’s value in reducing education-related expenditures and promoting child well-being.¹⁹

FIGURE 3.8

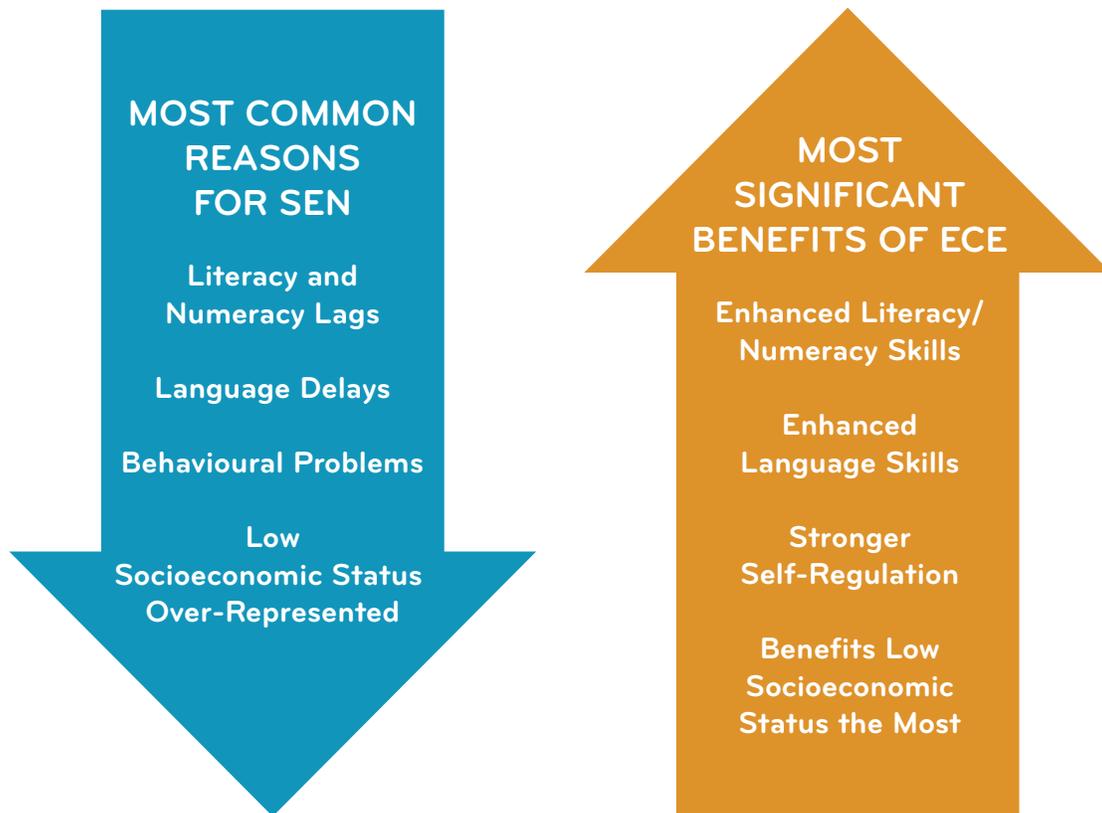
IMPACT OF ECE PARTICIPATION AT SECONDARY SCHOOL

	No ECE	With ECE
Special Education	28.3%	20.3%
Grade Retention	30.6%	22.7%
High School Graduation	62.6%	74.0%

McCoy, Yoshikawa, Ziol-Guest et al, 2017

FIGURE 3.9

ECE ADDRESSES SPECIAL EDUCATION NEEDS (SEN)



Philpott, Young, Maich et al, 2019

THE ISSUE OF FADE OUT

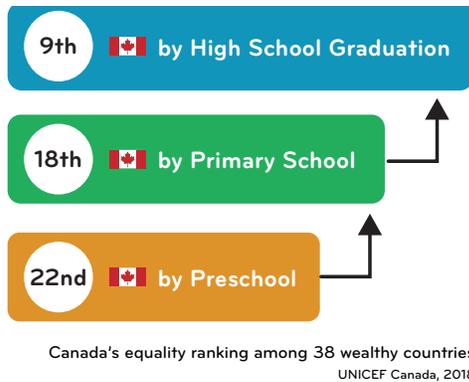
Many studies of early childhood interventions have found that gains achieved in early childhood are reduced or eliminated over time, referred to as “fade out”. Such studies have focused on academic achievement as an ultimate outcome. A more comprehensive understanding has emerged of the skills and behaviours that influence children’s socio-emotional as well as cognitive competencies. These self-regulatory skills are necessary for children’s successful transition into primary school and are relevant for both academic and behavioural outcomes into early adulthood.²⁰

For the benefits of preschool to persist, it is necessary to consider the quality of the programs as well as the school environment. Instruction in the early elementary grades is typically not well-aligned with ECE and therefore does not build on competencies developed in preschool. However, when interventions to improve kindergarten and first-grade teaching are introduced, preschool’s benefits are more persistent.²¹

Early education is a significant tool in reducing the opportunity and achievement gaps, but it is not enough. Fade out emphasizes the importance of improving the learning environment in preschool settings and ensuring that elementary schools build on those gains.

FIGURE 3.10

CANADA'S PUBLIC EDUCATION SYSTEM IS PULLING ITS WEIGHT The Equalizing Effect of Canada's Schools



CANADA'S PUBLIC EDUCATION SYSTEM HELPS YOUNG PEOPLE ACHIEVE

Many children experience their early years in poor environments without sufficient nurturing or stimulation. On average, 25 percent of Canadian children start school with wide gaps in their skills. Canada ranks 22 out of 38 countries on preschool access before formal schooling begins. But between primary and secondary school, the gap gets smaller compared to other wealthy countries, and by the end of secondary school most young people are thinking about further education. Children in immigrant families tend to do well in Canadian schools. But some children dominate the bottom of the education gap, including boys, Indigenous children and children with disabilities.²²

ECE PROMOTES A HEALTHY FAMILY ENVIRONMENT

Ideally, we learn unconditional love, an understanding of right from wrong, empathy and mutual respect from our family. These qualities enable us to engage positively at school, at work and in society. However, it is more difficult for parents to meet their children's needs when they are struggling financially or confronting domestic or neighbourhood violence. Children living in these circumstances are more at risk for health, learning or behaviour challenges.

A quarter of Canadian children under the age of 18 experience family breakdown; the impact is particularly acute for the most disadvantaged families. Family formation affects the general well-being and outcomes of children. In addition to social and emotional disruption, family breakdown has significant economic impacts. A report from the Parliament of Canada lists marital breakdown as a key risk factor for homelessness. Specifically, 40 percent of women experience a drop in their standard of living following divorce, and they are three times as likely to live in poverty.²³ For Indigenous women, marriage to a non-Indigenous man resulted in a loss of status rights. On marital breakdown they can lose the right to live in their home communities putting them at acute risk of homelessness.²⁴

In times of family chaos, quality ECE provides a haven for young children and provides parents with time to attend to the disruptions inherent in marital breakdown.

ECE SUPPORTS DEMOCRATIC VALUES

Early childhood is an opportune time to build more equal and inclusive societies by breaking cycles of exclusion. When children are exposed to principles and attitudes that support democratic values, gender equality and respect for the environment, they are more likely to hold these beliefs in later stages in life.

Early education programs can help strengthen solidarity within communities across class, ethnic and racial lines. Diversity is a key part of the early learning context. Consequently, ECE programs can be a central point for newcomer and refugee families making children and families part of civil society and helping build social cohesion at the community level.

ECE'S DOUBLE DIVIDEND

When early education is organized to support today's workforce, it creates a double dividend as it enhances the capacity of the next generation of workers. Some of the benefits accrue immediately such as the earnings of working mothers adding to the economy. Medium- and longer-term benefits are realized as children do better in school, graduate and make their own economic and social contributions.

Research has quantified the benefits of public spending on early education. A 2017 study by the Conference Board of Canada found that every \$1 spent on expanding ECE enrolment for children yields close to \$6 in economic benefits.²⁵ Other studies have shown similar benefits. An analysis of Quebec's low-cost child care found an additional 70,000 mothers entered the workforce as a result of the program. Their work has generated enough new taxes and reduced expenditures on social benefits to cover the costs of the entire program.²⁶ Several other studies have reached similar conclusions.

FIGURE 3.11

ECE PAYS BIG DIVIDENDS
Numerous made-in-Canada studies indicate there are economic benefits to investing in ECE

Benefits and Costs of Good Child Care (1998) Cleveland and Krashinsky	\$1 spent = \$2 in benefits
Northern Childcare: Childcare as Economic and Social Development (2007) Prentice	\$1 spent = \$1.60 in benefits
Better Beginnings, Better Futures Project (2010) Peters, Bradshaw, Petruka, Nelson, Harry, Craig, Arnold	\$1 spent = \$2 in benefits
Economic Consequences of Quebec's Educational Childcare Policy (2011) Fortin, Godbout, St-Cerny	\$1 spent = \$1.50 in benefits
Economic Impact Analysis of Early Learning and Care for Children (2012) Fairholm	\$1 spent = \$2.50 in benefits
Ready for Life: A Socio-Economic Analysis of Early Childhood Education and Care (2017) Alexander, Sackman, Macdonald, Renner, Stewart	\$1 Spent = \$6 in benefits

ENDNOTES

- 1 Campaign 2000 (2016). A Road Map to Eradicate Child and Family Poverty. Retrieved from <https://campaign2000.ca/wp-content/uploads/2016/11/Campaign2000NationalReportCard2016Eng.pdf>
- 2 Younglai, R & Yukselir, M. (2017). Who are Canada's 1 Per Cent and Highest Paid Workers? *Globe and Mail* November 12, 2017. Retrieved from <https://www.theglobeandmail.com/news/canada-1-per-cent-highest-paid-workers-compare/article36383159/>
- 3 OECD. (nd) Income Inequality. *Data*. OECD Social and Welfare Statistics: Income distribution. Retrieved from <https://data.oecd.org/inequality/income-inequality.htm#indicator-chart>
- 4 Younglai, R & Yukselir, M. (2017). Who are Canada's 1 Per Cent and Highest Paid Workers? *Globe and Mail* November 12, 2017. Retrieved from <https://www.theglobeandmail.com/news/canada-1-per-cent-highest-paid-workers-compare/article36383159/>
- 5 Government of Canada. (n.d.) Table 11-10-0135-01 *Low Income Statistics by Age, Sex and Economic Family Type*. Retrieved from <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1110013501>
- 6 Government of Canada. (2017, September 13). *Census in Brief. Children Living in Low Income Households*. Statistics Canada. Retrieved from <https://www12.statcan.gc.ca/census-recensement/2016/as-sa/98-200-x/2016012/98-200-x2016012-eng.cfm>
- 7 Moysler, M. (2017). *Women and Paid Work*. Government of Canada Retrieved from <https://www150.statcan.gc.ca/n1/pub/89-503-x/2015001/article/14694-eng.htm>
- 8 Moysler, M. (2017). *Women and Paid Work*. Government of Canada Retrieved from <https://www150.statcan.gc.ca/n1/pub/89-503-x/2015001/article/14694-eng.htm>
- 9 Moysler, M. (2017). *Women and Paid Work*. Government of Canada Retrieved from <https://www150.statcan.gc.ca/n1/pub/89-503-x/2015001/article/14694-eng.htm>
- 10 Moysler, M. (2017). *Women and Paid Work*. Government of Canada Retrieved from <https://www150.statcan.gc.ca/n1/pub/89-503-x/2015001/article/14694-eng.htm>
- 11 Statistics Canada. (2015). *Employment Rate by Sex, Province and Census Metropolitan Area; and Median Monthly Childcare Fees for Selected Cities*. Government of Canada. Retrieved from <https://www150.statcan.gc.ca/n1/pub/89-503-x/2015001/article/14694/tbl/tbl01-eng.htm>
- 12 Feir, D. & Thomas, J. (2019, March 27) *The Introduction of Formal Childcare Services in Inuit Communities and Labor Force Outcomes*. Center for Indian Country Development, Federal Reserve Bank of Minneapolis. Retrieved from <https://www.minneapolisfed.org/indiancountry/research-and-articles/cicd-working-paper-series/the-introduction-of-formal-childcare-services-in-inuit-communities-and-labor-force-outcomes>
- 13 OECD. (2019). *Wage Levels (Indicator)*. OECD Publishing, Paris. <https://data.oecd.org/earnwage/wage-levels.htm>
- 14 Taggart, B., Sylva, K., Melhuish, E., Sammons, P., & Siraj, I. (2015). *Effective Pre-School, Primary and Secondary Education Project (EPPSE 3-16+): How Pre-School Influences Children and Young People's Attainment and Developmental Outcomes over Time*. Government of the United Kingdom. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/455670/RB455_Effective_pre-school_primary_and_secondary_education_project.pdf.pdf
- 15 Alexander, C., Beckman, K., Macdonald, A., Renner, C., & Stewart, M. (2017). *Ready for Life: A Socio-Economic Analysis of Early Childhood Education and Care*. Ottawa, ON: Conference Board of Canada Retrieved from <https://www.conferenceboard.ca/e-library/abstract.aspx?did=9231>
- 16 Alexander, C., Beckman, K., Macdonald, A., Renner, C., & Stewart, M. (2017). *Ready for Life: A Socio-Economic Analysis of Early Childhood Education and Care*. Ottawa, ON: Conference Board of Canada. Retrieved from <https://www.conferenceboard.ca/e-library/abstract.aspx?did=9231>
- 17 Fortin, P. (2019). *Quebec Childcare at 20: What Have We Learned?* Paper presented at a seminar organized by the Centre for the Study of Living Standards at the Rideau Club, Ottawa, ON April 24, 2019.
- 18 McCoy, D. C., Yoshikawa, H., Ziol-Guest, K. M., Duncan, G. J., Schindler, H. S., Magnuson, K., & Shonkoff, J. P. (2017). Impacts of Early Childhood Education on Medium- and Long-Term Educational Outcomes. *Educational Researcher*, 46(8), 474-487. Retrieved from <https://journals.sagepub.com/doi/abs/10.3102/0013189X17737739>.
- 19 Philpott, D., Young, G., Maich, K., Penney, S., & Butler, E. (2019) *The Pre-emptive Nature of Quality Early Child Education on Special Needs in Children*. Research Library, Memorial University Newfoundland <https://research.library.mun.ca/13571/>
- 20 Whitebread, D. & Basilio, M. (2011). The Emergence and Early Development of Self-Regulation in Young Children. *Profesorado: Journal of Curriculum and Teacher Education*. 16. 15-34. Retrieved from https://www.researchgate.net/publication/272828327_The_emergence_and_early_development_of_self-regulation_in_young_children
- 21 Jade, J., Watts, T.W., Magnuson, K., Gershoff, D., Clements, D. H., Sarama, J., & Duncatn, G. (2016, March). Do High Quality Kindergarten and First Grade Classrooms Mitigate Preschool Fadeout? A Working Paper. *Irvine Network on Intervention in Development*. Retrieved from http://www.inid.gse.uci.edu/files/2011/03/Jenkins_et_al_Fadeout_March2016.pdf
- 22 UNICEF Canada. (2018). *UNICEF Report Card 15: Canadian Companion, The Equalizer: How Education Creates Fairness for Children in Canada*. UNICEF Canada, Toronto. Retrieved from <https://www.unicef.ca/en/unicef-report-card-15>

- 23 Sinha, M. (2014b). *Parenting and Child Support After Separation or Divorce*. Minister of Industry. Retrieved from <https://www150.statcan.gc.ca/n1/en/pub/89-652-x/89-652-x2014001-eng.pdf?st=Ax9H3MrR>
- 24 Indian and Northern Affairs (2003). *After Marriage Breakdown: Information on the On-Reserve Matrimonial Home*. Retrieved from <https://www.homelesshub.ca/resource/after-marriage-breakdown-information-reserve-matrimonial-home#>
- 25 Alexander, C., Beckman, K., Macdonald, A., Renner, C., & Stewart, M. (2017). *Ready for Life: A Socio-Economic Analysis of Early Childhood Education and Care*. Ottawa, ON: Conference Board of Canada. Retrieved from: <https://www.conferenceboard.ca/e-library/abstract.aspx?did=9231>
- 26 Fortin, P., Godbout, L., & St-Cerny, S. (2012). *Impact of Quebec's Universal Low-Fee Childcare Program on Female Labour Force Participation, Domestic Income, and Government Budgets*. Atkinson Centre. OISE, University of Toronto. Retrieved from https://www.oise.utoronto.ca/atkinson/UserFiles/File/News/Fortin-Godbout-St_Cerny_eng.pdf

BY THE NUMBERS

- 1 in 5 Campaign 2000 (2016) *A Road Map to Eradicate Child and Family Poverty*. Retrieved from <https://campaign2000.ca/wp-content/uploads/2016/11/Campaign2000NationalReportCard2016Eng.pdf>
- 1 in 2 Campaign 2000 (2016) *A Road Map to Eradicate Child and Family Poverty*. Retrieved from <https://campaign2000.ca/wp-content/uploads/2016/11/Campaign2000NationalReportCard2016Eng.pdf>
- 70K Fortin, P. (2019) *Quebec Childcare at 20: What Have We Learned?* Paper presented at a seminar organized by the Centre for the Study of Living Standards at the Rideau Club, Ottawa, April 24
- 58K Alexander, C., Beckman, K., Macdonald, A., Renner, C., & Stewart, M. (2017) *Ready for Life: A Socio-Economic Analysis of Early Childhood Education and Care*. Ottawa. Retrieved from <https://www.conferenceboard.ca/e-library/abstract.aspx?did=9231>

FIGURES

3.1 A GOOD START IN LIFE

Public Health England. (2016) *Health Matters: Giving Every Child the Best Start in Life*. Retrieved from <https://www.gov.uk/government/publications/health-matters-giving-every-child-the-best-start-in-life/health-matters-giving-every-child-the-best-start-in-life>

3.2 INEQUALITY IN CANADA

Campaign 2000 (2016) *A Road Map to Eradicate Child and Family Poverty*. Retrieved from <https://campaign2000.ca/wp-content/uploads/2016/11/Campaign2000NationalReportCard2016Eng.pdf>

Employment and Social Development Canada (2018a) *Opportunity For All – Canada's First Poverty Reduction Strategy*. Retrieved from <https://www.canada.ca/en/employment-social-development/programs/poverty-reduction/reports/strategy.html#h2.13>

Canadian Association for Community Living. (2017). Retrieved from <https://cacl.ca>

Food Banks Canada (2018) *Hunger Count*. Retrieved from <https://www.foodbankscanada.ca/HungerCount-Archives.aspx>

Homeless Hub (2018). *About Homelessness: Supporting Communities to Prevent and End Homelessness, Poverty*. Retrieved from <https://homelesshub.ca/about-homelessness/education-training-employment/poverty>

Proof: Food Insecurity Policy Research (2018). *Household Food Insecurity in Canada*. Retrieved from <http://proof.utoronto.ca/food-insecurity/>

Statistics Canada (2017). *Census in Brief: Children Living in Low-Income Households*. Retrieved from <https://www12.statcan.gc.ca/census-recensement/2016/as-sa/98-200-x/2016012/98-200-x2016012-eng.cfm>

Statistics Canada (2018). *Persons In Low-Income (After-Tax Low Income Measure), 2012 to 2016*. Retrieved from <https://www150.statcan.gc.ca/n1/daily-quotidien/180313/t002a-eng.htm>

UNICEF Canada (2013). *Child Well-Being in Rich Countries: A Comparative Overview*. Toronto, ON: Author Inc. Retrieved from <https://www.unicef.ca/en/child-well-being-rich-countries-comparative-overview>

3.3 MATERNAL LABOUR FORCE PARTICIPATION BY AGE OF YOUNGEST CHILD

Statistics Canada, Labour Force Survey, custom tabulation 0717_04 Table 1.ivt. in Akbari & McCuaig, (In press). *Early Childhood Education Report 2020*. Toronto, ON: The Atkinson Centre for Society and Child Development, OISE/University of Toronto

Akbari, E., & McCuaig, K. (In press). *Early Childhood Education Report 2020*. Toronto, ON: The Atkinson Centre for Society and Child Development, OISE/University of Toronto

3.4 A CHILD CARE TALE OF TWO CITIES

Statistics Canada. (2015). *Employment Rate By Sex, Province and Census Metropolitan Area; and Median Monthly Childcare Fees for Selected Cities*. Retrieved from <https://www150.statcan.gc.ca/n1/pub/89-503-x/2015001/article/14694/tbl/tbl01-eng.htm>

Akbari, E., & McCuaig, K. (In press). *Early Childhood Education Report 2020*. Toronto, ON: The Atkinson Centre for Society and Child Development, OISE/University of Toronto

3.5 PIERRE FORTIN, ECONOMIST

Fortin, P. (2019). *Quebec Childcare at 20: What Have We Learned?* Paper presented at a seminar organized by the Centre for the Study of Living Standards at the Rideau Club, Ottawa, ON. April 24, 2019

3.6 CANADA DOES NOT FARE WELL COMPARED TO OTHER OECD COUNTRIES IN RATES OF LOW WAGE EMPLOYMENT

OECD (2019). *Wage Levels (Indicator)*. Paris: OECD Publishing. Retrieved from <https://data.oecd.org/earnwage/wage-levels.htm>. Accessed on Oct 23, 2019.

3.7 THE COMPENSATORY IMPACT OF ECE

Barnett, W. (1992). Benefits of Compensatory Preschool Education. *The Journal of Human Resources*, 27(2), 279-312. doi:10.2307/145736

Jenkins, J., Boivin, M., & Akbari, E. (2015). *Empowering the Future: Best Evidence for Investing in Early Childhood Education for Canada*. Retrieved from http://ecincanada.ca/media/uploads/canadian_ece_open_letter_2015.pdf

3.8 IMPACT OF ECE PARTICIPATION AT SECONDARY SCHOOL

McCoy, D. C., Yoshikawa, H., Ziol-Guest, K. M., Duncan, G. J., Schindler, H. S., Magnuson, K. & Shonkoff, J. P. (2017). Impacts of Early Childhood Education on Medium- and Long-Term Educational Outcomes. *Educational Researcher*, 46(8), 474-487. Retrieved from <https://journals.sagepub.com/doi/full/10.3102/0013189X17737739?journalCode=edra>

3.9 ECE ADDRESSES SPECIAL EDUCATION NEEDS (SEN)

Philpott, D. F., Young, G., Maich, K., Pennney, S. C., & Butler, E. (2019). *The Preemptive Nature of Quality Early Child Education on Special Educational Needs in Children*. Research Report. Memorial University of Newfoundland, St. John's, Newfoundland and Labrador. <https://research.library.mun.ca/13571/>

3.10 CANADA'S PUBLIC EDUCATION SYSTEM IS PULLING ITS WEIGHT

UNICEF Canada. (2018). *UNICEF Report Card 15: Canadian Companion, The Equalizer: How Education Creates Fairness for Children in Canada*. UNICEF Canada, Toronto. Retrieved from <https://www.unicef.ca/en/unicef-report-card-15>

3.11 ECE PAYS BIG DIVIDENDS

Cleveland, G., and M. Krashinsky. (1998). *The Benefits and Costs of Good Child Care: The Economic Rationale for Public Investment in Young Children*. Monograph 1, March. Toronto: Childcare Resource and Research Unit, Centre for Urban and Community Studies, University of Toronto

Prentice, S. (2007) *Northern Childcare: Childcare as Economic and Social Development in Thompson*. Winnipeg, MB: Child Care Coalition of Manitoba. Retrieved from http://www.childcaremanitoba.org/images/stories/docs/cccmpublications/thompson_report.pdf

Peters, R. D., Bradshaw, A. J., Petrunka, K., Nelson, G., Herry, Y., Craig, W. M., Arnold, R., Parker, K. C., Khan, S. R., Hoch, J. S., Pancer, S. M., Loomis, C., Belanger, J. M., Evers, S., Maltais, C., Thompson, K., Rossiter, M. D. (2010). The Better Beginnings, Better Futures Project: Findings from Grade 3 to Grade 9. *Monographs of the Society for Research in Child Development*, 75(3), 1-174. doi: 10.1111/j.1540-5834.2010.00577.x.

