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Early Learning and Childcare as Key Economic Infrastructure

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# Note to Reader



This report outlines the case for large-scale investment in early learning and childcare ("ELCC"). While investments in ELCC can be an ideal source of economic stimulus for the current pandemic, they can also put Canada on the path to stronger, more resilient, and inclusive economic growth.

ELCC carries significant benefits for children, parents, governments, the economy and society. The most immediate impact is to lift the scope for parents, particularly women, to participate in the labour market, which contributes to stronger economic growth. The pandemic revealed how critical childcare is to labour participation. ELCC also reduces stress on parents, allowing them to be more productive. The additional income generated by increased labour participation adds tax revenues to government coffers that are badly needed in the wake the recent surge in government deficits. Availability of ELCC is scarce

for all households, but lower income families often cannot afford ELCC. So, investments in this space can be part of poverty reduction strategies and can lessen demand for government support programs – another area of fiscal savings.

The longer-term benefits are accrued by children who develop stronger foundational cognitive and emotional skills. This increases their readiness for school and helps them to advance their skills development. Robust skills are how we build a future workforce with the capabilities employers demand and creates a workforce that is more resilient to labour market disruptions. In turn, the improved outcomes raise economic growth and government tax revenues. It is also worth highlighting that there are social gains from lower income inequality, as lower income households and children from disadvantaged households benefit the most from greater investment in ELCC.

Early learning and childcare should be considered critical socioeconomic infrastructure. Regrettably, Canada has a history of underinvestment in ELCC in terms of funding, enrollment and duration of early learning relative to its international peers. Thus, as we look for ways to accelerate economic growth post-pandemic, we should take advantage of an opportunity to address a critical investment gap.

This report outlines a number of core recommendations to guide investment. The key suggestions are expanded and sustained funding adequate to create universal access to high quality early learning from coast-to-coast that is curriculum based and taught by credentialed educators. Ideally, ELCC would be linked or aligned to the public education system, which is a provincial responsibility, but the federal government should be involved in helping to assess the quality and impact of ELCC programs and be a key source of funding.

I would like to take this opportunity to thank Dr. Pierre Fortin for providing his latest analysis on the possible impact of replicating the Quebec ELCC experience to the rest of Canada. I would also like to thank Dr. David Philpott for his collection of data on the cost of special education programs on a per student basis. The cost of special education is very high, highlighting that education interventions later in a child's life are expensive. If ELCC can better prepare children for school, there could be very large savings in special education, reducing the cost for investment in early learning.

Chief Economist & Executive Advisor Economic Advisory, Deloitte LLP (Canada)

## 1.0 Introduction

At the onset of the pandemic, Canada was facing declining labour force participation and sluggish productivity growth, with the result that the outlook was for only slow economic growth and modest gains in living standards. Then, the pandemic caused the deepest recession in living memory. The downturn hit women harder than in any prior recession, creating what has been referred to as a "She-cession". It also revealed the critical nature of childcare, as school closures demonstrated that parents need children cared for so they can work.

The damage done to the labour market will take a long time to heal and yet aging demographics and forced early retirement for some older workers that lost employment means that Canada still needs to be concerned about labour supply. The pandemic also accelerated the information technology revolution, with a shift towards digital and more remote work, which is disrupting jobs and the demand for skills. Even with the job recovery after the first lockdown, there are more than 500,000 Canadians facing long-term unemployment and the need for these individuals to reskill will weigh on their ability to contribute to the economy. The implication is that a robust economic recovery requires the strongest labour market recovery possible. And, long-term prosperity requires removing barriers that are preventing many Canadians from realizing their potential and maximizing the contribution of our people by raising labour participation and skills development.

At the same time that Canada is contending with factors that are depressing our labour force and productivity growth, our federal and provincial governments are facing large deficits and must make difficult choices about where to allocate their limited funds. But these difficulties should not keep us from making investments that will improve our long-term standard of living. We would argue that, in fact, it is imperative that Canada make the type of investments that not only facilitate a robust recovery, but ones that that put us on a higher trend economic growth path.

Investments in early childhood education and childcare ("ELCC") can be part of that solution. When it comes to investments in ELCC the benefits are clear. Expanding access to childcare can have a positive economic impact through a resulting boost in the labour participation, particularly of women. Although parents will remain the primary educator of their young children, access to high quality early education programs can help with cognitive and soft-skill development of children. Ultimately, these gains create additional income that provide tax revenues to governments, as well as reduce government transfers to lower income families. In addition, through its impact on children's education and skills, ELCC can reduce demand for government transfers and other support programs, such as expensive special education programs. There is also evidence that investments in ELCC disproportionately benefit lower income Canadians and this can help address socioeconomic challenges, such as income inequality.

The purpose of this report is to highlight the literature on ELCC to demonstrate why further investments are necessary and how we can achieve a preferably universal system of early learning and childcare that will benefit our economy and society.

The report is organized as follows. Section 2 explores the economic case for investments in early childhood learning. Section 3 looks at how Canada's provision of ELCC compares to our peer countries. Section 4 reviews the literature and explores the benefits to children, parents, governments and addresses inequality. Section 5 explores whether benefits of early childhood education outweigh the costs of the investment. Section 6 concludes with recommendations.