Fortin, P., Godbout, L., and St-Cerny, S. (2011). Economic Consequences of Quebec's Educational Childcare Policy. *Early Years Economics Forum*. Jun 22 Retrieved from https://www.oise.utoronto.ca/atkinson/UserFiles/File/Events/2011-06-22%20-%20Economic%20Forum/EarlyLearningEconomicForum_Fortin.pdf

Fairholm, R. (2012). *Economic Impact Analysis of Early Learning and Care for Ontario*. The Centre for Spatial Economics. Retrieved from <https://www.toronto.ca/legdocs/mmis/2012/cd/bgrd/backgroundfile-46155.pdf>

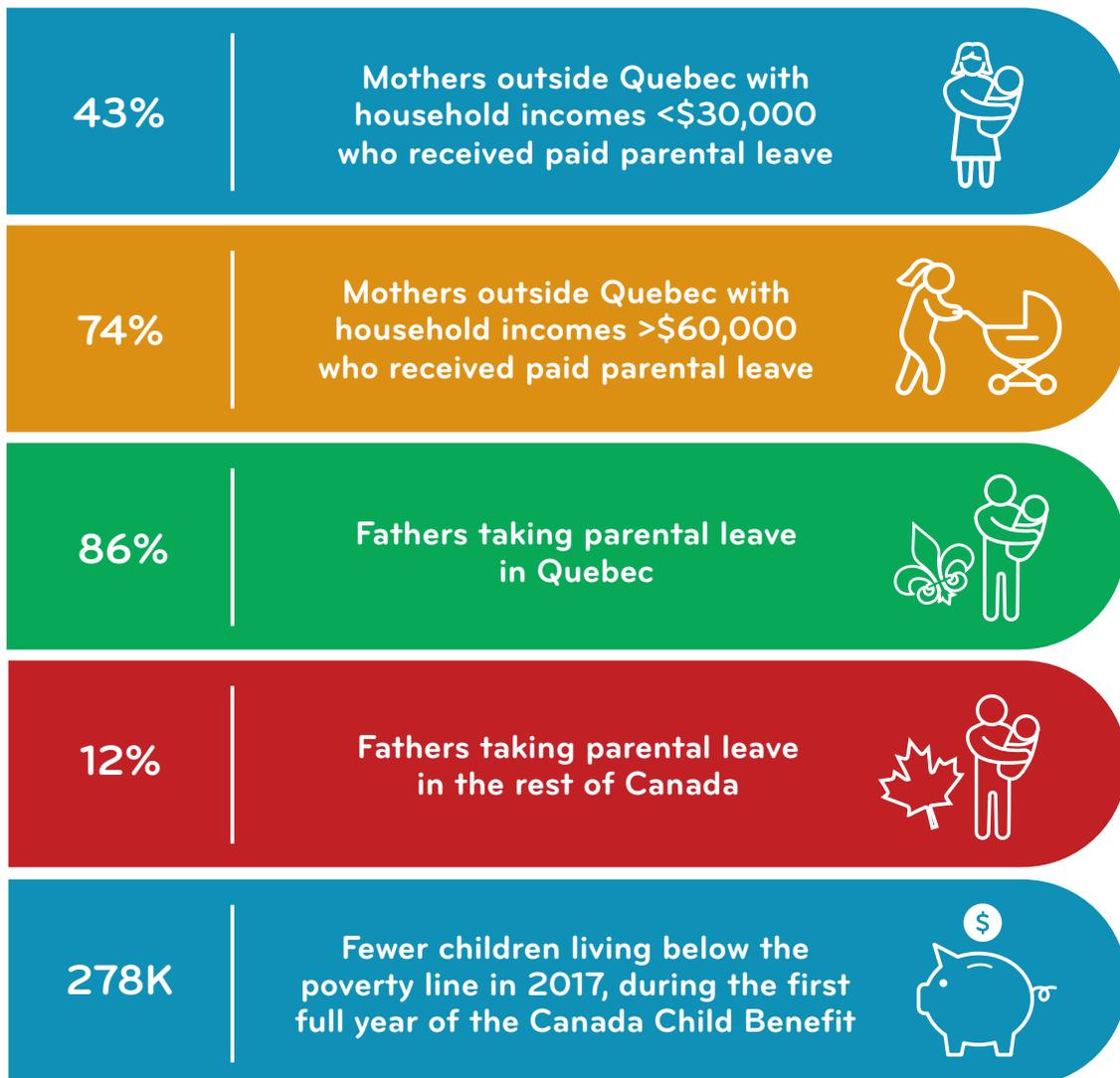
Alexander, C., Beckman, K., Macdonald, A., Renner, C., & Stewart, M. (2017). *Ready for Life: A Socio-Economic Analysis of Early Childhood Education and Care*. Ottawa, ON: The Conference Board of Canada. Retrieved from <https://www.conferenceboard.ca/e-library/abstract.aspx?did=9231>

4

ECE AND PUBLIC POLICY

FAMILIES BENEFIT FROM POLICY INITIATIVES

BY THE NUMBERS



4

ECE AND PUBLIC POLICY

FAMILIES BENEFIT FROM POLICY INITIATIVES

The digital economy not only restructured employment patterns, it also restructured families.¹ Non-standard hours, precarious work and absences due to work travel all affect the capacity of parents to meet the needs of their young children. Governments have a responsibility to facilitate societal strategies that provide parents with the time, financial resources, programs and services to promote their children's healthy development. Such strategies are costly, requiring significant public investment and political will. While much remains to be done, the last two decades have seen the emergence of a common understanding among policy-makers and the public that the costs of inaction are also great. This chapter outlines the progress to date.

FAMILY LEAVE

Family leave provides economic benefits for companies and employees, as well as important health benefits for family members. Mothers with access to paid leave are more likely to return to their jobs when their children are small, adding stability to the workforce and family income. Paid parental leave is also associated with reduced rates of low birth weight, lower maternal and infant mortality and higher rates of breastfeeding.² The effects of paid leave on mothers and children are also causal since mothers with access to leave are regularly employed and would therefore have higher incomes than mothers who do not take leave.

Canada is one of 41 countries that provide paid family leave following the birth or adoption of a child. While most countries reserve paid leave for mothers, 31 of the 41 also have paternity leave.³ Canada's new "use it or lose it" parental leave for non-birthing parents began in March 2019. Families receive five additional weeks if they opt for the traditional 50 weeks of paid parental leave, or eight more weeks under the new 61-week option, providing the second parent uses the additional weeks.⁴

Mandating a period of leave for fathers has an impact. Quebec’s family leave plan includes a dedicated five-week leave for the second parent, covering 70–75 percent of their income depending on the leave package chosen. In 2015, almost 86 percent of fathers with new babies took paid leave in Quebec, compared to fewer than 12 percent in the rest of the country.⁵

FIGURE 4.1

PARENTAL BENEFITS IN CANADA AND QUEBEC (2019)

	Standard Canada EI	Extended Canada EI	Quebec Basic Plan	Quebec Special Plan
Eligibility	600 hrs	600 hrs	\$2,000 earnings	\$2,000 earnings
Self-employed workers	As of 2011	As of 2011	Covered	Covered
Waiting period	1 week	1 week	None	None
Weeks of income-replacement at % of average earnings				
Maternity¹	15 at 55%	15 at 55%	18 at 70%	15 at 75%
Paternity	5 at 55%	8 at 33%	5 at 70%	3 at 75%
Parental (shared)²	35 at 55%	61 at 33%	7 at 70% + 25 at 55%	25 at 75%
Total weeks/couple Adoption (shared)³	35 shared plus 5 paternity at 55%	61 shared plus 8 paternity at 33%	12 at 70% + 25 at 55%	28 at 75%
Benefit based on income				
Maximum insurable earnings	\$53,100	\$53,100	\$76,500	\$76,500
Maximum benefit	\$562 / week for 55 weeks	\$562 / week for 15 weeks + \$337 / week for 69 weeks	\$1,029.80 / week for 25 weeks + \$809 / week for 25 weeks	\$1,103.36 / week for 40 weeks
Benefit for a low income family when annual income is less than \$25,921				
Parental Benefit	Up to 80% of annual income		Certain families that are eligible for Quebec Parental Insurance Plan (QPIP) benefits may apply for additional financial support in the form of a supplement	
EI Family Supplement⁴	When eligible, the EI Family Supplement is added to the Parental Benefit to reach a maximum total benefit of \$562 / week			

Notes: (1) Only birth mothers are entitled to maternity leave in all plans; (2) both jurisdictions recognize same sex relationships; (3) QPIP also has a distinct plan for adoptive parents; (4) The EI Family Supplement provides additional benefits to EI claimants with children under the age of 18 that are registered for the Canada Child Benefit (CCB)

Since parental benefits outside Quebec are distributed through Canada’s Employment Insurance (EI) program, parents must first qualify for EI. Full-time salaried workers, regardless of their wage, typically take about four months to meet the benchmark of 600 insured hours worked in the previous 12 months.⁶

For parents choosing the option of 50 weeks of leave, women who give birth are eligible for 15 weeks of maternity benefits, with EI providing 55 percent of their average weekly salary (up to \$562 a week). Benefits can start as early as 12 weeks before the baby arrives. After those 15 weeks of maternity leave, either parent may take 35 additional weeks of parental leave. EI provides 55 percent of their average weekly earnings during that time, up to \$562 a week. For those taking the extended leave (61 weeks), the maternity benefit stays the same: 15 weeks at 55 percent. But once those 15 weeks are up and parental benefits kick in, the government pays out just 33 percent of the average weekly salary (up to \$337 per week) over the longer time span of 61 weeks.⁷

Expanding the leave comes with little public cost. For example, a mother taking the maximum leave will receive \$28,100 over 50 weeks or \$28,987 if she chooses the 61-week option. Nevertheless, parents are making use of the extended leave. Out of 195,000 yearly parental claims, about 22,000⁸ have claimed the longer benefit since it came into effect in December 2017.

Experts, including labour and business groups, are calling on the Canadian government to make further changes to the parental leave system to allow more parents to qualify, boost the value of benefits paid out and ensure that single parents can also benefit from the dedicated leave for second parents. As well, there have been calls to make leaves available to other primary caregivers, such as grandparents.⁹

These plans do discriminate against freelance workers and independent contractors who do not qualify unless they pay EI on their income ahead of time (the vast majority do not). Other factors influence who does and does not receive paid leave. A 2017 study found that workers under the age of 25—particularly women—are less likely to meet EI criteria.¹⁰ The *Journal of Industrial Relations* (2016) calculates that (except in Quebec) only 43 percent of Canadian mothers with a household income of less than \$30,000 a year received paid parental leave, compared to 74 percent of those with household incomes of \$60,000 or more.¹¹ Adding to the disparity, employers that pay higher wages are more likely to supplement their employees’ leave with extended health care benefits or top-up pay programs. Employers can apply for a reduction in their EI premiums if they provide these benefits.

Parents in certain types of work can also be penalized. Tips earned by workers in the service industry are taxed, but EI does not count them as income for the purposes of calculating leave benefits.¹² Instead, benefit pay is calculated based on a server’s minimum wage, which is lower than the standard minimum wage in many jurisdictions.

Reduced leave disproportionately impacts lower-income families in other ways. For example, parents who return to work earlier will require infant child care, the most expensive and least-available type of care.¹³

CANADA CHILD BENEFIT

Prior to its election in October 2015, the Liberal government campaigned on a promise to consolidate the previous government's Universal Child Care Benefit, the Canada Child Tax Benefit and the National Child Benefit Supplement into one non-taxable payment. The new combined Canada Child Benefit (CCB) payments began July 20, 2016.¹⁴

Budget 2017 increased the CCB by \$5.6 billion over five years¹⁵ and addressed a primary criticism that the benefit was not indexed to inflation. The CCB is income-tested, with the amounts paid reduced when family net income exceeds \$31,059.¹⁶ In July 2019, the annual maximum increased from \$6,496 to \$6,626 for children under 6 years of age, and to \$5,591 for children aged 6 to 17 years.¹⁷ These are significant amounts. For many low-income families, the CCB represents almost 20 percent of their overall income. About 65 percent of families receiving the maximum CCB are single parents, of whom 90 percent are single mothers.¹⁸

While payments have increased, equity issues remain. A high number of Indigenous families do not apply for benefits, families without a regularized immigration status are ineligible and mothers can be penalized when parents separate.¹⁹ If custody of the children is split following parental separation, the CCB is also split, often penalizing the lower-income parent—most often the mother. Similarly, Canada's tax rules require parents receiving the CCB to declare a new partner's income, which is then taken into consideration when determining payments even though the partner is not legally required to support their spouse's children. Considering over 1.2 million children live in families affected by parental separation and divorce, this provision has large effects.²⁰

The CCB paid out more than \$23 billion to over 3.3 million families in 2018,²¹ reducing the child poverty rate by 1.2 percent. As payments increase, poverty rates are expected to fall further. In Budget 2018, the government pledged better outreach to ensure Indigenous families receive the benefit.²²

EARLY LEARNING AND CHILD CARE

After a decade's absence, the federal government renewed its interest in early learning and child care by pledging \$7.5 billion over 10 years to add 40,000 child care spaces across Canada.²³ The Multilateral Early Learning and Child Care Framework is a mechanism to flow federal funding to provinces and territories. It is focused on creating child care services for vulnerable families, including those who are marginalized by geography, income, family status, language, non-standard work, disability or culture.²⁴ The framework also commits to improving data collection and information about the status of child care for children under 6 years of age. A complementary but separate framework was developed in 2018 for Indigenous early learning and child care.²⁵

Titled the "Helping Families" initiative, the money is pulled from the \$11.9 billion social infrastructure fund. It provides \$500 million for child care in 2017–2018, increasing by 10 percent to \$550 million by 2021–2022.²⁶ More significant jumps, topping out at \$870 million, take place post-election between 2022 and 2028. The increases are not referenced in the framework; instead, the document commits the federal government to spending no less in 2028 than it did in 2017.²⁷

FIGURE 4.2

FEDERAL EXPENDITURES TO SUPPORT EARLY CHILDHOOD (2019)

Policy	Program Name	Department	Annual Expenditure	Description
Transfers to provinces/territories	Canada Social Transfer	Finance	\$1.4 billion	Support for children's programs increases by 3% annually
	Multilateral Early Learning and Child Care Framework	Employment & Social Development Canada (ESDC)	\$399.3 million	Payments to provinces and territories for early learning and child care
Income transfers to individuals	Canada Learning Bond	ESDC	\$180 million	Supports access to post-secondary education for children from low-income families
	Canada Education Savings Grant		\$995 million	Payments to Registered Education Savings Plan (RESP) to encourage parents to save for their children's post-secondary education
	Canada Child Benefit		\$24.9 billion	Consolidates a number of child payments. Indexed to the cost of living. Pays maximum of \$6,496 for a child under 6 years old, and \$5,591 for children 6 to 17 years old
Tax measures	Child Care Expense Deduction	Finance	\$1.41 billion	\$8,000 per child under age 7, \$5,000 per child between 7 and 16 years of age and infirm dependent children over age 16, and \$11,000 for a child eligible for the Disability Tax Credit, regardless of their age
	Investment Tax Credit for Child Care Spaces		\$500,000	Estimate. Numbers under \$500,000 are not detailed
	Exemption from GST for Child Care		\$190 million	Child care services are exempt from GST
	Teacher and Early Childhood Educator School Supply Tax Credit		\$5 million	Teachers and early childhood educators may claim a 15% refundable tax credit based on an amount of up to \$1,000 in expenditures made in a taxation year for eligible supplies
Community Grants	Children's Special Allowances	ESDC	\$337 million	Payments to agencies that care for children i.e. child welfare agencies. The monthly amount for a child under the age of six is \$541.33 and for a child 6 to 17 years old is \$456.75

Government of Canada, 2019 Akbari & McCuaig, in press

FIGURE 4.2b

FEDERAL INVESTMENTS IN EARLY LEARNING AND CHILD CARE FOR ABORIGINAL COMMUNITIES

Policy	Program Name	Type	Annual Expenditures	Description
Programs for Aboriginal Children	Aboriginal Head Start Urban and Northern Communities	Public Health Agency of Canada (PHAC)	\$34.8 million	Part day preschool for children 3-5 years old in urban and northern communities
	Aboriginal Head Start on Reserve	Indigenous Services Canada	\$47.3 million	Part day preschool for children 3-5 years old in First Nations communities
	First Nations and Inuit Child Care Initiative	Employment and Social Development Canada (ESDC)	\$50 million	Child care services for First Nations and Inuit parents employed or participating in a training program
	Early Learning and Child Care (ELCC) Accord	ESDC	\$119.5 million	Supporting early learning and child care
	Métis Nation Early Learning and Child Care (ELCC) Accord	ESDC	\$39.3 million	Part of the ELCC Accord pertaining to Métis children
	Supporting Inuit Children	ESDC	\$30 million	Interim funding to support services for Inuit children
	Child Care on Reserve (ON, AB)	Crown Indigenous Relations and Northern Affairs Canada (CIRNAC)	\$21 million	Federal/provincial cost sharing agreement where Ottawa reimburses ON and AB for their share of spending for on reserve child care
	Grants	ESDC	\$34.6 million	Grants to Aboriginal non-governmental organizations (NGOs) to develop early intervention programs for preschool children and their families

Government of Canada, 2019 Akbari & McCuaig, in press

Federal funds flow to the provinces and territories through bilateral agreements, which include action plans to meet the framework’s objectives. Approximately \$1.2 billion over three years supports phase one of the agreements, which will be updated and renewed in 2020. Each jurisdiction receives a base payment of \$2 million, plus a per capita allocation determined by the population of children 0 to 6 years of age. Over the course of the framework, \$95 million will go toward research and evaluation and \$100 million is dedicated to innovation.²⁸

Early learning and child care programs for Indigenous children and families are supported by \$1.7 billion over 10 years starting in 2018–2019. First Nations receive \$1.02 billion, \$111 million supports programming for Inuit families and \$450 million goes to Métis families.²⁹ This Indigenous Early Learning and Child Care Framework responds to the Truth and Reconciliation Commission of Canada’s Call to Action #12 to develop culturally appropriate early childhood education programs for Indigenous families.³⁰

In addition to federal efforts, provinces and territories have also increased funding for ECE. Budgets for 2018 saw a \$1.2 billion³¹ increase over 2014, bringing total spending for early learning and child care to over \$12 billion. Although this represents between 1 percent and 4.5 percent of provincial and territorial spending, it is considerably below spending levels in most OECD countries.³² A bump in funding is anticipated as provinces and territories add their own investments to federal transfers.

Most jurisdictions have also taken additional steps to improve access, program quality and oversight for ECE. Kindergarten for 5-year-olds is Canada’s only universal early years program and the only preschool program most children will experience. Although voluntary in all jurisdictions, with the exception of Prince Edward Island, Nova Scotia and New Brunswick, 95 percent of eligible children across the country attend. Four jurisdictions offer half-day kindergarten, while a full-day program is provided in the rest, covering 70 percent of 5-year-olds.³³

FIGURE 4.3

ENROLMENT IN SCHOOL-OPERATED ECE PROGRAMS (2019)

Province/ Territory	Total 4 year old population	% attending Pre-Kindergarten		Total 5 year old population	% attending Kindergarten	
		Full day	Part day		Full day	Part day
NL	4,641			5,107	96%	
PE	1,554			1,592	95%	
NS	8,911	34%		8,844	97%	
NB	7,322			7,361	96%	
QC	90,507	12%		91,352	98%	
ON	145,569	86%		145,353	93%	
MB	16,593		17%	16,298		90%
SK	14,924		34%	15,130		91%
AB	53,772		26%	53,974	8%	90%
BC	45,400			45,684	99.9%	
NU	802			769		100%
NT	660	84%		684	94%	
YK	490	9%		455	98%	
Total	391,145	41%		392,603	96%	

Not all provinces include students attending private schools or First Nations schools in their kindergarten calculations.
 AB Pre-K enrolment includes 2–4 year olds. SK Pre-K enrolment includes 3 & 4 year olds.
 Akbari & McCuaig, in press

Almost 125,000 children in Ontario attend full-day kindergarten for 4-year-olds. Full-day junior kindergarten is also offered in the Northwest Territories and is being rolled out in Nova Scotia. Schools in Whitehorse, Yukon, offer full-day preschool. Quebec is expanding its full-day 4-year-old program beginning in low-income communities, and Newfoundland is holding public consultations about introducing 4-year-old kindergarten.³⁴

Access to at least part-time programs is available for preschoolers in vulnerable circumstances in Saskatchewan and Alberta, and nursery school is widely available in Manitoba. In addition, many schools in British Columbia and Ontario offer part-time parent/child drop-in activities. Overall, about 40 percent of 4-year-olds receive their early education in schools.³⁵ This accounts for much of the increase in ECE participation and builds on the infrastructure that exists in public education.

Across the country, regulated child care has grown to over 1 million spaces, an increase of 150,000 spaces since 2014.³⁶ Ontario accounts for most of these new spaces.

FIGURE 4.4

CHANGE IN NUMBER OF REGULATED CHILD CARE SPACES BY PROVINCE / TERRITORY

Province / Territory	2014	2017	2019	Percentage Change from 2014 to 2019
Newfoundland	7,815	8,142	8,378	6.7%
Prince Edward Island	4,262	4,860	5,060	15.8%
Nova Scotia	17,509	18,855	19,490	10.2%
New Brunswick	24,556	27,690	28,200	12.9%
Quebec	251,193	264,425	270,225	7.0%
Ontario	311,297	406,395	427,032	27.1%
Manitoba	32,555	34,285	35,024	7.0%
Saskatchewan	14,025	15,269	17,784	21.2%
Alberta	97,930	126,165	126,915	22.8%
British Columbia	100,001	105,900	107,270	6.8%
Nunavut	1,140	1,089	1,109	-2.8%
Northwest Territories	2,361	1,865	1,981	-19.2%
Yukon	1,243	1,232	1,334	6.8%
Canada	865,887	1,016,172	1,049,802	17.5%

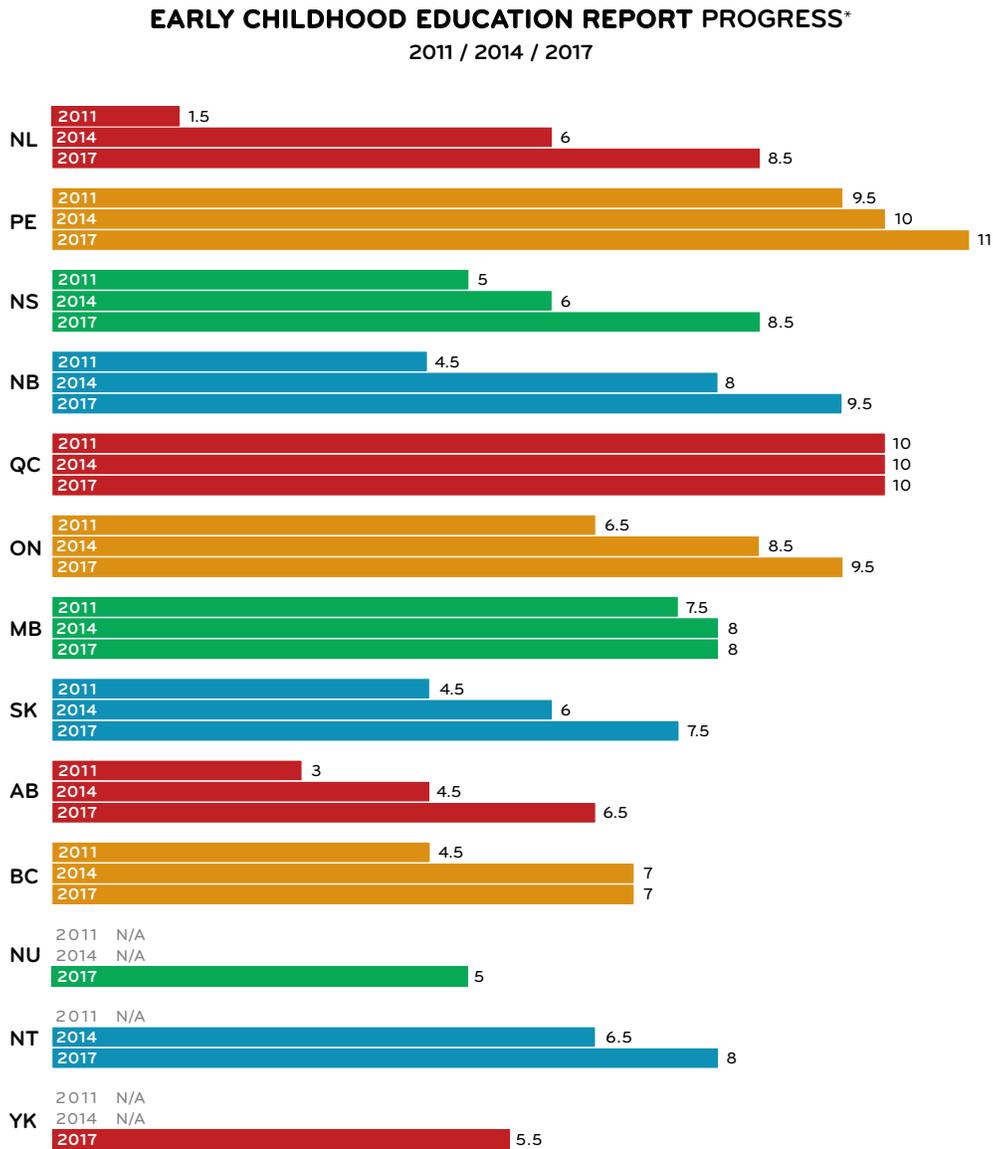
Akbari & McCuaig, in press

RESULTS CAN BE REALIZED IN YEARS, NOT DECADES

In the third *Early Years Study* in 2011, researchers from the University of Toronto developed a scale that assessed the quality of early education and child care in each province and territory.³⁷ Nineteen benchmarks, organized into five equally weighted categories, assign a total of 15 points to evaluate governance structures, funding levels, access, quality in early learning environments and the rigour of accountability mechanisms.³⁸

In 2011, most provinces scored toward the bottom of the assessment. By 2017, most provinces had showed improvements.

FIGURE 4.5



*Based on a scale of 1-15, the Early Childhood Education Report assesses provincial and territorial frameworks for ECE in Canada. Nineteen benchmarks, organized into five equally weighted categories evaluate governance structures, funding levels, access, quality in early learning environments, and the rigour of accountability mechanisms.

McCain, Mustard & McCuaig, 2011 Akbari & McCuaig, 2014, 2017

ENDNOTES

- 1 OECD. (2014). *Measuring the Digital Economy: A New Perspective*. Paris: OECD Publishing. Retrieved from <https://doi.org/10.1787/9789264221796-en>
- 2 Heymann, J., Sprague A.R. et al. (2017) Paid Parental Leave and Family Wellbeing in the Sustainable Development Era. *Public Health Reviews* 201738:21. Retrieved from <https://doi.org/10.1186/s40985-017-0067-2>
- 3 Livingston, G. (2016). *Among 41 Nations, U.S. is the Outlier When it Comes to Paid Parental Leave*. Washington, DC: Pew Research Centre. Retrieved from <https://www.pewresearch.org>
- 4 Department of Finance Canada (2018a). *Backgrounder: Canada's New Parental Sharing Benefit*. Ottawa, ON: Author Inc. Retrieved from <http://publications.gc.ca/site/eng/9.853223/publication.html>
- 5 Department of Finance. Canada (2016). *Employment Insurance Coverage Survey, 2015. The Daily*. Retrieved from <https://www.childcarecanada.org>
- 6 Braganza, C. (2018). "Why not all parents benefit from Canada's parental-leave program". January 15. The Ontario Educational Communications Authority (TVO). Retrieved from <https://www.tvo.org/article/why-not-all-parents-benefit-from-canadas-parental-leave-program>
- 7 Employment and Social Development Canada (n.d.). *EI Maternity and Parental Benefits: Eligibility*. Retrieved from <https://www.canada.ca/en/services/benefits/ei/ei-maternity-parental/eligibility.html>
- 8 Smith, K. (2018). Tens of Thousands of Canadian Parents Opting for 18-month Parental Leave. *Global News* November 13. Retrieved from <https://globalnews.ca/news/4656251/canadians-opt-18-month-parental-leave-family/>
- 9 Press, J. (2018). New Parental Leave Policy that Includes Fathers Will Arrive Earlier Than Expected. *Global News* September 26. Retrieved from <https://globalnews.ca/news/4489634/new-use-it-or-lose-it-parental-leave-fathers/>
- 10 Robson, J. (2017). Parental Benefits in Canada: Which Way Forward? *IRPP Study, No. 63*. Retrieved from <https://irpp.org/research-studies/parental-benefits-in-canada-which-way-forward/>
- 11 McKay, L., Mathieu, S., & Doucet, A. (2016). Parental-leave Rich and Parental-leave Poor: Inequality in Canadian Labour Market-Based Leave Policies. *Journal of Industrial Relations*, 58(4), 543-562. <https://doi.org/10.1177%2F0022185616643558>
- 12 Braganza, C. (2018). "Why not all parents benefit from Canada's parental-leave program". January 15. The Ontario Educational Communications Authority (TVO). Retrieved from <https://www.tvo.org/article/why-not-all-parents-benefit-from-canadas-parental-leave-program>
- 13 Braganza, C. (2018). "Why not all parents benefit from Canada's parental-leave program". January 15. The Ontario Educational Communications Authority (TVO). Retrieved from <https://www.tvo.org/article/why-not-all-parents-benefit-from-canadas-parental-leave-program>
- 14 Canada Revenue Agency. (2019). *Canada Child Benefit – Overview*. Retrieved from <https://www.canada.ca/en/revenue-agency/services/child-family-benefits/canada-child-benefit-overview.html>
- 15 Morneau, W. F. (2017). *Building a Strong Middle Class: Budget 2017*. Canada: Her Majesty the Queen in Right of Canada. Retrieved from <https://www.budget.gc.ca>
- 16 Department of Finance (2018b). *Backgrounder: Strengthening the Canada Child Benefit*. Retrieved from https://www.fin.gc.ca/n18/data/18-008_4-eng.asp
- 17 Department of Finance (2018b). *Backgrounder: Strengthening the Canada Child Benefit*. Retrieved from https://www.fin.gc.ca/n18/data/18-008_4-eng.asp
- 18 Gardiner, K. (2017). *How the Canada Child Benefit Affects Separated Parents: The Post-Relationship Breakdown Family Unit of Taxation*. Calgary, AB: The University of Calgary Faculty of Law Blog. Retrieved from <https://ablawg.ca/2017/11/01/how-the-canada-child-benefit-affects-separated-parents-the-post-relationship-breakdown-family-unit-of-taxation/>
- 19 Gardiner, K. (2017). *How the Canada Child Benefit Affects Separated Parents: The Post-Relationship Breakdown Family Unit of Taxation*. Calgary, AB: The University of Calgary Faculty of Law Blog. Retrieved from <https://ablawg.ca/2017/11/01/how-the-canada-child-benefit-affects-separated-parents-the-post-relationship-breakdown-family-unit-of-taxation>
- 20 Sinha, M. (2014c). *Spotlight on Canadians: Results From the General Social Survey, Parenting and Child Support After Separation or Divorce*. Ottawa, ON: Social and Aboriginal Statistic Division, Statistics Canada. Retrieved from <https://www150.statcan.gc.ca/n1/pub/89-652-x/89-652-x2014001-eng.htm>
- 21 Department of Finance (2018). *Backgrounder: Strengthening the Canada Child Benefit*. Retrieved from https://www.fin.gc.ca/n18/data/18-008_4-eng.asp
- 22 Morneau, W.F. (2018) *Equality + Growth A Strong Middle Class: Budget 2018*. Canada: Her Majesty the Queen in Right of Canada Retrieved from <https://www.budget.gc.ca>
- 23 Cossette M. A. (2017). Ottawa and Provinces Sign Deal to Create 'Fully Inclusive' Child Care System. *CBC News* June 27. Retrieved from <https://www.cbc.ca/news/politics/liberal-government-unveils-child-care-framework-1.4156348>

- 24 Employment and Social Development Canada (2017). *Multilateral Early Learning and Child Care Framework*. Canada: Her Majesty the Queen in Right. Retrieved from <https://www.canada.ca/en/employment-social-development/programs/early-learning-child-care/reports/2017-multilateral-framework.html>
- 25 Employment and Social Development Canada (2018c). *Indigenous Early Learning and Child Care Framework*. Canada: Her Majesty the Queen in Right. Retrieved from <https://www.canada.ca/en/employment-social-development/programs/indigenous-early-learning/2018-framework.html>
- 26 Morneau, W. F. (2017) *Building a Strong Middle Class: Budget 2017* Canada: Her Majesty the Queen in Right of Canada. Retrieved from <https://www.budget.gc.ca>
- 27 Employment and Social Development Canada (2017). *Multilateral Early Learning and Child Care Framework*. Canada: Her Majesty the Queen in Right. Retrieved from <https://www.canada.ca/en/employment-social-development/programs/early-learning-child-care/reports/2017-multilateral-framework.html>
- 28 Government of Canada (n.d.). *Canada-Ontario Early Learning and Child Care Agreement*. Retrieved from <https://www.canada.ca/en/early-learning-child-care-agreement/agreements-provinces-territories/ontario.html#h4>
- 29 Employment and Social Development Canada (2018c). *Indigenous Early Learning and Child Care Framework*. Canada: Her Majesty the Queen in Right. Retrieved from <https://www.canada.ca/en/employment-social-development/programs/indigenous-early-learning/2018-framework.html>
- 30 Truth and Reconciliation Commission of Canada (2015). *Truth and Reconciliation Commission of Canada: Calls to Action*. Winnipeg, MB: Author Inc. Retrieved from <http://nctr.ca>
- 31 Akbari, E., & McCuaig, K. (In press). *Early Childhood Education Report 2020*. Toronto, ON: Atkinson Centre for Society and Child Development, OISE/University of Toronto
- 32 OECD (2018b). *Economic Survey Canada: Key Policy Insights Canada: OECD Economic Survey*. Paris: OECD Publishing. Retrieved from <https://www.oecd.org>
- 33 Akbari, E., & McCuaig, K. (2018a). *Early Childhood Education Report 2017*. Toronto, ON: Atkinson Centre for Society and Child Development, OISE/University of Toronto. Retrieved from: <http://ecereport.ca/en/>
- 34 Akbari, E., & McCuaig, K. (2018a). *Early Childhood Education Report 2017*. Toronto, ON: Atkinson Centre for Society and Child Development, OISE/University of Toronto. Retrieved from: <http://ecereport.ca/en/>
- 35 Akbari, E., & McCuaig, K. (2018a). *Early Childhood Education Report 2017*. Toronto, ON: Atkinson Centre for Society and Child Development, OISE/University of Toronto. Retrieved from: <http://ecereport.ca/en/>
- 36 Akbari, E., & McCuaig, K. (2018a). *Early Childhood Education Report 2017*. Toronto, ON: Atkinson Centre for Society and Child Development, OISE/University of Toronto. Retrieved from: <http://ecereport.ca/en/>
- 37 McCain, M.N., Mustard, J.F., & McCuaig, K. (2011). *Early Years Study 3: Making Decisions, Taking Action*. Toronto, ON: Margaret & Wallace McCain Family Foundation. Retrieved from www.earlyyearsstudy.ca
- 38 Akbari, E. & McCuaig, K. (2018a). *Early Childhood Education Report 2017*. Toronto, ON: Atkinson Centre for Society and Child Development, OISE/University of Toronto. Retrieved from <http://ecereport.ca/en/>

BY THE NUMBERS

- 43% McKay, L., Mathieu, S., & Doucet, A. (2016). Parental-Leave Rich and Parental-Leave Poor: Inequality in Canadian Labour Market-Based Leave Policies. *Journal of Industrial Relations*, 58(4), 543-562 <https://doi.org/10.1177%2F0022185616643558>
- 74% McKay, L., Mathieu, S., & Doucet, A. (2016). Parental-Leave Rich and Parental-Leave Poor: Inequality in Canadian Labour Market-Based Leave Policies. *Journal of Industrial Relations*, 58(4), 543-562 <https://doi.org/10.1177%2F0022185616643558>
- 86% Department of Finance Canada (2016). Employment Insurance Coverage Survey, 2015 *The Daily*. Retrieved from <https://www.childcarecanada.org>
- 12% Department of Finance Canada (2016). Employment Insurance Coverage Survey, 2015 *The Daily*. Retrieved from <https://www.childcarecanada.org>
- 278K Press J. (2019). Fewer Canadians Living Below Poverty Line Due to Strong Economy, Liberal Government's Child Benefit: *The Globe and Mail* February 26. Retrieved from <https://www.theglobeandmail.com/canada/article-fewer-children-living-in-poverty-due-to-liberal-governments-child/>

FIGURES

4.1 PARENTAL BENEFITS IN CANADA AND QUEBEC (2019)

Employment and Social Development Canada. (2019c). *Employment Insurance Maternity and Parental Benefits*. Retrieved from <https://www.canada.ca/en/employment-social-development/programs/ei/ei-list/reports/maternity-parental.html#h2.0>

Services Québec – Citoyens (2017). *Québec Parental Insurance Plan*. Retrieved from <https://www.quebec.ca/en/family-and-support-for-individuals/parental-insurance/>

Doucet, A., McKay, L. & Tremblay, D.G. (2009). Parental Leave Policy in Canada In Peter Moss and Sheila Kammerman (Eds) *The Politics of Parental Leave Policies: Children, Parenting, Gender and the Labour Market*. Bristol, UK: Policy Press

Akbari, E., & McCuaig, K. (In press). *Early Childhood Education Report 2020*. Toronto, ON: Atkinson Centre for Society and Child Development, OISE/University of Toronto

4.2 FEDERAL EXPENDITURES TO SUPPORT EARLY CHILDHOOD (2019)

Administrative Tribunals Support Service of Canada (2019). *Main Estimates 2019-20*. Retrieved from <https://www.canada.ca/en/treasury-board-secretariat/services/planned-government-spending/government-expenditure-plan-main-estimates/2019-20-estimates/main-estimates.html>

Akbari, E., & McCuaig, K. (In press). *Early Childhood Education Report 2020*. Toronto, ON: Atkinson Centre for Society and Child Development, OISE/University of Toronto

4.2b FEDERAL INVESTMENTS IN EARLY LEARNING AND CHILD CARE FOR ABORIGINAL COMMUNITIES

Office of Audit and Evaluation Health Canada and the Public Health Agency of Canada. (2017). *Evaluation of the Aboriginal Head Start in Urban and Northern Communities Program 2011-2012 to 2015-2016*. Retrieved from <https://www.canada.ca/en/indigenous-services-canada/services/first-nations-inuit-health/family-health/healthy-child-development/aboriginal-head-start-reserve-first-nations-inuit-health-canada.html>

Employment and Social Development Canada (2019, May 15). *About the Indigenous Skills and Employment Training Program*. Retrieved from <https://www.canada.ca/en/employment-social-development/services/indigenous/asets.html>

Employment and Social Development Canada (2019, April 11). *2019–20 Departmental Plan*. Retrieved from <https://www.canada.ca/en/employment-social-development/corporate/reports/departmental-plan/2019-2020/transfer-payment-programs-over-5-million.html#h2.30>

The Minister of Families, Children and Social Development (2019, April 15). *Métis Nation Early Learning and Child Care Accord*. Retrieved from <https://www.canada.ca/en/employment-social-development/programs/indigenous-early-learning/accord-metis.html>

Administrative Tribunals Support Service of Canada (2019, May 3). *Main Estimates - 2019-20 Estimates*. Retrieved from <https://www.canada.ca/en/treasury-board-secretariat/services/planned-government-spending/government-expenditure-plan-main-estimates/2019-20-estimates/main-estimates.html>

Akbari, E., & McCuaig, K. (In press). *Early Childhood Education Report 2020*. Toronto, ON: Atkinson Centre for Society and Child Development, OISE/University of Toronto

4.3 ENROLMENT IN SCHOOL-OPERATED ECE PROGRAMS (2019)

Akbari, E., & McCuaig, K. (In press). *Early Childhood Education Report 2020*. Toronto, ON: Atkinson Centre for Society and Child Development, OISE/University of Toronto

4.4 CHANGE IN NUMBER OF REGULATED CHILD CARE SPACES BY PROVINCE/TERRITORY

Akbari, E., & McCuaig, K. (In press). *Early Childhood Education Report 2020*. Toronto, ON: Atkinson Centre for Society and Child Development, OISE/University of Toronto

Employment and Social Development Canada (2018, January 5). *Canada – Newfoundland and Labrador Early Learning and Child Care Agreement*. Retrieved from <https://www.canada.ca/en/early-learning-child-care-agreement/agreements-provinces-territories/newfoundland-and-labrador.html#h2.15>

Employment and Social Development Canada (2017, October 3). *Canada – Prince Edward Island Early Learning and Child Care Agreement*. Retrieved from <https://www.canada.ca/en/early-learning-child-care-agreement/agreements-provinces-territories/prince-edward-island.html#a2>

Employment and Social Development Canada (2018, January 10). *Canada - Nova Scotia Early Learning and Child Care Agreement*. Retrieved from <https://www.canada.ca/en/early-learning-child-care-agreement/agreements-provinces-territories/nova-scotia.html#h2.15>

Employment and Social Development Canada. (2018, March 10). *Implementation Agreement of the March 10, 2017, Asymmetrical Agreement – Early Learning and Child Care Component*. Retrieved from <https://www.canada.ca/en/early-learning-child-care-agreement/agreements-provinces-territories/quebec.html#h2.12>

Employment and Social Development Canada (2018, January 25). *Canada - Manitoba Early Learning and Child Care Agreement*. Retrieved from <https://www.canada.ca/en/early-learning-child-care-agreement/agreements-provinces-territories/manitoba.html#h14>

Employment and Social Development Canada. (2018, April 4). Canada - Saskatchewan Early Learning and Child Care Agreement. Retrieved from the Government of Canada website <https://www.canada.ca/en/early-learning-child-care-agreement/agreements-provinces-territories/saskatchewan.html#h2.2>

Employment and Social Development Canada (2018, b). Governments of Canada and Alberta are improving quality, accessibility and affordability of early learning and child care across Alberta. Retrieved from <https://www.newswire.ca/news-releases/governments-of-canada-and-alberta-are-improving-quality-accessibility-and-affordability-of-early-learning-and-child-care-across-alberta-679534673.html>

Employment and Social Development Canada (2018, March 6). Canada–British Columbia early learning and child care agreement. Retrieved from <https://www.canada.ca/en/early-learning-child-care-agreement/agreements-provinces-territories/british-columbia.html#h15>

Employment and Social Development Canada (2018, January 16). Canada–New Brunswick early learning and child care agreement. Retrieved from <https://www.canada.ca/en/early-learning-child-care-agreement/agreements-provinces-territories/new-brunswick.html#section15>

Employment and Social Development Canada (2018, March 8). Canada–Northwest Territories early learning and child care agreement. Retrieved from <https://www.canada.ca/en/early-learning-child-care-agreement/agreements-provinces-territories/northwest-territories.html#section15>

Employment and Social Development Canada (2018, February 8). Canada–Yukon early learning and child care agreement. Retrieved from <https://www.canada.ca/en/early-learning-child-care-agreement/agreements-provinces-territories/yukon.html#h2.15>

4.5 EARLY CHILDHOOD EDUCATION REPORT PROGRESS

McCain, M.N., Mustard, J.F., & McCuaig, K. (2011). *Early Years Study 3: Making Decisions, Taking Action*. Toronto, ON: Margaret and Wallace McCain Family Foundation. Retrieved from <http://www.earlyyearsstudy.ca>

Akbari, E., & McCuaig, K. (2014). *Early Childhood Education Report 2014*. Toronto, ON: Atkinson Centre for Society and Child Development, OISE/University of Toronto. Retrieved from <http://ecereport.ca>

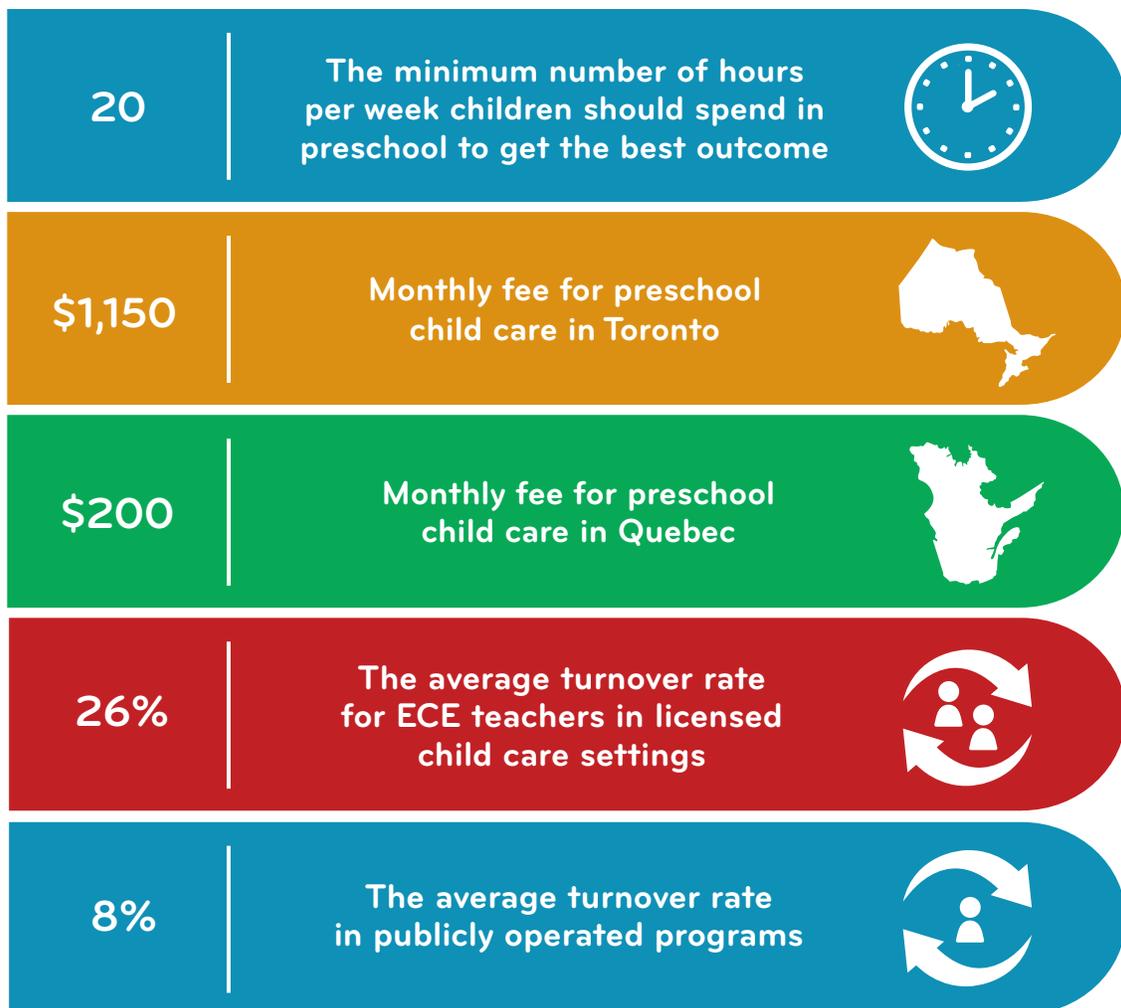
Akbari, E., & McCuaig, K. (2018a). *Early Childhood Education Report 2017*. Toronto, ON: Atkinson Centre for Society and Child Development, OISE/University of Toronto. Retrieved from <http://ecereport.ca/en>

5

RETHINKING EARLY CHILDHOOD EDUCATION

GOOD EDUCATION CARES AND GOOD CARE EDUCATES

BY THE NUMBERS



5

RETHINKING EARLY CHILDHOOD EDUCATION

GOOD EDUCATION CARES AND GOOD CARE EDUCATES

Families raising young children need all the support they can get. In international assessments, Canada scores in the middle to low range in terms of family supports.¹ We do a good job providing public education and maternal/child health care and have improved financial supports for children. The enhanced Canada Child Benefit, for example, raised more than 270,000 children out of poverty during its first full year of operation in 2017.² It is between the end of parental leave and the beginning of elementary schooling that supports for families with young children break down, and public policy is confused about what to do.