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# 2.0 The Economic Imperative: Why Now is the Time for Canada to Invest in Early Learning and Childcare

- Over the past year, the closure of schools and ELCC centres across the country pushed many women out of the labour force, demonstrating the importance of childcare.
- Even as Canada's economy recovers, slow labour force growth and weak productivity will limit Canada's economic growth.
- While investment in childcare is an economic imperative, such investment creates the opportunity to in parallel invest in early learning, which creates long-term gains. Early child education (ECE) programs can provide both childcare and early learning. Thus, by investing in ECE, we can offset some of the negative structural trends by boosting the current and future labour force as well as the productivity of that future workforce, resulting in stronger economic growth.

The COVID-19 pandemic caused the deepest recession since the end of the Second World War, while also revealing significant problems in our social infrastructure. The pandemic recession has been unique in many ways, particularly on its impact on women. In past recessions, men have borne the brunt of the job losses but, at the onset of this recession, it was women who were most deeply affected. This is driven by many factors including the fact women are overrepresented in sectors of the economy that have been most exposed to the downturn and lockdown measures. In addition to the concentration of job losses in occupations dominated by women, the closure of schools and early learning centres across the country pushed many women out of the labour force. The pandemic clearly illustrated that childcare is critical social and economic infrastructure that enables women to participate in the labour market.

The economic scars from the pandemic will be long lasting. But, from this crisis comes the opportunity to build back better, reshaping our economy and society in a way that makes every Canadian better off. As presented in Deloitte's Catalyst¹ report released last September, the reality is that pre-pandemic, Canada was facing a subdued economic outlook with growth set to slow due to our aging population and poor labour productivity growth. The productivity challenge reflects many factors, but from a labour angle, it was driven by shortages of high-skilled workers, declining demand for middle-skill jobs and barriers to success for low-income families and disadvantaged segments of our population, including women. The combination of lower labour force growth and weak productivity growth was set to cause Canada's economic growth to slow to a pace of around 1.7 percent per year over the next decade—roughly one-third slower than in the early 1990s and early 2000s.

Slow economic growth is a problem as it results in stagnant gains in living standards due to weak income growth. It also limits the ability of governments to fund public services as the size of the economy determines the tax base for governments. As a result, slower economic growth translates into weaker gains in government revenues, at a time when the federal and provincial governments are digging out of deep fiscal deficits and facing rising costs of providing services due to our aging population.

Moreover, there was growing awareness pre-pandemic of the issue of rising inequality, and the fallout of the COVID-19 pandemic has aggravated this societal and economic challenge. The industries that have been hardest hit by the downturn tend to employ an above average number of low paid workers, and Canada's most vulnerable populations make up the bulk of such employees—including women, visible minorities, immigrants, Indigenous Canadians, and youth.

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<sup>&</sup>lt;sup>1</sup> Deloitte. (2020).

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Faced with these challenges, Canada needs the most robust recovery possible and one that is inclusive in nature. The nation needs a path of higher trend economic growth and one that lifts living standards and lowers inequality. While this is no easy task, one part of that strategy involves investments in ELCC, which is a key enabler of women's participation in the labour market. By giving children a better start in life, it also helps build a more resilient future workforce and helps with the cognitive and emotional development of children. By boosting the current and future labour force and the productivity of that future workforce, we can achieve stronger economic growth providing governments with greater fiscal capacity to fund programs. Since high income families can already afford high quality early learning and childcare, greater investment in this area will benefit lower income and low-middle income families, contributing to lower inequality. It would also help to ensure that children from all socioeconomic backgrounds have a more equal starting point in life. And, the return to government is greater than the cost of investment, meaning that funding of early learning makes sense even when governments are running large deficits in the wake of the pandemic.

As we think about how to stimulate the economy, it is important to remind ourselves that investments in ELCC can have an immediate, direct impact on the economy by creating jobs for early childhood educators, and at the companies that supply ELCC establishments in communities across Canada. In this report, we will make the case of increasing funding by \$7-8 billion, materially adding jobs and raising the output by this sector – contributing to the economic recovery.

The bottom line is that early learning and childcare is good for children, parents, governments, society and the economy.

# 3.0 The State of Early Learning in Canada

- Many parts of Canada have little access to ELCC, creating challenges for parents. From an enrollment perspective, Canada
  is significantly below the OECD average for children enrolled in ELCC under the age of 5.
- Students in Canada are significantly less likely than students in peer countries to spend three or more years in an ECE program. Lower duration leads to less skill development.
- The portion of students in Canada who have no, or very little, early learning is significantly higher compared to peer countries and students in low socioeconomic schools are more likely to have never attended ECE.
- Canada performs worse than the OECD average on several metrics of early learning quality, including duration of early learning and staff training.

#### 3.1 ECE Enrollment

Canada has inadequate supply of ELCC, with many parts of the country having inadequate access. An estimated 776,000 children (44% of all non-school-aged children) in Canada live in areas where there are three children for each available space. Despite this challenge, at an aggregate level, Canada does a good job of educating its 5-year-olds, with roughly 96 percent of 5-year-olds enrolled in part-time or full-time school. In 2019, only 41 percent of 4-year-olds in Canada attended full- or part-time programs offered in public schools. Ontario, the Northwest Territories, and Nova Scotia provide full-day programs for all 4-year-olds. Quebec, Newfoundland, and Yukon are committed to providing full-time programs for 4-year-olds, but do not provide full-day-programming currently. The Prairie provinces provide part-day school for some 4-year-old children living in disadvantaged communities, BC and most Atlantic provinces do not provide ECE in schools.