Behind the confusion are the dueling views of preschool. Is it primarily a child-minding service designed to care for children while their parents work? Or is it a child development program, the first tier of education? Alternatively, could the needs of families with young children be addressed through a combination of home visits, drop-in programs or by having families use library, recreation and other community services? While early childhood education programs obviously serve the needs of both parents and children, whether public policy views the parent or the child as the primary user strongly influences the program design, who runs it and the type and extent of the oversight.

Seen primarily as a support for parents in the workforce, child care takes a variety of forms. It may be provided by unmonitored caregivers in a home setting or in government licensed homes or centres. Tax deductions may offset some costs for higher-income earners, while low-income families using licensed care may qualify for subsidies to reduce their fees.³ Licensed or not, child care remains a market service, dominated by for-profit providers and plagued by quality concerns.^{4,5}

LINKING ECE TO PUBLIC EDUCATION

The idea of creating an early childhood system linked to public education was introduced in *Early Years Study 2*⁶ in 2007 and detailed in *With Our Best Future in Mind*,⁷ the 2009 report to the Ontario government introducing full-day kindergarten for 4- and 5-year-olds. The report envisioned the transformation of elementary schools into child and family centres, welcoming infants to adolescents and operating year-round. The report argued that all the elements already exist in the hodgepodge of child care, public health, education and family support services to create a consolidated program that could actually work for families.

The provinces and territories have been experimenting with public education to expand early learning opportunities. Education comes with a readymade infrastructure of oversight, facilities and human resources. Underused schools are a smarter and less costly alternative to creating an entirely new early years system from the ground up. Full-day kindergarten, which is now in place in most provinces and territories, makes a natural starting point. A report by the Conference Board of Canada⁸ describes how governments could expand ECE, first by ensuring that all 5-year-olds receive a full-day program and then by growing opportunities for younger children. Starting with comprehensive parental leave of 18 months, it would be possible to bridge the gap between parental leave and formal schooling.

Quebec has grasped this concept by enriching its parental leave and expanding educational child care for preschoolers. Full-day kindergarten begins at age 5 and is expanding to include 4-year-olds. In addition, Quebec schools are required to provide out-of-school care for children up to age 12. Ontario requires school boards to respond to parental demand for before- and after-school care for children aged 4 to 12 years. Nova Scotia is including after-hours care as part of the rollout of its school-based, pre-primary program for 4-year-olds. Parents appreciate these efforts. Where full-day school programming is provided, the vast majority of families enroll their children.⁹

CHILD CARE COSTS

When it comes to the care of younger children, parents get what they can rather than what they want. About two-thirds of parents of young children regularly use some form of child care.¹⁰ Nevertheless, nowhere does access to care meet the demand. Nationwide, about one in three children under the age of 5 years attends a licensed child care program.

Licensed child care is expensive. Child care costs have increased at two to three times the rate of inflation.¹¹ Prince Edward Island and Manitoba cap fees at selected centres (\$586 and \$451 per month for preschoolers respectively). Newfoundland and Labrador top up the wages of child care workers in centres that agree to a provincial fee schedule. Alberta and British Columbia are piloting centres where parent costs are set at \$25 and \$10 a day respectively.¹² In Toronto, home of Canada's most expensive child care (\$1,150/month for preschoolers), the number of families able to afford market costs has been tapped out.¹³ The city will support establishing new programs only if there are sufficient subsidies to offset parent fees.

Studies find the quality of care that children receive is directly related to their parents' ability to pay. Canada-wide, low- and middle-income families access fewer early learning services, use less centre-based care and use a greater share of their income to pay for child care

compared to higher-income families.¹⁴ Even in Quebec, where there are more options, for-profit and home care are more commonly used by parents with low incomes. Research suggests that these settings, on average, offer poorer quality learning experiences than centre-based care.¹⁵

DEMAND FOR CHILD CARE

No doubt child care can be a game changer for families. Quebec's program is credited with opening up the workforce to more mothers; as previously mentioned, it now boasts the highest female labour participation rate among wealthy countries.¹⁶ But Quebec's approach also has its critics. From its inception, the low fees created a hyper demand for care. Governments responded by opening up the doors to more home care, commercial providers and tax credits. The highly regulated Centres de la petite enfance, which the system was based on when it was established 20 years ago, now account for only 21 percent of capacity.¹⁷

Alberta and British Columbia's low-fee options are also in high demand. Only 122 of Alberta's 831 daycare centres serving children younger than 5 years receive the additional government funding that allows them to offer parents a \$25 a day fee. In comparison, the daily fee for a preschooler in a non-subsidized centre is \$38. The subsidized programs use the funds not only to contain costs for parents, but also to enhance services, particularly for those families who often have difficulty accessing licensed child care. A 2018 survey by Public Interest Alberta found the pilot programs were 15 percent more likely to serve infants and 12 percent more likely to offer services to children with disabilities, compared to other child care operators in the province. The programs were also more likely to have highly qualified staff and professional development opportunities.¹⁸ Demand for the pilot sites is understandably high, averaging 250 families on wait-lists for each centre.¹⁹ British Columbia's \$10/day plan began in 53 centres in 2018 and is to serve as a prototype for the program when it is expected to go province-wide in 2020.²⁰

Ontario's 2018 plan to provide no fee enrolment for children aged 2½ to kindergarten focused on preschool children because Ontario has a substantial number of child care spaces for that age group (about 110,000).²¹ This means it can more easily meet demand for preschool care, avoiding the shortages and wait-lists that can lead to quality shortcuts.

Prince Edward Island is also removing barriers to low-income families. Parents will no longer need to work full-time or pursue full-time education or training to receive a child care subsidy. These participatory regulations ignore the reality for many parents who are working on contract or in a series of part-time jobs. Even when parents are not working, their children are still guaranteed a minimum number of hours per week in a child care centre.²²

BENEFITS OF QUALITY CARE

Child care availability and costs are drivers for parents. But from the children's perspective, what happens inside the program is what counts. These are places where small children spend long periods, entirely reliant on the adults who organize their day and respond to their needs.

There are mixed results on the developmental benefits of centre-based care for infants and toddlers. Group programs for very young children are not necessarily harmful, but

children blossom in settings with their peers starting around the age of 2 years. Researchers at the Ontario Institute for Studies in Education (OISE) have tracked successive cohorts of 4- and 5-year-old children, including those who did and did not attend full-day preschool. The study showed that children in the full-day program scored higher on reading, writing and number knowledge than those who attended the half-day program.²³ They also scored higher on self-regulation, which is the capacity to respond to life's stresses and is a strong predictor of academic achievement. Additionally, children who attended full-day kindergarten were significantly more likely to meet provincial academic expectations in Grade 3.²⁴

In addition to academic advantages, children reported that they enjoyed preschool. Observations showed that children were more engaged and self-regulated when they were playing. OISE's research findings align with other major studies,^{25, 26, 27} showing positive outcomes are most pronounced when children attend preschool on a regular basis (at least 20 hours per week) for two or more years.

ECE WORKFORCE CHALLENGES

As early childhood policies and systems evolve, creating new challenges and new requirements, the content and expectations regarding the ECE workforce are also changing. Outside forces, including the increasing impact of technology, changing family structures, new forms of diversity, migration and other complex societal challenges all influence children's lives and their opportunities to be active learners.

While more demands are being placed on the early childhood workforce, the infrastructure supporting programs, particularly licensed child care, remains weak.

Turnover among early childhood educators is high and creates serious challenges for centres and the children and families they serve. Preliminary results from research conducted by the Atkinson Centre at OISE indicate a critical educator shortage. By a conservative estimate, 15,000 positions that should be filled by an educator with recognized qualifications are not. Meeting federal expansion goals for 40,000 more spaces would require an additional 8,000 trained staff.²⁸ Meanwhile, jurisdictions are trying to increase the density of qualified staff in licensed programs and are looking for educators with degrees to take on leadership positions.

Educator shortages are tied to wages and working conditions. The average annual turnover rate for early childhood teachers is 26 percent in licensed child care settings and 8 percent in publicly operated programs.²⁹ Frequent teacher turnover and lack of consistency of care, especially in the formative years, can have harmful effects on children and the learning process. Compounding the problem, when teachers leave their jobs it is difficult to recruit qualified replacements, which prolongs the negative impact. Administrators say the most common reason educators leave their jobs is low pay. In 2016, the average annual salary for child care professionals was \$31,000, well below the \$37,542 poverty line for a family of four.³⁰

Levels of public spending are also related to staff compensation. Wages have been a priority for most provinces and territories. For some jurisdictions, wage supplements are their single biggest ECE investment. For example, Ontario tops up the wages of child care staff by \$2/hour or \$4,160 annually for full-time positions earning less than \$26.68/hour.³¹ Yukon contributes up to \$18,720 annually for each staff member depending on the level of educator

qualification.³² Similarly, Newfoundland adds \$13,500 a year to the salaries of lead educators and \$15,600 to centre directors.³³ The Newfoundland program is not without its challenges; some operators have refused to join, denying their staff the wage top-up and parents the reduced fees (the wage grant is tied to operators capping parent fees). The province also maintains an administrative burden by sending individual cheques to staff. The Northwest Territories provides a similar supplement.³⁴ New Brunswick provides major wage supplements directly to operators, while Alberta enhances staff wages for child care operators meeting accredited quality standards. British Columbia is phasing in a \$2 an hour wage increase, Manitoba has a wage floor³⁵ and Quebec³⁶ and Prince Edward Island³⁷ have province-wide wage grids.

Jurisdictions have also implemented other measures to support the ECE workforce, including training bursaries, hiring incentives and bonuses for continuous employment.

Educator turnover is greater in licensed child care settings than in publicly-operated programs. Early childhood teachers in the publicly operated programs receive higher salaries and employer-provided benefits, unlike many of those who care for and educate young children in community-based settings.³⁸

In terms of benefits, fewer than half of all centre-based teachers receive retirement benefits, health insurance and paid maternity leave as contrasted with their counterparts in publicly operated programs, nearly all of whom receive employer-provided benefits. Educators working in publicly operated programs (e.g., schools, municipal, post-secondary) also tend to be more satisfied with their work life, citing professional development opportunities and access to other staff, amenities and resources. These educators not only enjoy the highest wages and enhanced benefits, they also credit their career satisfaction to being able to practise with autonomy and shape the early learning environment for children.³⁹

Attracting and retaining a qualified early childhood workforce is the primary challenge for policy-makers. Wages and benefits are important, but most staff members are seeking the respect that should come from those who contribute to children's foundational experiences. Research indicates that higher levels of education and training can help improve teachers' interactions with children in ways that positively affect learning.⁴⁰ Studies also suggest that educators can more effectively promote and support young children's cognitive, social and emotional growth when they know how to capitalize on this period of critical early brain development.

In addition to improving the quality of teaching, stronger preparation requirements may help to professionalize the early childhood workforce. The resulting higher pay, in turn, would attract better quality recruits, reduce turnover and provide greater incentives to ongoing improvement of practice.

ENDNOTES

- 1 UNICEF Canada. 2018. *UNICEF Report Card 15: Canadian Companion, The Equalizer: How Education Creates Fairness for Children in Canada*. UNICEF Canada, Toronto. Retrieved from <https://www.unicef.ca/en/unicef-report-card-15>
- 2 Canada Revenue Agency (2018) *Minister LeBouthillier Highlights the Arrival of the Enhanced Canada Child Benefit* Retrieved from <https://www.canada.ca/en/revenue-agency/news/2018/07/minister-lebouthillier-highlights-the-arrival-of-the-enhanced-canada-child-benefit.html>
- 3 Cleveland, G. (2018) *Affordable for All: Making Licensed Child Care Affordable in Ontario* Toronto, ON: Cleveland Consulting. Retrieved from <http://www.childcarepolicy.net/wp-content/uploads/2018/05/Presentation-at-OISE-on-Affordable-for-All-report.pdf>
- 4 Institut de la statistique du Québec, (2015) *Québec Survey on the Quality of Educational Childcare (Grandir en qualité) 2003 and 2014*. Gouvernement du Québec. Retrieved from http://www.stat.gouv.qc.ca/enquetes/education/grandir-qualite_an.html
- 5 Gingras, L., Lavoie, A., & Audet, N. (2015). *La Qualité éducative dans les Installations de Centres de la Petite Enfance. Faits Saillants, Enquête Québécoise sur la Qualité des Services de Garde éducatifs 2014*, Québec, Institut de la Statistique du Québec. Retrieved from <http://www.stat.gouv.qc.ca/statistiques/education/milieu-garde/grandir2014-FS-CPE.pdf>
- 6 McCain, M. N., Mustard, J. F., & Shanker, S. (2007). *Early Years Study 2: Putting Science into Action*. Toronto, ON: The Council for Early Child Development. Retrieved from <http://www.earlyyearsstudy.ca>
- 7 Pascal, C. (2009) *With Our Best Future in Mind: Implementing Early Learning in Ontario*. Toronto, ON: Queen's Printer for Ontario Retrieved from https://www.oise.utoronto.ca/atkinson/UserFiles/File/Resources_Topics/With_Our_Best_Future_In_Mind_-_Charles_Pascal.pdf
- 8 Alexander, C., Beckman, K., Macdonald, A., Renner, C., & Stewart, M. (2017) *Ready for Life: A Socio-Economic Analysis of Early Childhood Education and Care* Ottawa, ON: The Conference Board of Canada. Retrieved from <https://www.conferenceboard.ca/e-library/abstract.aspx?did=9231&AspxAutoDetectCookieSupport=1>
- 9 Akbari, E., & McCuaig, K. (2018a) Percentage enrolled in school-operated ECE programs [Table]. Retrieved from the *Early Childhood Education Report* website: <http://ecereport.ca>
- 10 Statistics Canada, (2019) *Survey on Early Learning and Child Care Arrangements, 2019, The Daily*, Wednesday, April 10. Retrieved from <https://www150.statcan.gc.ca/n1/daily-quotidien/190410/dq190410a-eng.htm>
- 11 Macdonald, D., & Friendly, M. (2019). *Developmental Milestones: Child Care Fees in Canada's Big Cities 2018*. Ottawa, ON: Canadian Centre for Policy Alternatives. Retrieved from <https://www.policyalternatives.ca/newsroom/news-releases/study-reveals-highest-and-lowest-child-care-fees-canadian-cities-2018>
- 12 Akbari, E., & McCuaig, K. (2018a) *Early Childhood Education Report 2017* Toronto, ON: Atkinson Centre for Society and Child Development, OISE/University of Toronto. Retrieved from <http://ecereport.ca/en/>
- 13 Cleveland, G., Krashinsky, M., Colley, S., & Avery-Nunez, C. (2016, October). *City of Toronto Licensed Child Care Demand and Affordability Study*. Toronto, ON: Cleveland Consulting. Retrieved from <https://www.toronto.ca/wp-content/uploads/2017/12/8d0a-Community-Services-and-Facilities-Toronto-Demand-Affordability-Study-2016.pdf>
- 14 Sinha, M. (2014 a). *Child care in Canada. Spotlight on Canadians: Results from the General Social Survey*. Canada: Minister of Industry. Retrieved from <https://www150.statcan.gc.ca/>
- 15 Gouvernement du Québec, Institut de la Statistique du Québec, 2011, *Enquête sur L'utilisation, les Besoins et les Préférences des Familles en Matière de Services de Garde, 2009. Portrait Québécois et Régional*. Retrieved from <http://www.stat.gouv.qc.ca/statistiques/education/milieu-garde/utilisation-services-garde-2009.pdf>
- 16 Fortin, P. (2019) *Quebec Childcare at 20: What Have We Learned?* Paper presented at a seminar organized by the Centre for the Study of Living Standards at the Rideau Club, Ottawa. April 24, 2019
- 17 Fortin, P. (2019) *Quebec Childcare at 20: What Have We Learned?* Paper presented at a seminar organized by the Centre for the Study of Living Standards at the Rideau Club, Ottawa. April 24, 2019
- 18 Public Interest Alberta (2019). *Alberta Child Care Survey 2018*. Edmonton, AB: Authors Inc. Retrieved from <https://www.pialberta.org/childcaresurvey2018>
- 19 Omstead, J. (2019). *Alberta Child Care Survey Points to Success of \$25-a-day Programs*. *CBC News* January 16. Retrieved from <https://www.cbc.ca/news/canada/edmonton/affordable-child-care-leads-province-1.4981289>
- 20 Government of British Columbia (n.d.) *Universal Child Care Prototype Sites*. Retrieved from <https://www2.gov.bc.ca/gov/content/family-social-supports/caring-for-young-children/running-daycare-preschool/universal-child-care-prototype-sites>
- 21 Cleveland, G. (2018) *Affordable for all: Making Licensed Child Care Affordable in Ontario*. Toronto, ON: Cleveland Consulting. Retrieved from http://www.childcarepolicy.net/wp-content/uploads/2018/03/AFFORDABLE-FOR-ALL_Full-Report_Final.pdf
- 22 CHANCES Family Centres. (2019, March), *Early Childhood Services that Work for Children, Families and Islanders*. Author. Retrieved from http://mwmccain.ca/_media/uploads/peireport_update_final_march2019.pdf

- 23 Pelletier J., & Corter J. A. (2018) A Longitudinal Comparison of Learning Outcomes in Full-day and Half-day Kindergarten *The Journal of Educational Research*. 112(2), pp. 192-210. DOI: 10.1080/00220671.2018.1486280
- 24 Pelletier J., & Corter J. A. (2018) Longitudinal Comparison of Learning Outcomes in Full-day and Half-day Kindergarten *The Journal of Educational Research*. 112(2), pp. 192-210. DOI: 10.1080/00220671.2018.1486280
- 25 Melhuish, E. (2011, July 15) *Preschool Matters*. *Science* Vol. 333, Issue 6040, pp. 299-300. DOI: 10.1126/science.1209459. Retrieved from <https://science.sciencemag.org/content/333/6040/299.full>
- 26 OECD (2018a). *Early Learning Matters*. Author. Retrieved from <http://www.oecd.org/education/school/Early-Learning-Matters-Project-Brochure.pdf>
- 27 Pelletier J. & Corter J. A. (2018) Longitudinal Comparison of Learning Outcomes in Full-day and Half-day Kindergarten *The Journal of Educational Research*. 112(2), pp. 192-210. DOI: 10.1080/00220671.2018.1486280
- 28 Atkinson Centre for Society and Child Development (2018) *Canada Needs a National Strategy to Address the Shortage of Early Childhood Educators* Toronto, ON: Author, Inc. Retrieved from https://www.oise.utoronto.ca/atkinson/UserFiles/File/Policy%20Commentaries/Canada_needs_a_national_strategy_to_address_the_shortage_of_early_childhood_educators.pdf
- 29 Akbari, E., & McCuaig, K. (In press) *Early Childhood Education Report, 2020*. Toronto, ON: Atkinson Centre for Society and Child Development OISE/University of Toronto. Note: Ontario turnover rate
- 30 Akbari, E., & McCuaig, K. (In press) *Early Childhood Education Report, 2020*. Toronto, ON: Atkinson Centre for Society and Child Development OISE/University of Toronto
- 31 Akbari, E., & McCuaig, K. (2018b) *Ontario 2017: Trends in ECEC from 2011-2017* [Profile] Toronto, ON: Atkinson Centre for Society and Child Development OISE/University of Toronto. Retrieved from the Early Childhood Education Report website <http://ecereport.ca>
- 32 Akbari, E. & McCuaig, K. (2018c) *Yukon Territories Profile 2017: Trends in ECEC* Toronto, ON: Atkinson Centre for Society and Child Development OISE/University of Toronto. Retrieved from the Early Childhood Education Report website: <http://ecereport.ca>
- 33 Government of Newfoundland and Labrador Department of Education and Early Childhood Development (June 16, 2018) *Early Learning and Child Care Supplement* Retrieved from https://www.ed.gov.nl.ca/edu/family/childcare/supplement/pdf/ELCC_Supplement_Policy_Final_2018_.pdf
- 34 Government of the Northwest Territories, Department of Education, Culture and Employment (2016) *Early Childhood Program, Early Childhood Staff Grant Program Guidelines* Retrieved from https://www.ece.gov.nt.ca/sites/ece/files/resources/ecd_staff_grant_program_guidelines_-_en.pdf
- 35 Akbari, E. & McCuaig, K. (2018d) *Manitoba Profile 2017: Trends in ECEC from 2011-2017* Toronto, ON: Atkinson Centre for Society and Child Development OISE/University of Toronto. Retrieved from the Early Childhood Education Report website: <http://ecereport.ca>
- 36 Akbari, E. & McCuaig, K. (2018e) *Quebec Profile 2017: Trends in ECEC from 2011-2017* Toronto, ON: Atkinson Centre for Society and Child Development OISE/University of Toronto. Retrieved from the Early Childhood Education Report website: <http://ecereport.ca>
- 37 Akbari, E. & McCuaig, K. (2018f) *Prince Edward Island profile 2017: Trends in ECEC from 2011-2017* Toronto, ON: Atkinson Centre for Society and Child Development University of Toronto, OISE. Retrieved from the Early Childhood Education Report website: <http://ecereport.ca>
- 38 R.A. Malatest & Associates Ltd. (2017). *Workforce Study for Early Years and Child Care Employees: Final Report*. Retrieved from https://www.msdsb.net/images/ADMIN/correspondence/2018/MEDU_Workforce_Report_en.pdf
- 39 R.A. Malatest & Associates Ltd. (2017). *Workforce Study for Early Years and Child Care Employees: Final Report* Retrieved from https://www.msdsb.net/images/ADMIN/correspondence/2018/MEDU_Workforce_Report_en.pdf
- 40 Bueno, M., Darling-Hammond L., & Gonzales, D. (March 2010) *A Matter of Degrees: Preparing Teachers for the Pre-K Classroom Education. Reform Series* The Pew Centre on the States. Retrieved from https://www.pewtrusts.org/~media/legacy/uploadedfiles/wwwpewtrustsorg/reports/pre-k_education/pkneducationreformseriesfinalpdf.pdf

BY THE NUMBERS

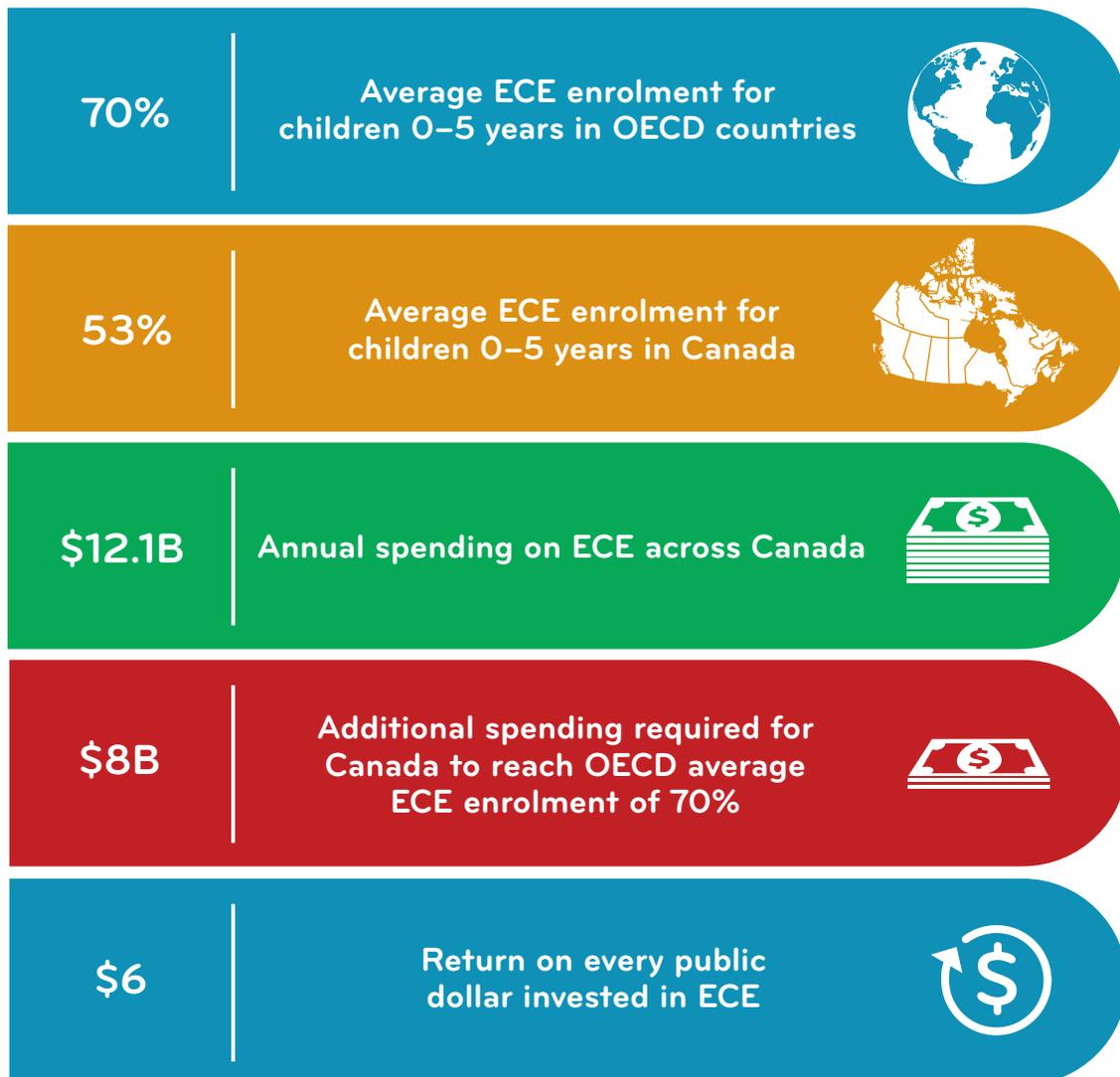
- 20 CHANCES Family Centres. (2019). *Early Childhood Services that Work for Children, Families and Islanders*. Charlottetown, PEI: Authors Inc. Retrieved from http://mwmccain.ca/media/uploads/peireport_update_final_march2019.pdf
- Pelletier, J. & Corter, J. (2019): A Longitudinal Comparison of Learning Outcomes in Full-Day And Half-Day Kindergarten. *The Journal of Educational Research*. 112 (2) pp 192-210 DOI:10.1080/00220671.2018.1486280
- Reynolds, A, Richardson, B., Hayakawa, M., Lease, E., Warner-Richter, M., Englund, M., Ou, S., & Sullivan, M. (2014). Association of a Full-Day vs Part-Day Preschool Intervention With School Readiness, Attendance and Parent Involvement. *JAMA*. 2014: 312(20): 2126-2134 doi:10.1001/jama.2014.15376. Retrieved from <https://jamanetwork.com/journals/jama/fullarticle/1938567>
- \$1,150** Macdonald, D., & Friendly, M. (2019) *Developmental Milestones: Child Care Fees in Canada's Big Cities 2018* [Online] Ontario: Canadian Centre for Policy Alternatives. Retrieved from <https://www.policyalternatives.ca/newsroom/news-releases/study-reveals-highest-and-lowest-child-care-fees-canadian-cities-2018>
- \$200** Moyser, M. (2017). *Women and Paid Work*. Government of Canada. Retrieved from <https://www150.statcan.gc.ca/n1/pub/89-503-x/2015001/article/14694-eng.htm>
- Statistics Canada. (2015). Employment rate by sex, province and census metropolitan area; and median monthly childcare fees for selected cities. Retrieved from <https://www150.statcan.gc.ca/n1/pub/89-503-x/2015001/article/14694/tbl/tbl01-eng.htm>
- 26%** Akbari, E., & McCuaig, K. (In press) *Early Childhood Education Report, 2020*. Toronto, ON: Atkinson Centre for Society and Child Development OISE/University of Toronto. Note: Ontario turnover rate
- 8%** Akbari, E., & McCuaig, K. (In press) *Early Childhood Education Report, 2020*. Toronto, ON: Atkinson Centre for Society and Child Development OISE/University of Toronto. Note: Ontario turnover rate

6

THE NEXT STEP

CANADA CAN DO BETTER

BY THE NUMBERS



6

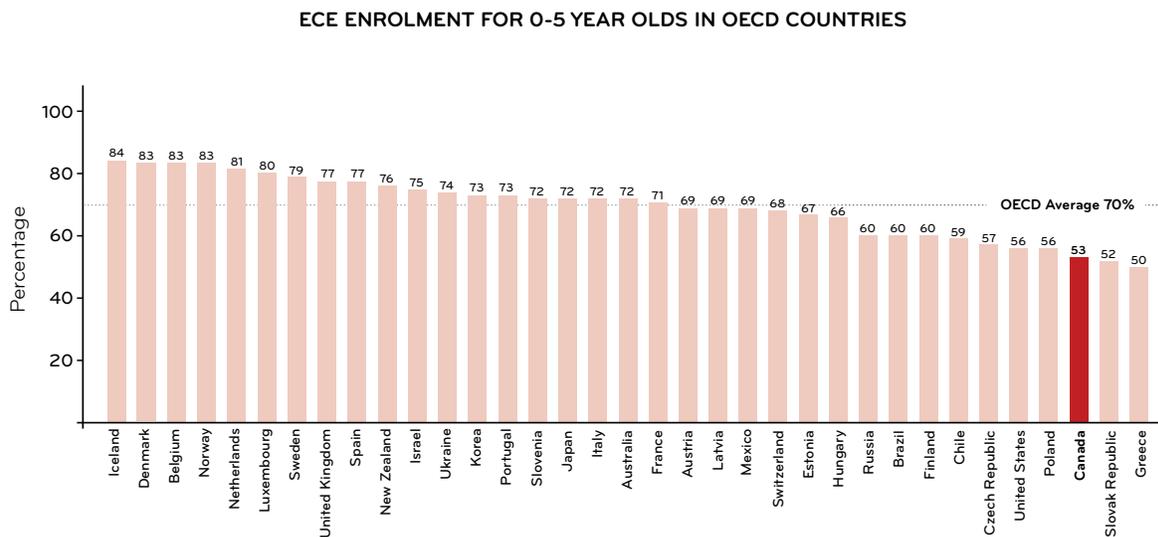
THE NEXT STEP

CANADA CAN DO BETTER

Early childhood advocates and Canadian parents outside Quebec have long envied the generous family supports offered in many other countries and lamented their absence here. With one in two children age 5 and younger regularly attending an early childhood education program, Canada ranks 33 out of 35 members of the Organisation for Economic Co-operation and Development (OECD), where enrolment for this age group averages 70 percent.¹ Canadians outside Quebec also pay much more of their income on early education and care (19 percent of net income) compared to the OECD average (12 percent).²

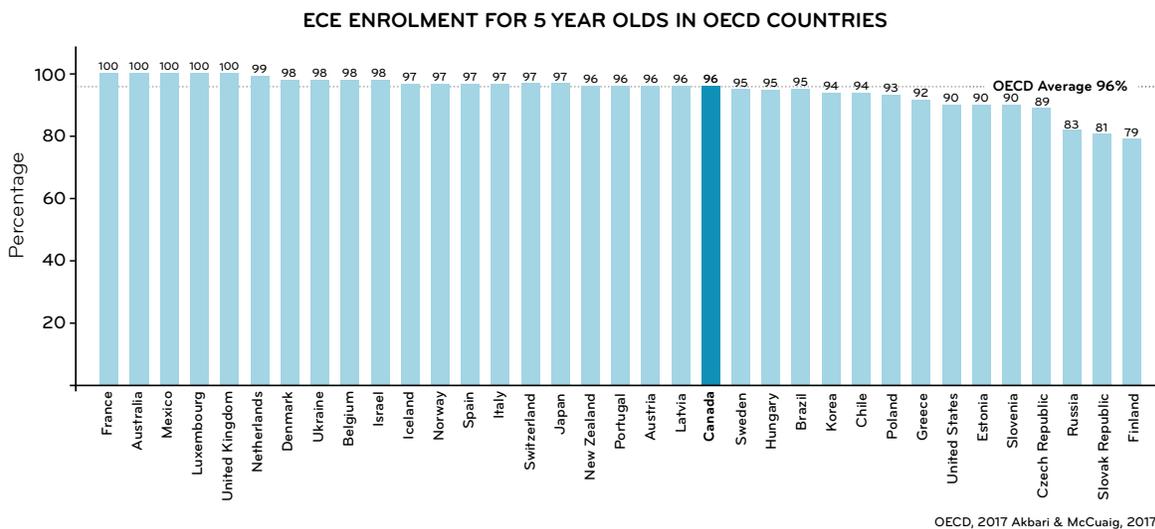
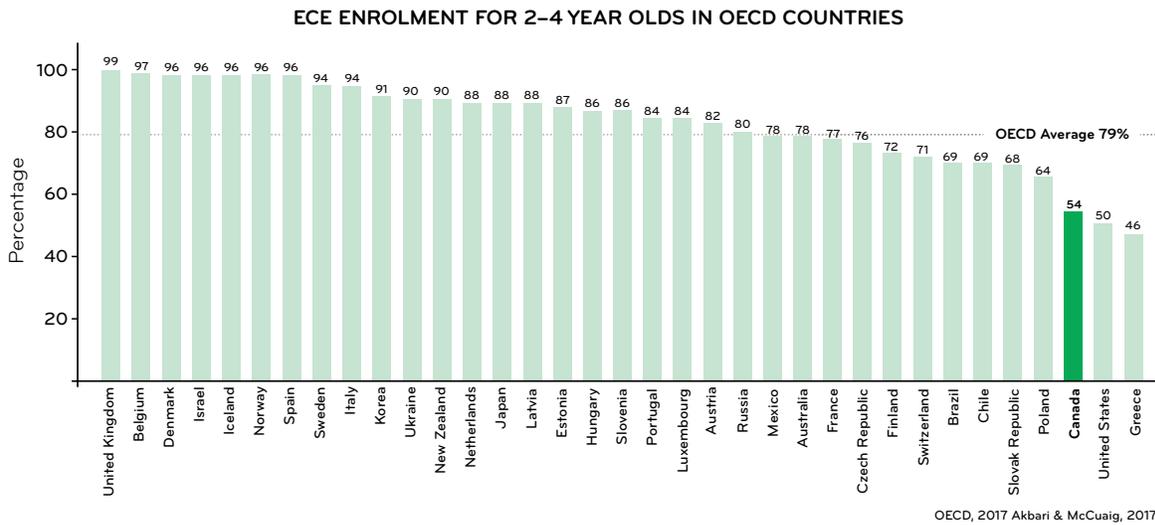
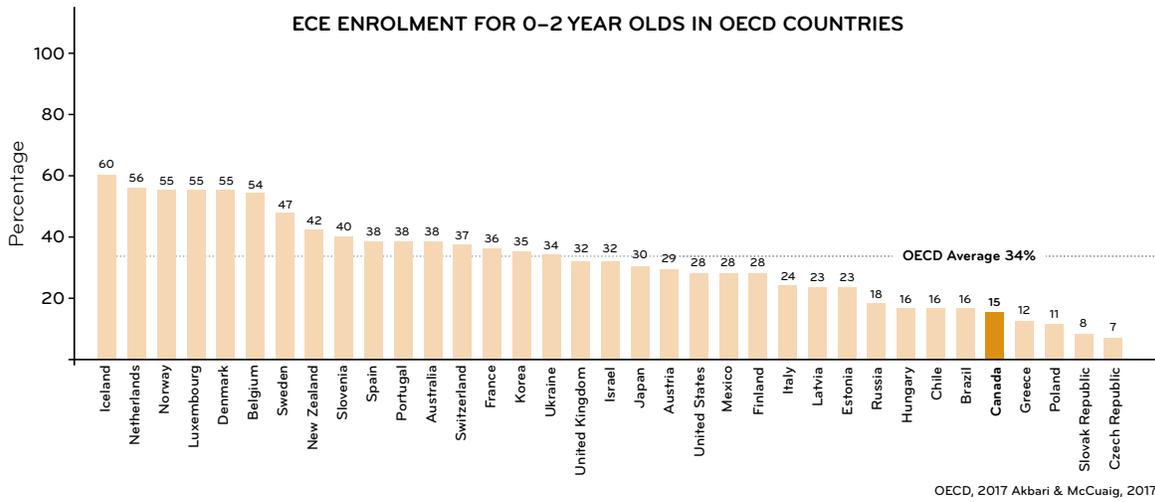
FIGURE 6.1

CANADA'S ECE ENROLMENT RATES COMPARED TO OTHER OECD COUNTRIES



OECD, 2017 Akbari & McCuaig, 2017

FIGURE 6.1 CONTINUED



Perhaps the biggest difference between Canada and the majority of its counterparts is the expectation in the OECD that young children, at least those between the ages of 3 and 5 years, will participate in an ECE program. Preschool as the norm for all children reduces stigma and barriers to enrolment, increasing participation from families across the income spectrum. It also frames early education as something that children deserve for their own well-being and development, rather than a service primarily to help parents work. Neurologists and psychologists unanimously agree that quality early childhood education can have long-lasting consequences for brain development and cognitive and behavioural preparation for school. This agreement helps silence the debate that burdens parents, particularly mothers, who can be harshly judged or who judge themselves if they place their children in an early years program while participating in the workforce.

The earnings of mothers are important to the financial well-being of families. Considerable evidence indicates that women's career paths and earnings can be reduced by time out of the labour market to care for small children. Considering that 50 percent of Canadian couples separate after 10 years,³ long periods of absence from the labour force can have severe financial consequences for lone mothers and their children.

Universal preschool has its critics. Some argue that universal programs are too costly, and that making access universal detracts from the pressing needs of low-income children. The evidence from Quebec suggests it is in fact less costly to care for the special needs of disadvantaged children under a universal rather than a targeted system. By foregoing the stigma of targeted programs, universal approaches are more effective at delivering better quality programming and boosting the participation of the most at-risk children, particularly when combined with targeted recruitment and enriched resources for marginalized communities.⁴

Universal early childhood education attracts so many more women into the labour force that the additional tax revenue from their earnings and economies in social transfers far exceed the cost of the program, even when the parental fee is very modest.⁵ This in turn leaves a financial surplus to enrich programming for disadvantaged children.

Others are concerned that universal access for preschoolers leaves infants and toddlers behind, that preschool hours do not meet the needs of working parents or that schools will push academic learning on children not yet ready for its rigour. These trepidations reflect a limited understanding of the evidence, rather than the failings of universality. For instance, universal access does not need to mean "free". All children could be entitled to a core day of preschool without fees—some OECD countries guarantee a minimum number of hours a week—with parents paying for additional hours to cover their work needs. Similarly, many countries that started with universal access for 4- and 5-year-olds subsequently expanded services for younger children, suggesting that universal preschool may open the door to broader support for early childhood provision rather than closing the door on infants and toddlers.

Nor does universal access mean that programs need to be provided exclusively through public schools. Delivering early childhood programs through public education makes sense in the Canadian context due to public education's comprehensive infrastructure, but alternatives could ensure strong support for the sector. For example, some countries designate municipalities or other public entities as their delivery agents. Others supplement public provision with community providers, as long as they meet public standards. Finally, experiences in Canada and abroad find that

early education’s approach to play-based learning wends its way up to influence pedagogy in the older grades and is a protection against only direct instruction and structured academic learning.

Even the leading countries experience challenges. Many are similar to our own. In some jurisdictions, government oversight draws a line between “education” offered by schools and poorly resourced “care” delivered by commercial and community agencies. Every country struggles to elevate the prestige of early childhood educators and recruit a workforce that is reflective of the communities served. Inequities in access in rural and remote communities and among historically marginalized populations also need to be addressed. And even countries that have secured significant spending for young children must work to protect it.

The countries that currently lead the way in early childhood access may have adopted different models of delivery, but they shared a common vision of early education as a public good requiring public leadership. For Canada, this means building systems for early education and care guided by the following principles:

- 1. EARLY CHILDHOOD EDUCATION AS AN ENTITLEMENT:** Without being mandatory, a legal entitlement makes children’s participation in preschool the norm, whether or not their parents engage in paid work. Entitlement emphasizes the educational nature of the investment and protects ECE from political shifts and economic downturns.
- 2. UNIVERSAL PROVISION:** The goal is for all children to participate in a single universal early education and care system. Universal access, with special outreach to marginalized groups, promotes social and economic integration, consistent quality and positive peer effects among children from different backgrounds.
- 3. STRONG PUBLIC INFRASTRUCTURE:** It is essential that early education have its own home within government. It needs a department with a mandate and resources to ensure that preschool is available, that children enjoy high quality programming, and that the ECE workforce is well prepared and receives adequate compensation and support. Early education departments are correctly located within broader education ministries to support the continuum of learning from early childhood and beyond.
- 4. ADEQUATE PUBLIC FUNDING:** Funding structures must ensure that costs are not a barrier to participation. This means either free enrolment or developing a fee structure that is progressive to ensure early education is affordable for all. Affordability needs to include middle-income families who often do not qualify for government subsidies.

Meeting these goals will require an increase in funding. To reach the average OECD enrolment level of 70 percent for children 0 – 5 years would require an increase in spending from the current \$12.1 billion that Canada spends, to \$20 billion annually. (Costs are based on attaining 70 percent enrolment for children 0 – 5 years old, funded at the rate of \$12,400 per space — Quebec’s level — for the provinces and \$18,000 per space in the territories to reflect additional costs in the Far North.) With the expanded parental leave, it is assumed that most of the increase in capacity will be for older children in the 0 – 5 year old cohort.

Provinces and territories will determine their own delivery and funding models including a possible parental fee structure to supplement public funding. Economists have argued the benefits of no fee,⁶ but options may include free ECE for the equivalent of a full school day with an affordable parental fee for an extended day. A modest flat fee could be waived for low-income families similar to the one found in Quebec or a sliding scale fee with a low cap.

The majority of current spending comes from the provinces and territories, with the federal government contributing only \$1.8 billion of the \$12.1 billion spent through the Canada Social Transfer and the bilateral agreements for Early Learning and Child Care. Since the provinces and territories have done much of the heavy lifting for young children to date, it would be appropriate for the federal government to make up the majority of the \$8 billion shortfall. Since Ottawa is also the greatest beneficiary of tax revenues from enhanced maternal labour force participation, this provides an additional rationale for the federal government to make the larger contribution. To manage expansion, spending should increase by \$1 billion a year until the shortfall is covered.

The figures are big, but so are the payoffs. James Heckman, a Nobel Laureate in economics, argues that the earlier the investment in human development, the greater the return on investment.⁷ Canadian economists estimate a long-term \$6 return for every public dollar spent as Canada reaps the benefits from improved maternal labour force participation, reduced inequality, better social integration of marginalized groups and improved educational outcomes for children.⁸

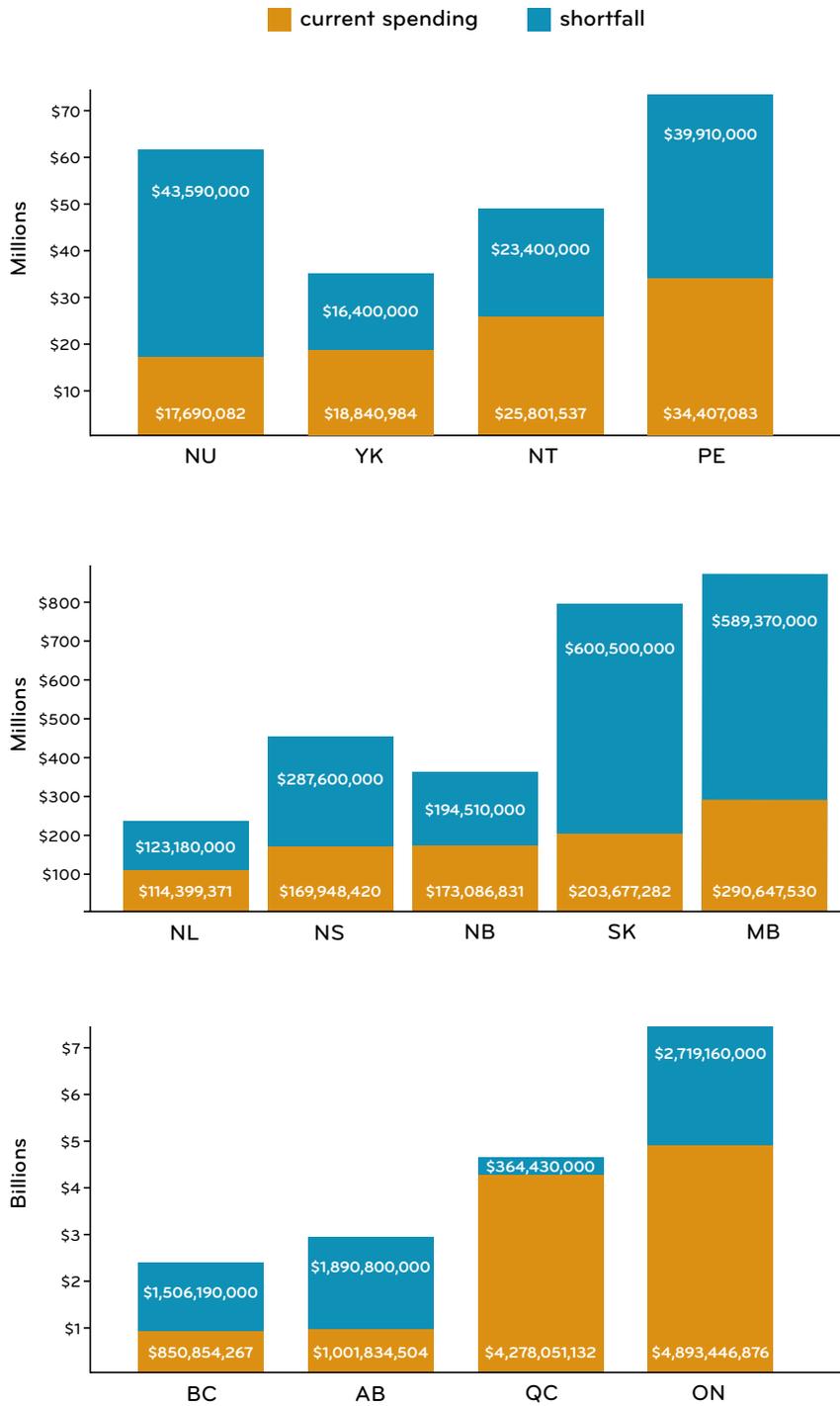
Some jurisdictions in Canada are on their way. Others have reduced capacity and will need more support. While the design and oversight of early childhood education is a provincial and territorial responsibility, the federal government has a duty to ensure equity of services for all children across Canada.