Canada ranks near the bottom of advanced economies in ELCC (including in schools) for 2-4-year-olds (Figure 1). Of the reporting countries, Canada falls behind all countries except the United States and Greece. Together, over 290,000 more children in Canada would need to enroll in ECE to reach the OECD average of roughly 79 percent of 2-4-year-olds enrolled.<sup>5</sup>

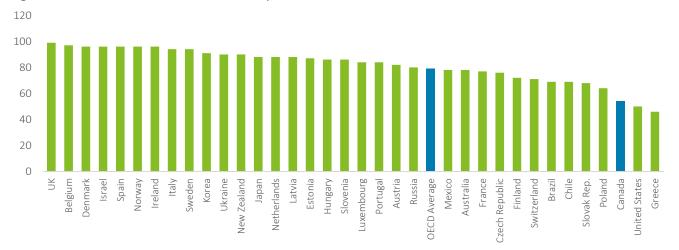


Figure 1: Share of 2-4-Year-Olds Enrolled in Early Childhood Education

Source: OECD. 2017. Data for Canada is for 2017 from the Early Childhood Education Report 2017.

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<sup>&</sup>lt;sup>2</sup> Macdonald, D. (2018).

<sup>&</sup>lt;sup>3</sup> McCain, 2020 (McCain, M., 2020, Early Years Study 4, Toronto, ON: Margaret and Wallace McCain Family Foundation Inc.

<sup>&</sup>lt;sup>4</sup> Ibid. There is a comparison issue, however, because the 41 percent in Canada is only 4-year olds in public school programs, while other OECD countries include public and private programs that meet the ECE quality criteria.

<sup>&</sup>lt;sup>5</sup> Using 2017 population estimates for children in Canada aged 2-4, Statistics Canada Table 17-10-0005-01.

Many OECD countries, including France, the UK, and Denmark have 100 percent of 4-5-year-olds enrolled in school. Some countries, even have 100 percent participation for 2-3-year-olds, suggesting there is plenty of room for Canada to improve its enrollment in ECE.

#### 3.2 ECE Duration

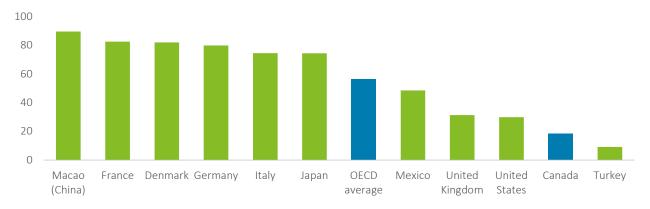
The reduced access to early learning can also be observed in Canada's statistics on the average duration of early learning. This is an important element because evidence from the OECD tells us that the number of years of early learning materially increases the extent of skill development of children. <sup>6</sup>

The number of children in Canada who have attended three or more years of ECE is significantly lower than the OECD average and lower than all of the G7 countries (Figure 2). Just 18 percent of 15-year-olds in Canada reported that they attended three or more

Early childhood education (ECE) is more than just childcare. Its early learning component provides long-lasting benefits to children.

years of early learning, compared to an average of 56 percent of students in OECD countries. Meanwhile, countries like Germany and France have 80 percent or more of students attending ECE for three or more years.

Figure 2: Percentage of 15-year-olds Who Attended 3 or More Years of ECE (2018)



Source: OECD (2020a).

Another way to look at the data on enrollments and duration of early learning is to show the number of students who did not attend ECE at all, or for less than a year. Roughly 15 percent of students in Canada report having never attended ECE, which is more than double the average of the 77 countries reported by the OECD.<sup>8</sup> Students who have never attended early learning are more likely to be those in low socioeconomic schools. Roughly 18 percent of Canadian students in low socioeconomic schools had never attended ECE, compared to 9 percent of students attending schools with high socioeconomic status.<sup>9</sup>

#### 3.3 ECE Quality

The pandemic has raised awareness of the importance of childcare. However, if Canada is going to invest in expanding childcare, it has the opportunity to use the time that children are in care to deliver early learning programs. The early learning component has the capacity to increase the skills of children, which can have long-run benefits.

In order to maximize benefits, programs should offer high-quality early learning. Quality, however, can be challenging to define. The OECD measures ECE program quality by looking at several metrics: duration of ECE (i.e., more than two years), child-to-teacher ratio, public expenditure per child, and staff training and job satisfaction. These metrics are useful. Quality can also be characterized as curriculum-based early learning programs delivered by certified early childhood educators.

<sup>&</sup>lt;sup>6</sup> OECD (2017).

<sup>&</sup>lt;sup>7</sup> OECD (2020a).

<sup>8</sup> OECD (2020a).

<sup>&</sup>lt;sup>9</sup> OECD (2020a). The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS). A socio-economically disadvantaged (advantaged) school is a school in the bottom (top) quarter of the index of ESCS in the relevant country/economy.

<sup>10</sup> OECD (2017).

In *Ready for Life*, the Conference Board of Canada evaluates Canada's performance across these identified measures of quality finding that Canada lags behind in terms of enrollment, duration of ECE, and staff training. <sup>11</sup> Limited data on child-to-teacher ratios in Canada and abroad suggest Canada performs on average compared to the OECD. <sup>12</sup>

When it comes to spending, Canada's history of investing in early learning is disappointing. For example, in 2006 Canada spent roughly 0.25 percent of GDP on early learning, significantly below the OECD average of 1 percent. <sup>13</sup> Canadian spending climbed to 0.6 percent of GDP in 2014 and has moved in the direction of the OECD average in recent years. This is positive, but the additional funding has not translated into the enrollment and duration of ECE experienced in OECD – and what matters is the impact of funding on children. The notion of average is also problematic because it masks the spectrum of good-to-bad outcomes.

Quebec has long had subsidized ELCC, and its experience on quality is insightful. Several academics in Canada and the US have studied the impact of the Quebec childcare system on child health, vocabulary, motor and social development, behaviour, and parental wellbeing. Studies have found mixed results, however, looking at the average impact of the Quebec program conceals the significant heterogeneity in the quality of care received and other characteristics, leading to potentially misleading conclusions about the overall impact. <sup>14</sup>

While some research found a negative impact on children in Quebec, the short-term negative impact may have been related to the rapid scale-up of centres with lighter regulation and poorer quality. <sup>15</sup> In fact, when focusing on higher-quality early childcare centres ("CPEs") in Quebec, the medical and psychological research literature has found positive cognitive, health, and behavioural impacts on children. <sup>16</sup>

No one should be surprised that the impact of education programs is directly tied to the quality of the programs being delivered. This is evident in primary, secondary and post-secondary education; and, it is equally true of early learning programs. In Canada, education and childcare is a provincial responsibility. This has created a very uneven patchwork of early learning and childcare services. Some will be of high quality, others less so. The implication is that on funding, enrollment, duration, and quality of early learning, there is significant room for Canada to do better.

<sup>&</sup>lt;sup>11</sup> Alexander et al. (2017).

<sup>12</sup> Ibid.

<sup>&</sup>lt;sup>13</sup> McCuaig, K. & Akbari, E. (2014).

<sup>&</sup>lt;sup>14</sup> Kottelenberg and Lehrer (2013).

<sup>15</sup> Haeck et al. (2015b).

<sup>&</sup>lt;sup>16</sup> Haeck et al. (2015b).

# 4.0 The Benefits of ECE

- Scientific evidence shows that brain development is well advanced before most Canadian children go to school.
- Access to curriculum based ECE can help cognitive and social skill development critical to school and later job market success.
- The labour force participation and career outcomes of women can be improved by the expansion of early childhood
  education as women are able to return to work earlier, helping gain valuable experience that can drive better labour
  market outcomes.
- Investment in universal ECE could add between 89,000 to 300,000 women to the labour force.

#### 4.1 Benefits to Children

While parents will always be the primary educator of their very young children, access to early childhood education accelerates development by putting children into a structured learning environment before entering the primary school system, aligning with when children start learning. There is extensive medical evidence that brain development starts in the womb and that the building blocks of future skills occur before age six—a time period during which there is an opportunity for structured early learning programs. For example, basic essential skill development—such as reading, writing and numeracy—can be developed through play and interactions.

Beyond cognitive skills, children develop critical social skills through their interaction with others. ECE presents the opportunity for greater interaction with other children and caregivers outside of the family. By developing cognitive and social skills earlier, children can be better prepared for entry into the public school system. It is this "readiness" in behaviour/emotional regulation that allows children to excel in cognitive tasks throughout their education.

The interdisciplinary evidence is clear. Neuroscience shows that early years are critical for brain development and the outcome is lasting. <sup>17</sup> From a psychological perspective, if unattended, cognitive/behavioural vulnerability in early years tends to persist into adolescence and adulthood and is often prohibitively costly to remedy. <sup>18</sup> Economically, as our paper will show, investment in early childhood by the family and childcare services is the most profitable of all investments in education. <sup>19</sup>

These interactions build the foundations for the skills and capabilities Canada's economy needs, and employers increasingly prioritize. Being able to work with others, continuously learn new information/technologies and problem-solving skills are the types of capabilities that will always be in demand.

As mentioned earlier, good quality ELCC is scarce for everyone. However, wealthier Canadian parents can afford high-quality early learning for their children while many middle- and low-income Canadian parents cannot. This dimension is particularly relevant when we consider that children from all backgrounds can be born with learning vulnerabilities that early learning can help alleviate.

A review of early development indicators suggest that roughly 28 percent of children are developmentally vulnerable and many of them would benefit from stronger literacy skills. <sup>20</sup> Research on the Quebec experience of early learning and childcare has found that, among children of mothers with low education, those who attended ECE had better cognitive outcomes (i.e., school readiness, vocabulary, reading and math scores) compared to children who did not attend ECE. <sup>21</sup>

#### 4.2 Benefits to Parents – Labour Force Outcomes

Beyond the benefits to children, ELCC provides significant benefits to parents. First and foremost, it allows parents with very young children to be engaged in the labour market. Because childcare responsibilities fall disproportionately on women, there is a particularly large impact on female labour force participation. It should be highlighted that this effect increases

<sup>&</sup>lt;sup>17</sup> Mustard JF. (2010). See also Schore, A. (1994).

 $<sup>^{\</sup>rm 18}$  See Tremblay RE. (2012) and Hertzman, C. (2010).