In addition, the federal government is directly responsible for supporting comparable programming for Indigenous families. It alone has the capacity to support pan-Canadian research and innovation and to provide transparent reporting to Canadians on the well-being of their children.

While Canada may lag behind other countries on early childhood indicators, we can learn from their experiences. By customizing international evidence to solutions based on Canada's values, its unique federal system and provincial/territorial/Indigenous and local circumstances—we can help accelerate our progress.

FIGURE 6.2

SPENDING REQUIRED BY PROVINCE / TERRITORY FOR CANADA TO REACH OECD AVERAGE ECE ENROLMENT OF 70% FOR 0-5 YEAR OLDS*



*Calculations based on \$12,400 per child in the provinces and \$18,000 per child in the territories
 OECD, 2017 Akbari & McCuaig, in press

ENDNOTES

- 1 OECD. (2017). *Starting Strong 2017: Key OECD Indicators on Early Childhood Education and Care*. Starting Strong, Paris: OECD Publishing <https://doi.org/10.1787/9789264276116-en>
- 2 OECD. (n.d.) Net income two earner, two children family, 2018. *Data*. Retrieved from <https://stats.oecd.org/Index.aspx?DataSetCode=NCC>
- 3 Fortin, P. (2019). *Quebec Childcare at 20: What Have We Learned?* Seminar at Centre for the Study of Living Standards at the Rideau Club, Ottawa, April 24, 2019
- 4 Taggart, B., Sylva, K., Melhuish, E., Sammons, P., Siraj, I. (2015, June). Effective pre-school, primary and secondary education project (EPPSE 3-16+) How pre-school influences children and young people's attainment and developmental outcomes over time *Research Brief*. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/455670/RB455_Effective_pre-school_primary_and_secondary_education_project.pdf.pdf
- 5 Fortin, P., Godbout, L., & St-Cerny, S. (2012). *Impact of Quebec's Universal Low-Fee Childcare Program on Female Labour Force Participation, Domestic Income, and Government Budgets*. Atkinson Centre, OISE, University of Toronto. Retrieved from https://www.utoronto.ca/atkinson/UserFiles/File/News/Fortin-Godbout-St_Cerny_eng.pdf
- 6 Cleveland, G. (2018). *Affordable for all: Making licensed child care affordable in Ontario*. Toronto, ON: Cleveland Consulting. Retrieved from http://www.childcarepolicy.net/wp-content/uploads/2018/03/AFFORDABLE-FOR-ALL_Full-Report_Final.pdf
- 7 National Institute for Early Childhood Education Research (n.d.) *The Heckman Equation: Invest in Early Childhood Development: Reduce Deficits, Strengthen the Economy*. Retrieved from http://www.earlychildhoodnry.org/pdfs/research/F_HeckmanDeficitPieceCUSTOM-Generic_052714.pdf
- 8 Alexander, C., Beckman, K., Macdonald, A., Renner, C., & Stewart, M. (2017, October). Ready for Life: A Socio-Economic Analysis of Early Childhood Education and Care. Ottawa, ON The Conference Board of Canada. Retrieved from <https://www.conferenceboard.ca/e-library/abstract.aspx?did=9231&AspxAutoDetectCookieSupport=1>

BY THE NUMBERS

- 70%** Organisation for Economic Co-operation and Development (2017). Key OECD indicators on early childhood education and care. Retrieved from <http://www.oecd.org/education/school/SS%20V%20Enrolment%20rates%20by%20age.png>
- 53%** Akbari, E., & McCuaig, K. (2018a). *The Early Childhood Education Report 2017*. Toronto, ON: Atkinson Centre for Society and Child Development, OISE/University of Toronto. Retrieved from <http://ecereport.ca/media/uploads/2017-report-pdfs/ece-report2017-en-feb6.pdf>
- \$12.1B** Akbari, E., & McCuaig, K. (In press). *The Early Childhood Education Report 2020*. Toronto, ON: Atkinson Centre for Society and Child Development, OISE/University of Toronto
- \$8B** Akbari, E., & McCuaig, K. (In press). *The Early Childhood Education Report 2020*. Toronto, ON: Atkinson Centre for Society and Child Development, OISE/University of Toronto
- \$6** Alexander, C., Kip, B., Macdonald, A., Renner, C., & Stewart, M. (2017). *Ready for Life: A Socio-Economic Analysis of Early Childhood Education and Care*. Ottawa, ON: The Conference Board of Canada, 2017. Retrieved from <https://www.conferenceboard.ca/e-library/abstract.aspx?did=9231&AspxAutoDetectCookieSupport=1>

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6.1 CANADA'S ECE ENROLMENT RATES COMPARED TO OTHER OECD COUNTRIES

OECD. (2017). *Starting Strong 2017: Key OECD Indicators on Early Childhood Education and Care*. Starting Strong, Paris: OECD Publishing <https://doi.org/10.1787/9789264276116-en>

Akbari, E., & McCuaig, K. (In press). *Early Childhood Education Report 2020*. Toronto, ON: Atkinson Centre for Society and Child Development, OISE/University of Toronto

6.2 SPENDING REQUIRED BY PROVINCE/TERRITORY FOR CANADA TO REACH

OECD AVERAGE ECE ENROLMENT OF 70% FOR 0 – 5 YEAR OLDS

OECD. (2017). *Starting Strong 2017: Key OECD Indicators on Early Childhood Education and Care*. Starting Strong, Paris: OECD Publishing <https://doi.org/10.1787/9789264276116-en>

Akbari, E., & McCuaig, K. (In press). *Early Childhood Education Report 2020*. Toronto, ON: Atkinson Centre for Society and Child Development, OISE/University of Toronto

BECOMING A CAPABLE CHILD

Dr. V. Angela James

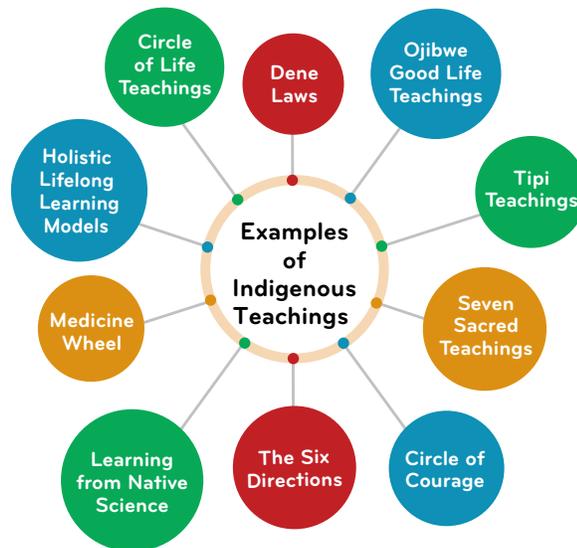
The “capable person” concept originated in the mid-1990s from the Northwest Territories (NWT) Indigenous curriculum documents that highlight the Dene¹ and Inuit² perspectives on raising and educating children.

A capable person is one who has integrity in relationships that honour the self, others, the land and the spiritual world.³ Through these relationships, a capable person grows and develops a more expansive understanding of the physical, mental, emotional and spiritual—the four parts of human development.⁴

These are the critical elements that Elders envision for their children so they can become, be and believe as capable beings who grow and develop into healthy adults, contributing their gifts and strengths to family, home, early childhood centres, schools and community.

FIGURE AJ1

A CHILD IS A CAPABLE PERSON

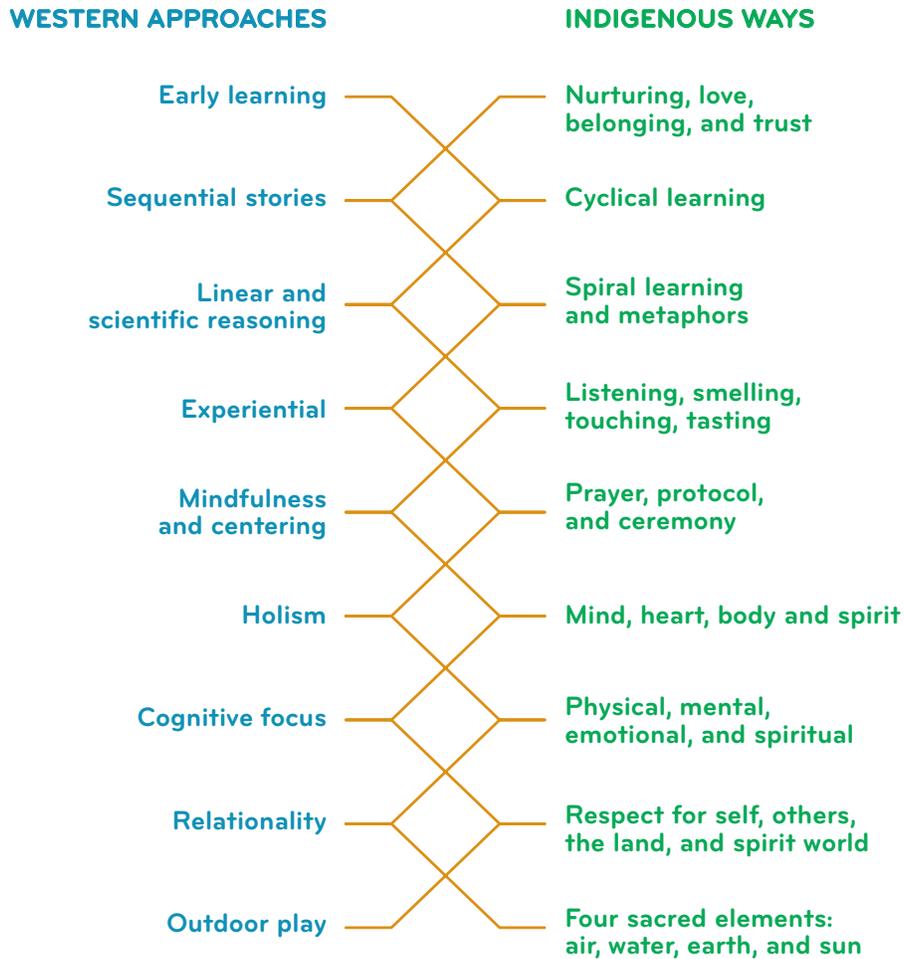


Dene Kede, 1993 Inuuqatigiit, 1996
Western and Northern Canadian Protocol, 2000



FIGURE AJ2

**SIMILAR GOALS – DIFFERENT LANGUAGE,
BRIDGING WESTERN AND INDIGENOUS EARLY LEARNING CURRICULA**



James, 2018

As a Métis educator and researcher, my bicultural perspective has informed my work. Drawing on life-experience narratives of NWT Elders, a metaphor emerged for looking at NWT early education in the form of an Indigenous tipi. This concept frames the processes of raising children as similar to the raising of an Indigenous tipi.

The tipi metaphor brings meaning to the discussion of how an individual develops into a capable person and what influences that growth. There are four structures: the centre with its grounding influences of the circle of self and identity; the tripod of relationality that encourages searching for meaning in time, people and place; the spirals emanating from the centre of the narrative space, with their recurring influences of the ancient and spiritual teachings of Elders’ stories; and the “canvas” covering the tipi that represents the outside influence surrounding children as they grow and develop into capable people.

FIGURE AJ3



By embedding a capable person philosophy, pedagogy and practice into the curricula of early childhood centres and schools, educators are able to address the continuum of education and respect children in all stages of their growth and development. In their Indigenous curriculum, the NWT Dene Elders agree that such an approach is not only generative, but also honourable:

“Among the Dene, it is said that the child is born with integrity. The child has worth. It is the birth right of the Dene child to be acknowledged and respected for this. The child who is not respected cannot become what it is meant to be...that is a capable person.” (p. vxi)⁵

As the child grows and develops into a capable person, it is critical that Indigenous education values, beliefs and ways of knowing have space in the early years dialogue. Educators need to pay attention to and practise wakefulness⁶ in integrating culturally relevant approaches as they relate to the early years. For example, educators need to acknowledge and act upon key Indigenous values and beliefs relating to children, including:

- The reverential attitude toward the child in Indigenous families
- Parents as the first teachers
- Grandparents’ (Elders) love for children as the closest love the Creator has for humankind
- The critical importance of identity and self
- Honouring place, people and history
- Spiral guides and spiral learning
- Spirituality as an extension of culture
- Welcoming early learning environments for children, family, community and Elders to create intergenerational learning spaces

Early learning policy that acknowledges Indigenous philosophies and cares for Indigenous children must be included across the continuum and become a priority for policy leaders and educators aiming to nurture capable children. If not, the child becomes lost in two worlds rather than becoming strong like two people: strong in the Indigenous world as well as in the Western world.⁷ As such, it is important to apply elements from the Indigenous curriculum in the early years and to understand the need to balance these with Western counterparts. For instance, when calling on Western approaches in the early years, educators can add more meaning by referencing some of the Indigenous ways as outlined below:⁸

FIGURE AJ4

EDUCATORS, RESEARCHERS AND SCHOLARS HAVE USED A VARIETY OF EXPRESSIONS IN DISCUSSING “A CAPABLE PERSON” PHILOSOPHY



Western and Northern Canadian Protocol, 2013

By balancing these approaches, educators will create the conditions that help shape the development of Indigenous children who benefit from culturally sensitive early learning centres. In turn, the centres become beacons of hope not only for the Indigenous families who benefit from culturally appropriate, quality early learning, but also for all families wishing to reach reconciliation, relationship building and revitalization of language and culture. This will bring hope for children to grow and develop into the capable people they are meant to be.

Dissertation link: <http://summit.sfu.ca/item/16711>

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ENDNOTES

- 1 Government of Northwest Territories (1993). *Education: A Dene Perspective*. Yellowknife, NWT: Department of Education, Culture and Employment. Retrieved from https://www.ece.gov.nt.ca/sites/ece/files/resources/dene_kede_k-6_full_curriculum.pdf
- 2 Government of Northwest Territories (1996). *Inuuqatigiit Curriculum: The Curriculum from the Inuit Perspective*. Yellowknife, NWT: Department of Education, Culture and Employment
- 3 James, V. A. (2016). *The Shaping Influences of 'A Capable Person': A narrative research of Elders' stories of raising children to inform Aboriginal education in the Northwest Territories*. Unpublished doctoral dissertation, Simon Fraser University, Vancouver, BC, Canada. Retrieved from <https://summit.sfu.ca/item/16711>
- 4 Western and Northern Canadian Protocol. (2013). *Our Way is a Valid Way: Professional Educator Resource*. Canada: The Crown in Right of the Governments of Alberta, Manitoba, Northwest Territories, Nunavut, Saskatchewan, and Yukon Territory. Retrieved from <https://education.alberta.ca/media/563981/our-way-is-a-valid-way.pdf>
- 5 Government of Northwest Territories (1993). *Education: A Dene Perspective*. Yellowknife, NWT: Department of Education, Culture and Employment. Retrieved from https://www.ece.gov.nt.ca/sites/ece/files/resources/dene_kede_k-6_full_curriculum.pdf
- 6 Clandinin, D. J. (2013). *Engaging in Narrative Inquiry* Walnut Creek, CA: Left Coast Press, Inc. Retrieved from <https://www.routledge.com/Engaging-in-Narrative-Inquiry-1st-Edition/Clandinin/p/book/9781611321609>
- 7 Tłı̨ch̓ Government. (1971). Chief Jimmy Bruneau school opening [Video]. Retrieved from <https://vimeo.com/230827229>
- 8 Western and Northern Canadian Protocol. (2013). *Our way is a valid way: Professional educator resource*. Canada: The Crown in Right of the Governments of Alberta, Manitoba, Northwest Territories, Nunavut, Saskatchewan, and Yukon Territory. Retrieved from <https://education.alberta.ca/media/563981/our-way-is-a-valid-way.pdf>

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Government of Northwest Territories (1996). *Inuuqatigiit Curriculum: The Curriculum from the Inuit Perspective*. Yellowknife, NWT: Department of Education, Culture and Employment

Government of Northwest Territories (1993). *Education: A Dene Perspective*. Yellowknife, NWT: Department of Education, Culture and Employment. Retrieved from https://www.ece.gov.nt.ca/sites/ece/files/resources/dene_kede_k-6_full_curriculum.pdf

Western and Northern Canadian Protocol (WNCP) (2000) *Our Way is a Valid Way* Canada: The Crown in Right of the Governments of Alberta, Manitoba, Northwest Territories, Nunavut, Saskatchewan, and Yukon Territory. Retrieved from <https://education.alberta.ca/media/563981/our-way-is-a-valid-way.pdf>

AJ2 SIMILAR GOALS – DIFFERENT LANGUAGE, BRIDGING WESTERN AND INDIGENOUS EARLY LEARNING CURRICULA

James, V. A. (2018). *What can Indigenous curriculum teach us all?* Presentation to Outdoor Play and Early Learning Policy Research Symposium. The Lawson Foundation. October 25

AJ3 SHAPING INFLUENCES OF 'A CAPABLE PERSON'

James, V. A. (2016). *The Shaping Influences of 'A Capable Person': A narrative research of Elders' stories of raising children to inform Aboriginal education in the Northwest Territories*. Unpublished doctoral dissertation, Simon Fraser University, Vancouver, BC, Canada. Retrieved from <https://summit.sfu.ca/item/16711>

AJ4 EDUCATORS, RESEARCHERS AND SCHOLARS HAVE USED A VARIETY OF EXPRESSIONS IN DISCUSSING "A CAPABLE PERSON" PHILOSOPHY

Western and Northern Canadian Protocol. (2013). *Our way is a valid way: Professional educator resource*. Canada: The Crown in Right of the Governments of Alberta, Manitoba, Northwest Territories, Nunavut, Saskatchewan, and Yukon Territory. Retrieved from <https://education.alberta.ca/media/563981/our-way-is-a-valid-way.pdf>

ECE PROGRAMS HAVE MANY NAMES

PREK
PRIMARY
CPE NURSERY
GARDERIE
L'ÉCOLE MATERNELLE
EARLY PRIMARY
LEARNING CRÈCHE
KINDERGARTEN
ECE CHILD CARE
HEAD START
PRESCHOOL FDK
PRE-PRIMARY
NURSERY
DAY JUNIOR
CARE KINDERGARTEN
PRIMARY
CRÈCHE EARLY
FKD CHILDHOOD
EDUCATION
PRE-PRIMARY
NURSERY
PRESCHOOL

ECE CRÈCHE
PRIMARY
EARLY LEARNING
FDK DAY CARE
L'ÉCOLE MATERNELLE PREK
EARLY CHILDHOOD
EDUCATION
JUNIOR KINDERGARTEN
NURSERY
ECE GARDERIE
PRE-PRIMARY
CHILD CARE CPE
PRESCHOOL
KINDERGARTEN
CRÈCHE
PRIMARY
L'ÉCOLE MATERNELLE
HEADSTART
DAYCARE
EARLY ECE
LEARNING

TERMS USED IN THIS REPORT

Canada Child Benefit (CCB)

A tax-free monthly payment by the federal government made to eligible families with children under 18 years of age. It is intended to help with the cost of raising children.

Continuum of Play-Based Learning

Developed at the Dr. Eric Jackman Institute of Child Study, OISE, University of Toronto, the continuum includes five distinct categories of play: learning through games, playful learning, collaboratively created play, inquiry play and free play. Each presents important opportunities for personal, social and academic growth, while incorporating various levels of educator involvement. This continuum helps to enhance the practice of play-based learning pedagogies for early childhood educators and primary teachers.

<https://www.playlearninglab.ca>

Early Childhood Education (ECE)

Programs for young children based on an explicit curriculum and pedagogy, delivered by qualified staff and designed to support children's development and learning. Settings may include child care centres, HeadStart, nursery schools, preschools, pre or junior kindergarten, playgroups, family resource centres and kindergarten. Attendance is regular and children may participate on their own or with a parent or caregiver.

Early Childhood Educators

Adults who work directly with children in early childhood education settings have early childhood education (ECE) post-secondary education credentials and are recognized by provincial/territorial legislation as qualified to teach in licensed child care, nursery school, preschool or kindergarten programs.

Early Childhood Education Report (ECER)

An assessment of provincial and territorial frameworks for early childhood education in Canada. The report is made up of nineteen benchmarks organized into five equally weighted categories evaluating governance structures, funding levels, access, quality in early learning environments and monitoring mechanisms. The ECER is produced every three years by the Atkinson Centre for Society and Child Development, OISE, University of Toronto in consultation with provincial, territorial and federal government officials.

<http://ecereport.ca/en/>

Early Development Instrument (EDI)

An assessment of children's development from the Offord Centre for Child Studies, McMaster University. Completed by kindergarten teachers, the EDI measures a child's ability to meet age-appropriate developmental benchmarks in physical health and well-being, social competence, emotional maturity, language and cognitive development, communication skills and general knowledge.

Employment Insurance (EI)

A federally-run government program that provides income support to unemployed Canadians while they seek employment or upgrade their skills. It also provides maternity and parental benefits during pregnancy and to those caring for newborns and newly adopted children. Workers are eligible for EI benefits if they have paid premiums in the past year, and meet qualifying and entitlement conditions.

Gross Domestic Product (GDP)

A monetary measure of value of a country's economic activity. It is the sum of the market values or prices of the goods and services that are produced in a country's economy during a period of time.

Margaret and Wallace McCain Family Foundation (MWMFF)

A champion of high quality early childhood education for all young children in Canada. The aim of the Foundation is to increase public investment in early childhood education systems that feature sound governance, quality learning environments and qualified educators.
<http://mwmccain.ca>

Multilateral Early Learning and Child Care Framework

A mechanism to flow federal funding to provinces and territories, the framework focuses on creating child care services for vulnerable families, including those marginalized by geography, income, family status, language, non-standard work, disability or culture. It includes a commitment to improve data collection and information about the status of early learning and child care and children under 6 years of age. A complimentary framework was developed for Indigenous early learning and child care.