<sup>&</sup>lt;sup>19</sup> Economists Heckman and Karapakula (2019) studied the long-term outcomes of African American adults who participated in the Perry Preschool Project in the 1960s. They find long-term benefits in terms of lower crime rates, better employment outcomes, and better health outcomes for participants. See also Romer, P. (1994).

<sup>&</sup>lt;sup>20</sup> Canadian Institute for Health Information. Looking at data from the National Longitudinal Study of Children and Youth in 1994, Wilms (2002) found a similar share of children in Canada were vulnerable (defined as children who had a low score on motor and social development). Wilms' study also found that the prevalence of vulnerability varied considerably and that children from poor families were typically worse off, unless they had attended a high-quality early learning program.

<sup>21</sup> Geoffroy et al. (2010).

when families have more than one child, as parents can find that paying for more than one child becomes non-economic for them. Lower labour participation constrains economic growth and can contribute to labour shortages, particularly if the parent has in-demand skills. The loss of employment income for low income families can add to poverty. Indeed, a study by the Conference Board of Canada in 2017 noted that 43 percent of families with mothers outside of the labour market had an income below \$36,000. December of the labour market when children enter to care for children can experience skills atrophy, making it difficult to re-enter the labour market when children enter primary school. In some cases, returning parents find work, but not at the level they had before or they have missed out on opportunities to advance their career, which can have a lasting impact. Beyond the labour and income effect, childcare can reduce the stress experienced by parents. This improvement to their mental health in turn benefits their children, their work performance and their standard of living.

It has taken women over a century of striving and breaking down barriers to achieve a situation where women can have both a career and a family. <sup>23</sup> In the past 40 years, we have seen a significant improvement in the labour force participation of core working age women, which increased from roughly 60 percent in 1980 to roughly 84 percent in January 2020. <sup>24</sup> However, a gap between the labour force participation of men and women in Canada remains.

In 2019, just 83.7 percent of women between the ages of 25 to 54 participated in the labour force. This compares to 91.3 percent of men in the same age category. <sup>25</sup> Moreover, the global pandemic has exacerbated the challenges women face when trying to have both a career and a family—their labour force participation dropped to 78.1 percent in April 2020, representing a 20-year

As many as 89,000 to 300,000 women could be added to the Canadian workforce with support from a universal ECE program.

low.<sup>26</sup> The closure of schools and childcare facilities has created considerable stress on parents, reducing their productivity and lowering labour participation, particularly among women. In addition to their low participation rate, many women are employed less than they would like due to issues with childcare. In January 2021, 246,000 people were employed part time due to childcare issues. Of this total, 235,000 or 96 percent were women.<sup>27</sup>

The adoption of universal ELCC can reverse a significant portion of this disparity. The long-term impact of ELCC on the labour force participation of mothers has been reinforced by several academic research teams in Canada and the US. <sup>28</sup> Some research also suggests that the impact of ELCC programs on mothers' employment may last beyond the years their children spend in preschool. <sup>29</sup>

There are varying estimates that paint a picture of how many women could be added to the workforce with support of a universal ECE program, with the assessments ranging between 89,000 to 300,000. For example:

- Our own Deloitte conservative approach to this analysis also supports the view that ELCC can materially boost the labour force participation of women. According to data on labour participation for women with young kids, Quebec has a significantly higher labour force participation rate for mothers with children than the rest of Canada. In particular, 80 percent of Quebec women with children younger than age three participate in the labour force compared to only 70 percent for the rest of Canada. Even more impressive, Quebec is close to the top of the international ranking, exceeding countries like Sweden, France, the Netherlands, and others.<sup>30</sup>
- According to analysis from Dr. Pierre Fortin, Professor of Economics at the Université du Québec à Montréal, there could be a significant impact on the labour force participation of women based on the difference in maternal employment in Quebec compared to the rest of Canada between 1997 and 2008.<sup>31</sup> He estimates that if the same percent-increase in maternal employment experienced in Quebec between 1997 and 2008 (i.e., 14 percent) was applied to maternal

<sup>&</sup>lt;sup>22</sup> Alexander et al (2017).

<sup>&</sup>lt;sup>23</sup> Goldin (2020).

<sup>&</sup>lt;sup>24</sup> Statistics Canada Table: 14-10-0287-03.

<sup>&</sup>lt;sup>25</sup> Statistics Canada Table: 14-10-0287-03. December 2020.

<sup>&</sup>lt;sup>26</sup> Statistics Canada Table: 14-10-0287-01. Core working age population.

<sup>&</sup>lt;sup>27</sup> Statistics Canada table: 282-0013

<sup>&</sup>lt;sup>28</sup> See Lefebvre and Merrigan (2008), Haeck et al. (2015a), Baker et al. (2008), and Kottelenberg and Lehrer (2013).

<sup>&</sup>lt;sup>29</sup> Lefebvre, Pierre, Philip Merrigan and Matthieu Verstraete. 2009. "Dynamic labour supply effects of childcare subsidies: Evidence from a Canadian natural experiment on low-fee universal child care." Labour Economics, vol. 16, no. 5, October, 490-502.

<sup>&</sup>lt;sup>30</sup> Quebec has a higher female labour force participation rate than OECD countries for mothers of children 0-2-years-old, data not available specifically for 3-years-old; however, data on mothers of children 0-14-years-old shows Quebec's participation rate is still higher than most OECD countries. OECD Family Database.

<sup>&</sup>lt;sup>31</sup> The Quebec childcare program was expanded in 2009 to cover full-fee, for-profit childcare centres. However, some for-profit centres have been shown to be at greater risk of delivering lower quality, which likely negatively impacted the potential outcomes of the program. As such, the estimation relies on the impact of the Quebec program between 1997 and 2008.

- employment in the rest of Canada, an additional 281,000 women could have been added to the Canadian labour force in 2019. <sup>32</sup> This accounts for the fact that mothers would stay in the labour force as their child grow.
- In a 2018 speech, Bank of Canada Governor Poloz referenced Quebec's child-care program as one model to help women, which he noted represent the largest source of economic potential, enter the workforce. In the speech he stated that "if we could simply bring the participation rate of prime-age women in the rest of Canada up to the level in Quebec, we could add almost 300,000 people to our country's workforce" 33

Figure 3 illustrates how the labour force participation of mothers with young children in Quebec is significantly greater than elsewhere in Canada. Not surprisingly, the participation rate of women with kids rises significantly once their child reaches school age. For Canada as a whole, the participation rate rises from 72.5 percent for mothers with children younger than three to 85.1 percent once the child turns five and enters primary school. Based on the analysis of what happened in Quebec, it is reasonable to expect that if ECE were universally adopted, we would see a narrowing of the differential between the participation rate of mothers with children between 2 and 4 years old in Canada and mothers of school-aged children. If we bring the participation rate of women with children aged 2 to 4 to the average participation rate of women with kids aged 5, who have access to primary school, we could see as many as 89,000 women could be added to the Canadian workforce.<sup>34</sup>

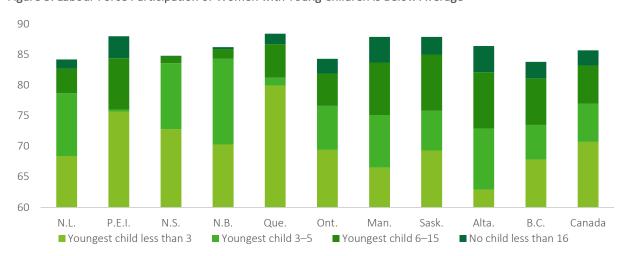


Figure 3: Labour Force Participation of Women with Young Children is Below Average

Source: Deloitte analysis. Statistics Canada data, 2019.

Overall, in rolling out universal ELCC we expect tens of thousands of women would be added to the Canadian labour market, allowing them to generate income, improve their families outcomes and contribute to government tax revenues, while simultaneously knowing that their children are being cared for and are experiencing education that will raise their chance of future success.

#### 4.3 ECE as an Enabler for Equality

Evidence from the literature suggests that access to affordable, high-quality childcare can also contribute to reducing income inequality. Research from the Conference Board of Canada looked at the impact of the Gini coefficient, a measure of inequality, associated with increasing the labour force participation of women. The Gini coefficient measures income distribution among the population – a Gini coefficient of zero represents a perfectly equal distribution of income while a coefficient of one represents one person in the population having all the income. With support from a Canada-wide ECE program, the research found that if roughly 76,540 additional women were employed, as opposed to being out of the labour force, Canada's Gini coefficient for families with young children (0 to 4 years old) would improve from 0.36 to 0.35 –

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<sup>&</sup>lt;sup>32</sup> Based on previous research at UQAM, Toronto, MIT, UBC and Queen's, Dr. Fortin and colleagues estimate than an additional 70,000 mothers with children 0-15-years-old were employed in Quebec in 2008, compared to 1997. This represents an increase of roughly 14% in employment of mothers in Quebec during that period. If the same 14% increase in employment were experienced by the rest of Canada in 2019, an additional 281,000 mothers would be employed (i.e., 2,008,100 x 14%).

<sup>33</sup> Press coverage of the speech referenced here from CBC, 2018. Web link: https://www.cbc.ca/news/politics/poloz-child-care-quebec-1.4574195

<sup>&</sup>lt;sup>34</sup> Calculated by increasing the participation rate of mothers with children between 2 and 4 years old in Canada to the same participation rate as mothers of school-aged children.

representing a 2.3 percent reduction in income inequality for families with young children.<sup>35</sup> That is a significant increase given that the policy investment only affects roughly 0.5 percent of census families.

1,000 500  $\cap$ -500 -1,000 -1,500 -2,000 -2,500-3.000 -3,500 \$16,000 to \$17,999 \$70,000 to \$71,999 \$22,000 to \$23,999 \$28,000 to \$29,999 \$34,000 to \$35,999 \$40,000 to \$41,999 \$46,000 to \$47,999 \$52,000 to \$53,999 \$58,000 to \$59,999 \$64,000 to \$65,999 \$76,000 to \$77,999 \$82,000 to \$83,999 \$88,000 to \$89,999 \$94,000 to \$95,999 \$100,000 to \$101,999 \$106,000 to \$107,999 \$112,000 to \$113,999 to \$119,999 \$124,000 to \$125,999 to \$131,999 \$136,000 to \$137,999 to \$143,999 \$148,000 to \$149,999 \$154,000 to \$155,999 to \$161,999 to \$167,999 \$172,000 to \$173,999 to \$179,999 \$190,000 to \$191,999 to \$197,999 ,208,000 to \$209,999 \$118,000 \$130,000 \$142,000 \$160,000 166,000

Figure 4: Change in Number of Families with Children Aged 0-4 in each Income Bracket

Source: Conference Board of Canada. Ready for Life. 2017.