<https://www.canada.ca/en/employment-social-development/programs/early-learning-child-care/reports/2017-multilateral-framework.html>

Organisation for Economic Co-operation and Development (OECD)

A group of 34 democratic countries that discuss and develop economic and social policy. Its stated goals include fostering economic development and cooperation, fighting poverty and ensuring the environmental impact of growth and social development is always considered. Over the years, the OECD has dealt with a range of issues such as raising the standard of living in member countries, contributing to the expansion of world trade and promoting economic stability.

<http://www.oecd.org/canada/>

Preschool

A term with multiple meanings that references a particular age group. 'Preschool' can refer to all children from birth to entry to school, kindergarten or Grade 1, or ages 2 to 4 years. It may also refer to early childhood education programs typically offered for children from ages 2 to 4.

Special Educational Needs (SEN)

A term that refers to children with learning or developmental challenges that make it harder for them to learn than most children their age.

Socio-Economic Status (SES)

The social and economic standing of individuals or groups. SES typically includes a combination of measures of education, income and occupation.

Vulnerable

Children who are experiencing learning, behaviour or health difficulties that are likely to interfere with their later academic and life success. Children are assessed for vulnerability in kindergarten using the *Early Development Instrument* (EDI) tool. A child deemed ‘vulnerable’ at this stage is behind their peers in areas such as academic learning, getting along with others and managing emotions. Vulnerability at age 5 is often a predictor of problems in later school years and beyond.

<https://edi.offordcentre.com>

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REFERENCES

- Administrative Tribunals Support Service of Canada. (2019). *Main Estimates - 2019-20 estimates*. Retrieved from <https://www.canada.ca/en/treasury-board-secretariat/services/planned-government-spending/government-expenditure-plan-main-estimates/2019-20-estimates/main-estimates.html>
- Akbari, E., & McCuaig, K. (In press). *Early Childhood Education Report 2020*. Toronto, ON: Atkinson Centre for Society and Child Development, OISE/University of Toronto
- Akbari, E., & McCuaig, K. (2018a). *Early Childhood Education Report 2017* Toronto, ON: Atkinson Centre for Society and Child Development, OISE/University of Toronto. Retrieved from <http://ecereport.ca/en/>
- Akbari, E., & McCuaig, K. (2018b). *Ontario Profile 2017: Trends in ECEC*. Toronto, ON: Atkinson Centre for Society and Child Development, OISE/University of Toronto. Retrieved from: http://ecereport.ca/media/uploads/2017-profiles-updated/on_final-feb14.pdf
- Akbari, E. & McCuaig, K. (2018c). *Yukon Territories Profile 2017: Trends in ECEC*. Toronto, ON: Atkinson Centre for Society and Child Development, OISE/University of Toronto. Retrieved from: http://ecereport.ca/media/uploads/2017-profiles-updated/yk_final-feb14.pdf
- Akbari, E. & McCuaig, K. (2018d). *Manitoba Profile 2017: Trends in ECEC*. Toronto, ON: Atkinson Centre for Society and Child Development, OISE/University of Toronto. Retrieved from: http://ecereport.ca/media/uploads/2017-profiles-updated/mb_final-feb14.pdf
- Akbari, E. & McCuaig, K. (2018e). *Quebec Profile 2017: Trends in ECEC*. Toronto, ON: Atkinson Centre for Society and Child Development, OISE/University of Toronto. Retrieved from: http://ecereport.ca/media/uploads/2017-profiles-updated/qceng_final-feb14.pdf
- Akbari, E. & McCuaig, K. (2018f). *Prince Edward Island Profile 2017*. Toronto, ON: Atkinson Centre for Society and Child Development, OISE/University of Toronto. Retrieved from: http://ecereport.ca/media/uploads/2017-profiles-updated/pei_final-feb14.pdf
- Akbari, E., & McCuaig, K. (2018g). *Federal Early Childhood Education Report 2017*. Toronto, ON: Atkinson Centre for Society and Child Development, OISE/University of Toronto. Retrieved from: http://ecereport.ca/media/uploads/2017-prov-profiles/fed_final-may4.pdf
- Akbari, E., & McCuaig, K. (2018h). Percentage enrolled in school-operated ECE programs Toronto, ON: Atkinson Centre for Society and Child Development, OISE/University of Toronto. Retrieved from <http://ecereport.ca>
- Akbari, E., & McCuaig, K. (2014). *Early Childhood Education Report 2014 [Online]*. Toronto, ON: Atkinson Centre for Society and Child Development, OISE/University of Toronto. Retrieved from <http://ecereport.ca/>
- Alberta, Treasury Board and Finance Office of Statistics and Information. (2018). *Women in Alberta Income and Paid Work*. Author. Retrieved from <https://open.alberta.ca/dataset/4cd009e7-e7ad-43dc-ab16-b95d2700aeea/resource/9faa905c-b207-4bb5-984b-5a637800568e/download/2018-0214-women-in-alberta-income-and-paid-work.pdf>
- Alexander, C., Beckman, K., Macdonald, A., Renner, C., & Stewart, M. (2017). *Ready for Life: A Socio-Economic Analysis of Early Childhood Education and Care*. Ottawa, ON: The Conference Board of Canada. Retrieved from <https://www.conferenceboard.ca/e-library/abstract.aspx?did=9231>
- Astington, J. W. (2000). *Minds in the Making: Essays in Honour of David R. Olson*: Wiley.
- Atkinson Centre for Society and Child Development (2018) *Canada Needs a National Strategy to Address the Shortage of Early Childhood Educators*. Toronto, ON: Author Inc. OISE/University of Toronto. Retrieved from https://www.oise.utoronto.ca/atkinson/UserFiles/File/Policy%20Commentaries/Canada_needs_a_national_strategy_to_address_the_shortage_of_early_childhood_educators
- Barnett, W. (1992). Benefits of Compensator Preschool Education. *The Journal of Human Resources*, 27(2), 279-312. doi:10.2307/145736
- Becker, D. R., McClelland, M. M., Loprinzi, P., & Trost, S. G. (2014). Physical Activity, Self-Regulation, and Early Academic Achievement in Preschool Children. *Early Education & Development*, 25(1), 56-70. <https://doi.org/10.1080/10409289.2013.780505>
- Bertrand, J. (2012). Preschool Programs: Effective Curriculum. Comments on Melhuish and Barnes, Kagan and Kauerz, Schweinhart, and Leseman. In: Tremblay RE, Boivin M, Peters RDeV, eds. Melhuish E, topic ed. *Encyclopedia on Early Childhood Development* [online]. Retrieved from <http://www.child-encyclopedia.com/preschool-programs/according-experts/preschool-programs-effective-curriculum-comments>
- Biemiller, A. (2009). Research Review: Vocabulary Development (0 – 60 Months). In L.M. Phillips (Ed.), *Handbook of Language and Literacy Development: A Roadmap from 0 – 60 Months* [online], pp. 1 – 51. London, ON: Canadian Language and Literacy Research Network. Available at: Handbook of Language and Literacy Development
- Bingham, D. D., Costa, S., Hinkley, T., Shire, K. A., Clemes, S. A., & Barber, S. E. (2016). Physical Activity During the Early Years: A Systematic Review of Correlates and Determinants. *American Journal of Preventive Medicine*, 51(3), 384-402. Retrieved from [https://www.ajpmonline.org/article/S0749-3797\(16\)30139-8/fulltext](https://www.ajpmonline.org/article/S0749-3797(16)30139-8/fulltext)
- Blair, C. (2002). School Readiness: Integrating Cognition and Emotion in a Neurobiological Conceptualization of Children's Functioning at School Entry. *American Psychologist*, 57(2), 111-127. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/11899554>
- Braganza, C. (2018). *Why Not All Parents Benefit from Canada's Parental-Leave Program*. The Ontario Educational Communications Authority (TVO) January 15. Retrieved from <https://www.tvo.org>
- Brooks-Gunn, J., Markman-Pithers, L., & Rouse, C. E. (2016). Starting Early: Introducing the Issue. *The Future of Children*, 26(2), 3-19. Retrieved from <http://www.jstor.org/stable/43940578>

- Brownell, M., Roos, N., & Fransoo, R. (2006). Is the Class Half Empty? A Population Based Perspective on Socioeconomic Status and Educational Outcomes. *IRPP Choices*, 12 (5). Retrieved from <http://irpp.org/wp-content/uploads/assets/research/family-policy/is-the-class-half-empty/vol12no5.pdf>
- Bueno, M., Darling-Hammond L., & Gonzales, D. (2010). A Matter of Degrees: Preparing Teachers for the Pre-K Classroom Education. *Reform Series*. The Pew Centre on the States. Retrieved from https://www.pewtrusts.org/~media/legacy/uploadedfiles/wwwpewtrustsorg/reports/pre-k_education/pkneducationreformseriesfinalpdf.pdf
- Campaign 2000. (2016). *A Road Map to Eradicate Child and Family Poverty*. Retrieved from <https://campaign2000.ca/wp-content/uploads/2016/11/Campaign2000NationalReportCard2016Eng.pdf>
- Canada Revenue Agency. (2018). *Minister Lebovillier highlights the arrival of the enhanced Canada Child Benefit*. Retrieved from <https://www.canada.ca/en/revenue-agency/news/2018/07/minister-lebovillier-highlights-the-arrival-of-the-enhanced-canada-child-benefit.html>
- Canada Revenue Agency. (2019). *Canada Child Benefit – Overview*. Retrieved from <https://www.canada.ca>
- Canada Without Poverty. (2019). Just the Facts. Retrieved from <http://www.cwp-csp.ca/poverty/just-the-facts/>
- Canadian Association for Community Living. (2017). Retrieved from <https://cacl.ca>
- Canadian Paediatric Society. (2015). *How Much for Preschoolers? (1-4 years)*. Ottawa, ON: Author Inc. Retrieved from <https://www.cps.ca/en/active-actifs/how-much-for-preschoolers>
- Case, R., Griffin, S., & Kelly, W. M. (1999). Socioeconomic Gradients in Mathematical Ability and their Responsiveness to Intervention During Early Childhood. In *Developmental Health and the Wealth of Nations: Social, Biological, and Educational dynamics*. (pp. 125-149). New York, NY, US: The Guilford Press.
- CHANCES Family Centres. (2019). *Early Childhood Services that Work for Children, Families and Islanders*. Charlottetown, PEI: Authors Inc. Retrieved from http://mwmccain.ca/_media/uploads/peireport_update_final_march2019.pdf
- Clandinin, D. J. (2013). *Engaging in Narrative Inquiry*. Walnut Creek, CA: Left Coast Press, Inc. Retrieved from <https://www.routledge.com/Engaging-in-Narrative-Inquiry-1st-Edition/Clandinin/p/book/9781611321609>
- Clements, D. H., Sarama, J., Wolfe, C. B., & Spitler, M. E. (2013). Longitudinal Evaluation of a Scale-Up Model for Teaching Mathematics With Trajectories and Technologies: Persistence of Effects in the Third Year. *American Educational Research Journal*, 50(4), 812-850. Retrieved from <https://journals.sagepub.com/doi/abs/10.3102/0002831212469270>
- Cleveland, G., Krashinsky, M., Colley, S., & Avery-Nunez, C. (2016). *City of Toronto Licensed Child Care Demand and Affordability Study*. Toronto, ON: Cleveland Consulting. Retrieved from <https://www.toronto.ca/wp-content/uploads/2017/12/8d0a-Community-Services-and-Facilities-Toronto-Demand-Affordability-Study-2016.pdf>
- Cleveland, G. (2018). *Affordable for all: Making licensed child care affordable in Ontario*. Toronto, ON: Cleveland Consulting. Retrieved from <http://www.childcarepolicy.net/wp-content/uploads/2018/05/Presentation-at-OISE-on-Affordable-for-All-report.pdf>
- Cleveland, G., and M. Krashinsky. 1998. *The Benefits and Costs of Good Child Care: The Economic Rationale for Public Investment in Young Children*. Monograph 1, March. Toronto: Childcare Resource and Research Unit, Centre for Urban and Community Studies, University of Toronto.
- Corter, C., Janmohamed, Z., & Pelletier, J. (2012). *Toronto First Duty: Phase 3 Report*. Dr. Eric Jackman Institute of Child Study & Atkinson Centre for Society and Child Development, OISE/University of Toronto. Retrieved from https://www.oise.utoronto.ca/Atkinson/About_Us/What_We_Do/Toronto_First_Duty/
- Cossette M. A. (2017). Ottawa and provinces sign deal to create ‘fully inclusive’ child-care system. June 12 *CBC News*. Retrieved from <https://www.cbc.ca>
- De V. Peters, R., Bradshaw, A., Petrunka, K., Nelson, G., Herry, Y., Craig, W.,..... Collins, W. (2010). The Better Beginnings, Better Futures Project: Findings from Grade 3 to Grade 9. *Monographs of the Society for Research in Child Development*, 75(3), 1-176. Retrieved from <http://www.jstor.org/stable/40984372>
- Department of Finance Canada (2016). Employment Insurance Coverage Survey, 2015. *The Daily*. Retrieved from <https://www150.statcan.gc.ca/n1/daily-quotidien/161116/dq161116b-eng.htm>
- Department of Finance Canada (2018a). *Backgrounder: Canada’s New Parental Sharing Benefit*. Ottawa, ON: Author Inc. Retrieved from <http://publications.gc.ca/>
- Department of Finance Canada (2018b). *Backgrounder: Strengthening the Canada Child benefit*. Ottawa, ON: Author Inc. Retrieved from <https://fin.gc.ca>
- Doucet, A., McKay, L. & Tremblay, D. G. (2009). Parental Leave Policy in Canada. In P. Moss, P. and S. Kammerman. (Eds), *The Politics of Parental Leave Policies: Children, Parenting, Gender and the Labour Market*. Bristol, UK: Policy Press.
- Employment and Social Development Canada. (n. d.). *EI Maternity and Parental Benefits: Eligibility*. Retrieved from <https://www.canada.ca/en/services/benefits/ei/ei-maternity-parental/eligibility.html>
- Employment and Social Development Canada (2019a). *2019–20 Departmental Plan*. Retrieved from <https://www.canada.ca/en/employment-social-development/corporate/reports/departmental-plan/2019-2020/transfer-payment-programs-over-5-million.html#h2.30>

- Employment and Social Development Canada (2019b). *About the Indigenous Skills and Employment Training Program*. Retrieved from <https://www.canada.ca/en/employment-social-development/services/indigenous/asets.html>
- Employment and Social Development Canada. (2019c). *Employment Insurance Maternity and Parental Benefits*. Retrieved from <https://www.canada.ca/en/employment-social-development/programs/ei/ei-list/reports/maternity-parental.html#h2.0>
- Employment and Social Development Canada. (2018a). *Opportunity For All – Canada's First Poverty Reduction Strategy*. Retrieved from <https://www.canada.ca/en/employment-social-development/programs/poverty-reduction/reports/strategy.html#h2.13>
- Employment and Social Development Canada. (2018b). *Governments of Canada and Alberta are Improving Quality, Accessibility and Affordability of Early Learning and Child Care Across Alberta*. Retrieved from <https://www.newswire.ca/news-releases/governments-of-canada-and-alberta-are-improving-quality-accessibility-and-affordability-of-early-learning-and-child-care-across-alberta-679534673.html>
- Employment and Social Development Canada. (2018 c). *Indigenous Early Learning and Child Care Framework*. Canada: Her Majesty the Queen in Right. Retrieved from <https://www.canada.ca/en/employment-social-development/programs/indigenous-early-learning/2018-framework.html>
- Employment and Social Development Canada. (2018, June 4). *Implementation Agreement of the March 10, 2017, Asymmetrical Agreement – Early Learning and Child Care Component*. Retrieved from <https://www.canada.ca/en/early-learning-child-care-agreement/agreements-provinces-territories/quebec.html#h2.12>
- Employment and Social Development Canada. (2018 April 4). *Canada-Saskatchewan Early Learning and Child Care Agreement*. Retrieved from <https://www.canada.ca/en/early-learning-child-care-agreement/agreements-provinces-territories/saskatchewan.html#h2.2>
- Employment and Social Development Canada. (2018 March 10). *Implementation Agreement of The March 10, 2017, Asymmetrical Agreement – Early Learning and Child Care Component*. Retrieved from <https://www.canada.ca/en/early-learning-child-care-agreement/agreements-provinces-territories/quebec.html#h2.12>
- Employment and Social Development Canada. (2018 March 8). *Canada-Northwest Territories Early Learning and Child Care Agreement*. Retrieved from <https://www.canada.ca/en/early-learning-child-care-agreement/agreements-provinces-territories/northwest-territories.html#section15>
- Employment and Social Development Canada. (2018 March 6). *Canada-British Columbia Early Learning and Child Care Agreement*. Retrieved from <https://www.canada.ca/en/early-learning-child-care-agreement/agreements-provinces-territories/british-columbia.html#h15>
- Employment and Social Development Canada. (2018 February 8). *Canada-Yukon Early Learning and Child Care Agreement*. Retrieved from <https://www.canada.ca/en/early-learning-child-care-agreement/agreements-provinces-territories/yukon.html#h2.15>
- Employment and Social Development Canada. (2018 January 25). *Canada-Manitoba Early Learning and Child Care Agreement*. Retrieved from <https://www.canada.ca/en/early-learning-child-care-agreement/agreements-provinces-territories/manitoba.html#h14>
- Employment and Social Development Canada. (2018 January 16). *Canada-New Brunswick Early Learning and Child Care Agreement*. Retrieved from <https://www.canada.ca/en/early-learning-child-care-agreement/agreements-provinces-territories/new-brunswick.html#section15>
- Employment and Social Development Canada. (2018 January 10). *Canada-Nova Scotia Early Learning and Child Care Agreement*. Retrieved from <https://www.canada.ca/en/early-learning-child-care-agreement/agreements-provinces-territories/nova-scotia.html#h2.15>
- Employment and Social Development Canada. (2018 January 5). *Canada-Newfoundland and Labrador Early Learning and Child Care Agreement*. Retrieved from <https://www.canada.ca/en/early-learning-child-care-agreement/agreements-provinces-territories/newfoundland-and-labrador.html#h2.15>
- Employment and Social Development Canada. (2017 October 3). *Canada – Prince Edward Island Early Learning and Child Care Agreement*. Retrieved from <https://www.canada.ca/en/early-learning-child-care-agreement/agreements-provinces-territories/prince-edward-island.html#a2>
- Employment and Social Development. (2017). *Multilateral Early Learning and Child Care Framework*. Canada: Her Majesty the Queen in Right. Retrieved from https://www.canada.ca/en/employment-social-development/news/2017/06/historic_agreementbetweenthefederalprovincialandterritorialgover.html
- Fairholm, R. (2010). *Early Learning and Care Impact Analysis*. The Centre for Spatial Economics. Retrieved from https://www.oise.utoronto.ca/atkinson/UserFiles/File/Events/2010-08-30%20-%20Cost%20Benefits/CSE_EarlyLearningandCareImpactAnalysis.pdf
- Fairholm, R. (2012). *Economic Impact Analysis of Early Learning and Care for Ontario*. The Centre for Spatial Economics. Retrieved from <https://www.toronto.ca/legdocs/mmis/2012/cd/bgrd/backgroundfile-46155.pdf>
- Feir, D. & Thomas, J. (2019, March 27) *The Introduction of Formal Childcare Services in Inuit Communities and Labor Force Outcomes*. Center for Indian Country Development, Federal Reserve Bank of Minneapolis. Retrieved from <https://www.minneapolisfed.org/indiancountry/research-and-articles/cicd-working-paper-series/the-introduction-of-formal-childcare-services-in-inuit-communities-and-labor-force-outcomes>
- Food Banks Canada. (2018). *Hunger Count*. Retrieved from <https://www.foodbankscanada.ca/HungerCount-Archives.aspx>
- Fortin, P. (2019). *Quebec Childcare at 20: What Have We Learned?* Paper Presented at a Seminar Organized by the Centre for the Study of Living Standards at the Rideau Club, Ottawa, April 24, 2019
- Fortin, P., Godbout, L., & St-Cerny, S. (2012). *Impact of Quebec's Universal Low-Fee Childcare Program on Female Labour Force Participation, Domestic Income, and Government Budgets*. Toronto, ON: Atkinson Centre, OISE/University of Toronto. Retrieved from https://www.oise.utoronto.ca/atkinson/UserFiles/File/News/Fortin-Godbout-St_Cerny_eng.pdf

- Fortin, P., Godbout, L., and St-Cerny, S. (2011). Economic Consequences of Quebec's Educational Childcare Policy. *Early Years Economics Forum*. June 22 Retrieved from https://www.oise.utoronto.ca/atkinson/UserFiles/File/Events/2011-06-22%20-%20Economic%20Forum/EarlyLearningEconomicForum_Fortin.pdf
- Gardiner, K. (2017). *How the Canada Child Benefit Affects Separated Parents: The Post-Relationship Breakdown Family Unit of Taxation*. Calgary, AB: The University of Calgary Faculty of Law Blog. Retrieved from <http://ablawg.ca>
- Garvis, S., & Pendergast, D. (Eds.). (2017). *Health and Wellbeing in Childhood* (pp. 141-160). Cambridge: Cambridge University Press.
- Gingras, L., Lavoie, A., & Audet, N. (2015). *La qualité éducative dans les installations de centre de la petite enfance. Faits saillants, Enquête québécoise sur la qualité des services de garde éducatifs 2014*, Québec, Institut de la statistique du Québec. Retrieved from <http://www.stat.gouv.qc.ca/statistiques/education/milieu-garde/grandir2014-FS-CPE.pdf>
- Gopnik, A. (2016). *The Gardener and the Carpenter: What the New Science of Child Development Tells Us About the Relationship Between Parents and Children*. New York, NY: Farrar, Straus and Giroux
- Gouvernement du Québec, Institut de la statistique du Québec. (2011). *Enquête sur l'utilisation, les besoins et les préférences des familles en matière de services de garde, 2009*. Portrait québécois et régional. Retrieved from <http://www.stat.gouv.qc.ca/statistiques/education/milieu-garde/utilisation-services-garde-2009.pdf>
- Government of British Columbia. (n. d.) *Universal Child Care Prototype Sites*. Retrieved from <https://www2.gov.bc.ca/gov/content/family-social-supports/caring-for-young-children/running-daycare-preschool/universal-child-care-prototype-sites>
- Government of Canada (n.d.). *Canada-Ontario Early Learning and Child Care Agreement*. Retrieved from <https://www.canada.ca/en/early-learning-child-care-agreement/agreements-provinces-territories/ontario.html#h4>
- Government of Canada. (n. d.). *Table 11-10-0135-01 Low Income Statistics by Age, Sex and Economic Family Type*. Retrieved from <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1110013501>
- Government of Canada. (2017, September 13). *Census in Brief. Children Living in Low Income Households*. Statistics Canada. Retrieved from <https://www12.statcan.gc.ca/census-recensement/2016/as-sa/98-200-x/2016012/98-200-x2016012-eng.cfm>
- Government of Newfoundland and Labrador Department of Education and Early Childhood Development. (2018). *Early Learning and Child Care Supplement*. Retrieved from https://www.ed.gov.nl.ca/edu/family/childcare/supplement/pdf/ELCC_Supplement_Policy_Final_2018_.pdf
- Government of the Northwest Territories, Department of Education, Culture and Employment (2016) *Early Childhood Program, Early Childhood Staff Grant Program Guidelines* Retrieved from https://www.ece.gov.nt.ca/sites/ece/files/resources/ece_staff_grant_program_guidelines_-_en.pdf
- Government of Northwest Territories (1996). *Inuuqatigiit Curriculum: The Curriculum from the Inuit Perspective*. Yellowknife, NWT: Department of Education, Culture and Employment.
- Government of Northwest Territories (1993). *Education: A Dene Perspective*. Yellowknife, NWT: Department of Education, Culture and Employment. Retrieved from https://www.ece.gov.nt.ca/sites/ece/files/resources/dene_kede_k-6_full_curriculum.pdf
- Harari, Y. N. (2014). *Sapiens: A Brief History of Humankind* London, UK: Signal
- Heagle, K., Timmons, K., Hargreaves, F., & Pelletier, J. (2017). The Social Kindergartener: Comparing Children's Perspectives of Full- and Half-Day Kindergarten. *Early Child Development and Care*, 187(5-6), 978-989. DOI: 10.1080/03004430.2016.1199551
- Hewes, J. (2014). Seeking Balance in Motion: The Role of Spontaneous Free Play in Promoting Social and Emotional Health in Early Childhood Care and Education. *Children* 1, 280-301. <https://doi.org/10.3390/children1030280>
- Heymann, J., Sprague A. R., et al. (2017). Paid Parental Leave and Family Wellbeing in the Sustainable Development Era. *Public Health Reviews* 38 (21). Retrieved from <https://doi.org/10.1186/s40985-017-0067-2>
- Homeless Hub (2018). *About Homelessness: Supporting Communities to Prevent and End Homelessness, Poverty*. Retrieved from <https://homelesshub.ca/about-homelessness/education-training-employment/poverty>
- Indian and Northern Affairs. (2003). *After Marriage Breakdown: Information on the On-Reserve Matrimonial Home*. Retrieved from <https://www.homelesshub.ca/resource/after-marriage-breakdown-information-reserve-matrimonial-home#>
- Jade, J., Watts, T.W., Magnuson, K., Gershoff, D., Clements, D. H., Sarama, J., & Duncan, G. (2016). Do High Quality Kindergarten and First Grade Classrooms Mitigate Preschool Fadeout? A Working Paper. *Irvine Network on Intervention in Development*. Retrieved from http://www.inid.gse.uci.edu/files/2011/03/Jenkins_etal_Fadeout_March2016.pdf
- James, V. A. (2018). *What Can Indigenous Curriculum Teach Us All?* Presentation to Outdoor Play and Early Learning Policy Research Symposium. The Lawson Foundation. October 25.
- James, V. A. (2016). *The Shaping Influences of 'A Capable Person': A narrative research of Elders' stories of raising children to inform Aboriginal education in the Northwest Territories*. Unpublished doctoral dissertation, Simon Fraser University, Vancouver, BC, Canada. Retrieved from summit. <https://summit.sfu.ca/item/16711>
- Janus, M., Enns, J., Forer, B., Raos, R., Gaskin, A., Webb, S., Duku, E., Brownell, M., Muhajarine, N., & Guhn, M. (2018). A Pan-Canadian Data Resource for Monitoring Child Developmental Health: The Canadian Neighbourhoods and Early Child Development (CanNECD) Database. *International Journal of Population Data Science*. Retrieved from <https://ijpds.org/article/view/431/957>