Another potential avenue through which ELCC can reduce inequality is by improving educational opportunities for disadvantaged children. Some evidence suggests that children who attend ELCC retain their academic advantage throughout life, leading to higher wages when they later enter the workforce. Other research shows that early learning programs are particularly beneficial for children from poorer households or disadvantaged backgrounds, since there is often a wider gap between where the child's skills stand when entering primary school and the level of skills deemed acceptable by the primary education system. Meanwhile, children from wealthier households often experience less of a learning curve when entering school, partly due to having greater access to early learning opportunities. By fostering socioeconomic mobility, ECE can help to support a more inclusive economy. Our view on the link between ECE programs and inequality is that there are important benefits from these programs on later human capital accumulation.

The potential for higher wages for children attending ECE programs, particularly for those from disadvantaged groups, and the increase in the participation rate for women are just two of the ways by which ECE programs can help lower income inequality. However, the exact mechanisms behind these effects on children who receive ECE are uncertain and can differ sharply depending on the quality of the ECE programming under consideration since quality can vary greatly.

The inequitable access to ECE can often be misinterpreted as a policy recommendation that greater investment should be targeted at low income and disadvantaged families, but this is erroneous. While children from disadvantaged families would benefit most from greater access to ECE, studies suggest that early learning classes that include children from all socioeconomic backgrounds lead to better outcomes for the participating children.



- Revenues generated outweigh costs
- Generation of fiscal surplus that can be used for reinvestment in other government priorities
- Supports mixing of children and families from across communities and social classes
- Prevents damaging stigma associated with "programs for the poor"
- Casts the early learning and childcare system as a part of our free public school system
- Can raise the standard of ECE options across communities in Canada
- Can help to create an even playing field for children from different socioeconomic backgrounds

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<sup>35</sup> Alexander et al (2017).

One final dimension to consider regarding inequality is how ELCC can reduce barriers for women beyond labour participation. The experience of Nordic countries in terms of the outcomes of women is insightful. First, these countries have high investment and enrollment in early learning. They also have very low gender pay gaps. This might only be correlation, rather than causation, but there is likely a link.

There are several dimensions to the gender wage gap. Some factors are discriminatory and reflect occupational differences. Others can be related to the fact that women often leave the workforce for a period of time (i.e., maternity leave). As women leave the workforce temporarily, their counterparts who did not are able to gain experience that can then lead to higher wages. However, if women are given the option to return to work sooner as a result of having an ELCC option for their child, the length of time they spend out of the workforce shortens, enabling women to continue to gain experience and raise their incomes over time, putting mothers on a more even playing field with their colleagues. This can lead to a greater level of representation of women in leadership positions, and across industries which in turn, helps to drive a more inclusive cultural and societal view that contributes to less discrimination and ultimately helps shrink the gender wage gap.

#### How long do the benefits from ECE last?

While there is mixed data on how long the benefits of ECE last, there are few studies able to track the performance of children through the education system. On average across OECD countries, 15-year-old students who attended pre-primary education for at least two years scored better on reading tests compared to students who had never attended an ECE program or who had attended for less than one year. <sup>36</sup> Likewise, the OECD has found that 15-year-olds who attend an ECE program for less than one year are over three times as likely to perform below the baseline level of proficiency in science, compared to those who attend ECE for a year or more. <sup>37</sup> Moreover, the benefits are related to quality of the early learning that was received. <sup>38</sup> Further still, evidence is growing that early learning supports children later in life via increased labour market participation, reduction of poverty, and greater social mobility and integration. <sup>39</sup>

However, some suggest that the education system can help kids that do not receive early learning to catch up to those that had the early advantage. The research suggests that this is true for cognitive skills but not for social skills. There is evidence that ECE participants have sustained advantage on soft skills like self-control and social interaction.

But, even if children without ECE catch up, a key question is at what cost? First, there is a cost to the education system for the remedial education, and the cost increases over time – in other words later interventions are more costly than early interventions. Recent estimates suggest that between 17 and 22 percent of students in Canada qualify as having special educational needs ("SEN"). 40 Other metrics of child development suggest that as many as 28 percent of Canadian children entering grade 1 are vulnerable in one of five key development dimensions. 41 Worse still, children from low socioeconomic households are more likely to have developmental challenges. 42

The cost of educating children with SEN is high, with price estimates in Nova Scotia, Newfoundland and Labrador, and British Columbia suggesting a cost of over \$2,000 per student in the current education system. To stress this point, it isn't \$2,000 per child or youth with special needs, but rather the total student population in those provinces. This is hundreds of millions of dollars for small provinces and billions for larger provinces every year. The fact that the cost per student is very similar across provinces suggests that this is a good proxy for the cost in other regions as well. Table 1 summarizes the estimates.

Table 1: Examples of Provincial Cost of Special Needs Education

Province	Total Count K-12 Students	Cost of Special Needs Education	Cost per Student
British Columbia	663,208	\$1.6B	\$2,487
Nova Scotia	121,600	\$260M	\$2,140
Newfoundland and Labrador	63,570	\$130M	\$2,051

<sup>&</sup>lt;sup>36</sup> OECD (2020a).