- Jenkins, J., Boivin, M., & Akbari, E. (2015). *Empowering the Future: Best Evidence for Investing in Early Childhood Education for Canada*. Retrieved from http://ecincanada.ca/media/uploads/canadian_ece_open_letter_2015.pdf
- Kolb, B., Whishaw, I. Q., & Teskey G. C. (2019). *An Introduction to Brain and Behavior* (6 ed.): Worth Publishers.
- Lee, D., & Jackson, M. (2017). The Simultaneous Effects of Socioeconomic Disadvantage and Child Health on Children's Cognitive Development. *Demography*, 54(5), 1845-1871. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5856460/>
- Leseman P. (2012) Preschool and Learning-Related Skills. In: Tremblay RE, Boivin M, Peters RDeV, eds. Melhuish E, topic ed. *Encyclopedia on Early Childhood Development* [online]. <http://www.child-encyclopedia.com/preschool-programs/according-experts/preschool-and-learning-related-skills>
- Livingston, G. (2016). *Among 41 Nations, U.S. is the Outlier When it Comes to Paid Parental Leave*. Washington, DC: Pew Research Centre. Retrieved from <https://www.pewresearch.org>
- Macdonald, D., & Friendly, M. (2019). *Developmental Milestones: Child Care Fees in Canada's Big Cities 2018* [Online]. Ottawa, ON: Canadian Centre for Policy Alternatives. Retrieved from: <https://www.policyalternatives.ca/newsroom/news-releases/study-reveals-highest-and-lowest-child-care-fees-canadian-cities-2018>
- McCain, M., & Mustard, F. (1999). *Early Years Study: Reversing the Real Brain Drain*. Toronto, ON: Government of Ontario. Retrieved from <http://www.earlyyearsstudy.ca>
- McCain, M., Mustard, F., & McCuaig, K. (2011). *Early Years Study 3: Making Decisions, Taking Action*. Toronto, ON: Margaret and Wallace McCain Family Foundation. Retrieved from <http://www.earlyyearsstudy.ca>
- McCain, M., Mustard, F., & Shanker, S. (2007). *Early Years Study 2: Putting Science into Action*. Toronto, ON: Council For Early Child Development. Retrieved from <http://www.earlyyearsstudy.ca>
- McCoy, D. C., Yoshikawa, H., Ziol-Guest, K. M., Duncan, G. J., Schindler, H. S., Magnuson, K. & Shonkoff, J. P. (2017). Impacts of Early Childhood Education on Medium-and Long-Term Educational Outcomes. *Educational Researcher*, 46(8),474-487. Retrieved from <https://journals.sagepub.com/doi/abs/10.3102/0013189X17737739>
- McKay, L., Mathieu, S., & Doucet, A. (2016). Parental-leave Rich and Parental-leave Poor: Inequality in Canadian Labour Market-based Leave Policies. *Journal of Industrial Relations*, 58(4), 543-562. <https://doi.org/10.1177%2F0022185616643558>
- Melhuish, E. (2011) Preschool Matters. *Science* Vol. 333, Issue 6040, pp. 299-300. DOI: 10.1126/science.1209459. Retrieved from <https://science.sciencemag.org/content/333/6040/299.full>
- Morneau, W. F. (2018). *Equality and Growth: A Strong Middle Class*. Canada: Her Majesty the Queen in Right of Canada. Retrieved from www.fin.gc.ca
- Morneau, W. F. (2017). *Building a Strong Middle Class: Budget 2017*. Canada: Her Majesty the Queen in Right of Canada. Retrieved from <https://www.budget.gc.ca>
- Moyser, M., & Milan, A. (2018). Fertility Rates and Labour Force Participation Among Women in Quebec and Ontario. *Insights on Canadian Society*. Government of Canada. Retrieved from: <https://www150.statcan.gc.ca/n1/pub/75-006-x/2018001/article/54976-eng.htm>
- Moyser, M. (2017). *Women and Paid Work*. Government of Canada. Retrieved from <https://www150.statcan.gc.ca/n1/pub/89-503-x/2015001/article/14694-eng.htm>
- Nash, C. (1989). *Learning Environment*. Toronto, ON: Collier Macmillan Canada
- National Institute for Early Childhood Education Research. (n.d.). *The Heckman Equation: Invest in Early Childhood Development: Reduce Deficits, Strengthen the Economy*. Retrieved from http://www.earlychildhoodny.org/pdfs/research/F_HeckmanDeficitPieceCUSTOM-Generc_052714.pdf
- Numeracy: Synthesis. In: Tremblay RE, Boivin M, Peters RDeV, eds. Bisanz J, topic ed. (2011). *Encyclopedia on Early Childhood Development* [online]. <http://www.child-encyclopedia.com/numeracy/synthesis>
- Obesity Canada (2019). *What Causes Obesity?* Edmonton, AB: Author. Retrieved from <https://obesitycanada.ca/understanding-obesity/>
- OECD. (n.d.). Net Income Two Earner, Two Children Family, 2018. *Data*. Retrieved from <https://stats.oecd.org/Index.aspx?DataSetCode=NCC>
- OECD. (n.d.) Income Inequality. *Data*. OECD Social and Welfare Statistics: Income distribution. Retrieved from <https://data.oecd.org/inequality/income-inequality.htm#indicator-chart>
- OECD. (2019). *Wage Levels (Indicator)*. Paris: OECD Publishing. <https://data.oecd.org/earnwage/wage-levels.htm>. Accessed on Oct 23, 2019.
- OECD (2018b). *Economic Survey Canada: Key Policy Insights Canada: OECD Economic Survey*. Paris: OECD Publishing. Retrieved from <https://www.oecd.org>
- OECD. (2017). *Starting Strong 2017: Key OECD Indicators on Early Childhood Education and Care*. Starting Strong, Paris: OECD Publishing. <https://doi.org/10.1787/9789264276116-en>.
- OECD. (2015). *Starting Strong IV: Monitoring Quality in Early Childhood Education and Care*. Paris: OECD Publishing. <http://dx.doi.org/10.1787/9789264233515-en>

- OECD. (2014). *Measuring the Digital Economy: A New Perspective*. Paris: OECD Publishing. <https://doi.org/10.1787/9789264221796-en>
- Office of Audit and Evaluation Health Canada and the Public Health Agency of Canada. (2017). *Evaluation of the Aboriginal Head Start in Urban and Northern Communities Program 2011-2012 to 2015-2016*. Retrieved from <https://www.canada.ca/en/public-health/corporate/transparency/corporate-management-reporting/evaluation/2011-2012-2015-2016-aboriginal-head-start-urban-and-northern-communities-program.html#summary>
- Omstead, J. (2019). Alberta Child-Care Survey Points to Success of \$25-a-day Programs. *CBC News* January 16. Retrieved from <https://www.cbc.ca>
- Pascal, C. (2009) *With Our Best Future in Mind: Implementing Early Learning in Ontario*. Toronto, ON: Queen's Printer for Ontario. Retrieved from https://www.oise.utoronto.ca/atkinson/UserFiles/File/Resources_Topics/With_Our_Best_Future_In_Mind_-_Charles_Pascal.pdf
- Pelletier, J. & Corter, J. (2019). A longitudinal comparison of learning outcomes in full-day and half-day kindergarten. *The Journal of Educational Research*. 112 (2) pp 192-210 DOI:10.1080/00220671.2018.1486280
- Peters, R. D., Bradshaw, A. J., Petrunka, K., Nelson, G., Herry, Y., Craig, W. M., & Rossiter, M. D. (2010). The Better Beginnings, Better Futures Project: Findings from Grade 3 to Grade 9. *Monographs of the Society for Research in Child Development*, 75(3), 1-174. doi: 10.1111/j.1540-5834.2010.00577.x
- Philpott, D., Young, G., Maich, K., Penney, S., & Butler, E. (2019) *The Pre-emptive Nature of Quality Early Child Education on Special Needs in Children*. Research Library, Memorial University Newfoundland <https://research.library.mun.ca/13571/>
- Prentice, S. (2007) *Northern Childcare: Childcare as Economic and Social Development in Thompson*. Winnipeg, MB: Child Care Coalition of Manitoba. Retrieved from http://www.childcaremanitoba.org/images/stories/docs/cccmpublications/thompson_report.pdf
- Preskitt, J., Johnson, H., Becker, D., Ernest, J., Fifolt, M., Adams, J., & Sen, B. (2018). Proficiency in Reading and Math: First Class Pre-K Benefits Persist in Elementary and Middle School *Research Issue Brief*. Retrieved from http://children.alabama.gov/wp-content/uploads/sites/4/2018/12/6_Persistence-of-Proficiency-Differences.pdf
- Press J. (2019) Fewer Canadians Living Below Poverty Line Due to Strong Economy, Liberal government's child benefit. *The Globe and Mail* February 26. Retrieved from <https://www.theglobeandmail.com/canada/article-fewer-children-living-in-poverty-due-to-liberal-governments-child/>
- Press, J. (2018). New Parental Leave Policy that Includes Fathers Will Arrive Earlier Than Expected. *Global News* September 26. Retrieved from <https://globalnews.ca/news/4489634/new-use-it-or-lose-it-parental-leave-fathers/>
- Proof: Food Insecurity Policy Research (2018). *Household Food Insecurity in Canada*. Retrieved from <http://proof.utoronto.ca/food-insecurity/>
- Public Health England. (2016). *Health Matters: Giving Every Child the Best Start in Life*. Retrieved from <https://www.gov.uk/government/publications/health-matters-giving-every-child-the-best-start-in-life/health-matters-giving-every-child-the-best-start-in-life>
- Public Interest Alberta. (2019). *Alberta Child Care Survey 2018*. Edmonton, AB: Authors Inc. Retrieved from <https://www.pialberta.org/childcaresurvey2018>
- Pyle, A., & Danniels, E. (2017). A Continuum of Play-Based Learning: The Role of the Teacher in Play-Based Pedagogy and the Fear of Hijacking Play. *Early Education and Development*, 28(3), 274-289. DOI: 10.1080/10409289.2016.1220771
- Québec, Institut de la Statistique du Québec. (2015). *Québec Survey on the Quality of Educational Childcare (Grandir en qualité) 2003 and 2014*. Gouvernement du Québec, Retrieved from http://www.stat.gouv.qc.ca/enquetes/education/grandir-qualite_an.html
- R.A. Malatest & Associates Ltd. (2017). *Workforce Study for Early Years and Child Care Employees: Final Report*. Retrieved from https://www.msdsb.net/images/ADMIN/correspondence/2018/MEDU_Workforce_Report_en.pdf
- Reynolds, A, Richardson, B., Hayakawa, M., Lease, E., Warner-Richter, M., Englund, M., Ou, S., & Sullivan, M. (2014) Association of a Full-Day vs Part-Day Preschool Intervention With School Readiness, Attendance and Parent Involvement. *JAMA*. 2014;312(20): 2126-2134 doi:10.1001/jama.2014.15376. Retrieved from <https://jamanetwork.com/journals/jama/fullarticle/1938567>
- Robson, J. (2017). Parental Benefits in Canada: Which way forward? *IRPP Study*, No. 63. Retrieved from <http://irpp.org>
- Royal Bank of Canada. (2018). *Humans Wanted: How Canadian Youth Can Thrive in the Age of Disruption*. Toronto, ON: Author Inc. Retrieved from https://www.rbc.com/dms/enterprise/futurelaunch/humans-wanted-how-canadian-youth-can-thrive-in-the-age-of-disruption.html?utm_source=vanity&utm_medium=internal&utm_campaign=students_futurelaunch_humanswanted2018&utm_content=rbc_humanswanted
- Russell, B. S., Lee, J. O., Spieker, S., & Oxford, M. L. (2016). Parenting and Preschool Self-Regulation as Predictors of Social Emotional Competence in 1st Grade. *Journal of Research in Childhood Education: JRCE*, 30(2), 153-169. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/PMC5015765/>
- Self-Regulation as Predictors of Social Emotional Competence in 1st Grade. *Journal of Research in Childhood Education: JRCE*, 30(2), 153-169. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/PMC5015765/>
- Services Québec – Citoyens. (2017). *Québec Parental Insurance Plan*. Retrieved from <https://www.quebec.ca/en/family-and-support-for-individuals/parental-insurance/>
- Sinha, M. (2014a). *Child care in Canada. Spotlight on Canadians: Results from the General Social Survey*. Minister of Industry Canada. Retrieved from <https://www150.statcan.gc.ca/>

- Sinha, M. (2014b). *Parenting and Child Support After Separation or Divorce*. Minister of Industry Canada Retrieved from <https://www150.statcan.gc.ca/n1/en/pub/89-652-x/89-652-x2014001-eng.pdf?st=Ax9H3MrR>
- Sinha, M. (2014c). *Spotlight on Canadians: Results from the General Social Survey, Parenting and Child Support After Separation or Divorce*. Canada: Social and Aboriginal Statistical Division, Statistics Canada. Retrieved from <https://www150.statcan.gc.ca>
- Smith, K. (2018). Tens of Thousands of Canadian Parents Opting for 18-month Parental Leave. *Global News* November 13. Retrieved from <https://globalnews.ca>
- Statista. (2018). *Number of Births in Canada from 2000 to 2018*. Retrieved from <https://www.statista.com/statistics/443051/number-of-births-in-canada/>
- Statistics Canada, Labour Force Survey, custom tabulation 0717_04 Table 1.ivt. in Akbari & McCuaig (In press). *Early Childhood Education Report 2020*. Toronto, ON: Atkinson Centre for Society and Child Development, OISE/University of Toronto
- Statistics Canada. (2019). Survey on Early Learning and Child Care Arrangements, *The Daily* April 10. Retrieved from <https://www150.statcan.gc.ca/n1/daily-quotidien/190410/dq190410a-eng.htm>
- Statistics Canada. (2018). *Persons in Low-Income (After-Tax Low Income Measure), 2012 to 2016*. Retrieved from <https://www150.statcan.gc.ca/n1/daily-quotidien/180313/t002a-eng.htm>
- Statistics Canada. (2017). *Census in Brief: Children Living in Low-Income Households*. Retrieved from <https://www12.statcan.gc.ca/census-recensement/2016/as-sa/98-200-x/2016012/98-200-x2016012-eng.cfm>
- Statistics Canada. (2015). *Employment Rate by Sex, Province and Census Metropolitan Area; and Median Monthly Childcare Fees for Selected Cities*. Government of Canada. Retrieved from <https://www150.statcan.gc.ca/n1/pub/89-503-x/2015001/article/14694/tbl/tbl01-eng.htm>
- Sylva, K., Melhuish, E., Sammons, P., Siraj, I., & Taggart, B. (2008). *Effective Pre-school and Primary Education 3-11 Project (EPPE 3-11): Final Report from the Primary Phase: Pre-school, School and Family Influences on Children's Development During Key Stage 2 (7-11)*. London, United Kingdom: Department for Children Schools and Families. Retrieved from <https://ro.uow.edu.au/cgi/viewcontent.cgi?article=3434&context=sspapers>
- Taggart, B., Sylva, K., Melhuish, E., Sammons, P., & Siraj, I. (2015). *Effective Pre-School, Primary and Secondary Education Project (EPPSE 3-16+): How Pre-School Influences Children and Young People's Attainment and Developmental Outcomes Over Time*. Government of the United Kingdom. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/455670/RB455_Effective_pre-school_primary_and_secondary_education_project.pdf
- Taggart, G., Ridley, K., Rudd, P., & Benefield, P. (2005). *Thinking Skills in the Early Years: A Literature Review*. Retrieved from http://eprints.whiterose.ac.uk/73999/1/Thinking_skills_in_early_years.pdf
- The Minister of Families, Children and Social Development. (2019). *Métis Nation Early Learning and Child Care Accord*. Retrieved from <https://www.canada.ca/en/employment-social-development/programs/indigenous-early-learning/accord-metis.html>
- Theobald, M., Danby, S., Thompson, C., and Thorpe, K. (2017). *Friendships*. In S. Garvis and D. Pendergast (Eds.), *Health and Wellbeing in Childhood*, pp. 141-160. Cambridge: Cambridge University Press. doi:10.1017/9781316780107.011
- Thị chọ Government. (1971). Chief Jimmy Bruneau school opening [Video]. Retrieved from <https://vimeo.com>
- Timmons, B. W., LeBlanc, A. G., Carson, V., Connor Gorber, S., Dillman, C., Janssen, I., ... Tremblay, M. S. (2012). Systematic Review of Physical Activity and Health in the Early Years (aged 0–4 years). *Applied Physiology, Nutrition, and Metabolism*, 37. <https://doi.org/10.1139/h2012-070>
- Truth and Reconciliation Commission of Canada (2015). *Truth and Reconciliation Commission of Canada: Calls to Action*. Winnipeg, MB: Author Inc. Retrieved from <http://nctr.ca>
- UNICEF Office of Research (2016). *Fairness for Children: A League Table of Inequality in Child Well-Being in Rich Countries*, *Innocenti Report Card 13*, UNICEF Office of Research – Innocenti, Florence. Retrieved from <https://www.unicef-irc.org/publications/830-fairness-for-children-a-league-table-of-inequality-in-child-well-being-in-rich-countries.html>
- UNICEF Canada. (2013). *Child Well-Being in Rich Countries: A Comparative Overview*. UNICEF Canada, Toronto. Retrieved from <https://www.unicef-irc.org/publications/830-fairness-for-children-a-league-table-of-inequality-in-child-well-being-in-rich-countries.html>
- UNICEF Canada (2018). *UNICEF Report Card 15 Canadian Companion: The Equalizer: How Education Creates Fairness for Children in Canada*. Toronto, ON: UNICEF Canada. Retrieved from https://www.unicef.ca/sites/default/files/legacy/imce_uploads/DISCOVER/OUR%20WORK/ADVOCACY/DOMESTIC/POLICY%20ADVOCACY/DOCS/unicef_report_card_11.pdf
- Vygotsky, L. S., Cole, M., John-Steiner, V., Scribner, S., & Souberman, E. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Cambridge, MA: Harvard University Press.
- Western and Northern Canadian Protocol (WNCP). (2013). *Our Way is a Valid way: Professional Educator Resource*. Canada: The Crown in Right of the Governments of Alberta, Manitoba, Northwest Territories, Nunavut, Saskatchewan, and Yukon Territory. Retrieved from <https://education.alberta.ca/media/563981/our-way-is-a-valid-way.pdf>
- Western and Northern Canadian Protocol (WNCP) (2000) *Our Way is a Valid Way* Canada: The Crown in Right of the Governments of Alberta, Manitoba, Northwest Territories, Nunavut, Saskatchewan, and Yukon Territory. Retrieved from <https://education.alberta.ca/media/563981/our-way-is-a-valid-way.pdf>

- Whitebread, D. & Basilio, M. (2011). The Emergence and Early Development of Self-Regulation in Young Children. *Profesorado: Journal of Curriculum and Teacher Education*, 16, 15-34. Retrieved from https://www.researchgate.net/publication/272828327_The_emergence_and_early_development_of_self-regulation_in_young_children
- World Economic Forum. (2018). *The Future of Jobs Report*. Geneva, Switzerland: Center for the New Economic and Society. Retrieved from http://www3.weforum.org/docs/WEF_Future_of_Jobs_2018.pdf
- Yogman, M., Garner, A., Hutchinson, J., Hirsh-Pasek, K., & Golinkoff, R. M. (2018). The Power of Play: A Pediatric Role in Enhancing Development in Young Children. *Pediatrics*, 142(3), e20182058. DOI: 10.1542/peds.2018-2058
- Younglai, R. (2017). Canada's 1 Per Cent Gets Another Big Income Boost. *The Globe and Mail*, November 18 Retrieved from <https://www.theglobeandmail.com/report-on-business/economy/canadas-1-per-cent-gets-another-big-income-boost/article36993871/>
- Younglai, R., & Yukselir, M. (2017). Who are Canada's 1 Per Cent and Highest Paid Workers? *The Globe and Mail*, November 12. Retrieved from <https://www.theglobeandmail.com/news/canada-1-per-cent-highest-paid-workers-compare/article36383159/>
- Zelazo, P. D., & Carlson, S. M. (2012). Hot and Cool Executive Function in Childhood and Adolescence: Development and Plasticity. *Child Development Perspectives*, 6(4), 354-360. <https://doi.org/10.1111/j.1750-8606.2012.00246.x>
- Zhang, X. (2017). *Children Living in Low-Income Households*. Government of Canada. Retrieved from <https://www12.statcan.gc.ca/census-recensement/2016/as-sa/98-200-x/2016012/98-200-x2016012-eng.cfm>

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