<sup>&</sup>lt;sup>37</sup> OECD (2018).

<sup>38</sup> Ibid.

<sup>&</sup>lt;sup>40</sup> Philpott et al. (2019).

<sup>&</sup>lt;sup>41</sup> Data from the Early Development Instrument, as reported by the Canadian Institute for Health Information.

https://yourhealthsystem.cihi.ca/hsp/inbrief#!/indicators/013/children-vulnerable-in-areas-of-early-development/;mapC1;mapLevel2;overview;/

<sup>&</sup>lt;sup>42</sup> Data from the Early Development Instrument shows that 36% of children from low socioeconomic neighbourhoods are vulnerable in one or more development area, compared to 22% of children from high socioeconomic neighbourhoods.

Data for BC are for 2019/20 and provided by the BC Ministry of Education. Data for NL are for 2020/21 and provided by Newfoundland and Labrador English School District (NLESD), as well as the Conseil Scolaire Francophone Provincial (CSFP). Data for NS are for 2020/21 and provided by Nova Scotia Department of Education and Early Childhood Development.

The costs presented above are only the annual cost to the educational system, they do not consider the lifetime costs to the individuals who, for lack of early intervention, are put on a track where they leave school early or exit with a lower educational level and go on to face potentially worse employment, wage, physical or mental health, and other economic and social outcomes. Moreover, they do not capture the cost to parents who themselves may suffer from stress, economic or social pressures, if their child struggles in school and throughout life.

Furthermore, there is evidence that children who struggle early on continue to struggle as they get older. While some students are able to catch-up, it is not clear that everyone can. Roughly 50 percent of students with SEN have preventable challenges, such as language or behavioral challenges. As Canada does not have a universal ECE program, examples of the impact of ECE in Canada are hard to come by. However, a study of the Better Beginnings: Better Futures program for 4-8-year-olds in Canada found that students who participated in the program had better adaptive functioning/behavior at school, better preparedness to learn, less grade repetition, and a reduced need for special education, these results stuck with children throughout elementary and into high-school education.

There is evidence of the sustained impact of ECE on reducing the need for special education in the US, the UK, Canada, and other advanced economies. <sup>45</sup> A notable study of over 3,000 children in the UK tracked the impact of ECE on children through primary, elementary, and high school. The researchers found that children who attended ECE programs were 40 percent less likely to have SEN, with this increasing to 55 percent if children attended high-quality ECE programs. <sup>46</sup>

A study on the impact of full-day kindergarten versus half-day kindergarten in Ontario showed that children with only half-day were well below average in vocabulary, reading, writing, mathematics, and self-regulation. <sup>47</sup> Self-regulation was particularly poor, with half day kindergarten children three times more likely to be below average. This is important because these outcomes make it much more likely that the children will require future special education.

Ultimately, it is easier to help children catch-up to peers when they are younger. While it is possible to have children catch-up in terms of their basic literacy and numeracy skills when they are older, it is expensive. To drive home this point, the special education cost savings could be huge. While a 40 to 50 percent potential reduction in SEN enrollment won't equate to an identical percentage decline in special education budgets, even half that would save an incredible amount of money. Ontario has just over 2 million primary and secondary school students. Based on what is spent in other provinces, it is estimated that Ontario is spending \$4 billion a year on special education. The potential savings of having better school ready children could save the province hundreds of millions every year. And, the lesson is true for all provinces and territories. It should be stressed that this potential saving is not factored into any of the cost-benefit estimates discussed next.

<sup>&</sup>lt;sup>43</sup> Philpott et al. (2019).

<sup>&</sup>lt;sup>44</sup> Worton et al. (2014).

<sup>45</sup> See McCoy et al. (2017) for a summary of the literature in the US. See also Heckman et al. (2013). See Bauchmüller et al (2014) for a study of ECE in Denmark.

<sup>&</sup>lt;sup>46</sup> Melhuish (2019).

<sup>&</sup>lt;sup>47</sup> Pelletier and Fesseha (2019).

# 5.0 Cost-Benefit Analysis of ECE

- The literature on ECE investment points to a positive impact. Benefits are derived from higher rates of labour market participation, better outcomes for children who receive ECE and reduced spending on social supports.
- Cost-benefit ratios show a range of estimates with every \$1 invested generating an economic impact of roughly \$1.6-\$5.8. These estimates do not include savings on special education which could be substantial.
- The impact to government revenues can be studied using the Quebec example.
- The optimal type of funding mechanism is one that is supply side driven which adheres to quality standards.

#### **5.1 Literature Review of Cost-Benefit Analyses**

There are several studies that look at the costs and benefits of ECE investments. Broadly speaking, the literature shows four main ways in which the economy benefits from this investment:

- 1. Increased tax revenue generated from an increase in the labour force participation of women. This gain is experienced quickly.
- 2. Potential reduction in demand for government programs, services, and transfers as a result of better labour market outcomes for parents. This effect also takes hold rapidly as it is tied to the improvement in labour participation.
- 3. Increased tax revenue generated over the long-term from increased employment driven by better labour market outcomes of children participating in ECE.
- 4. Increased tax revenue generated over the long-term from an increase in labour productivity driven by improved skills of children participating in ECE.

To assess the economic value of investment in ECE, one can look at estimates of the benefits relative to the cost – similar to a return on investment (ROI). Various studies have estimated the potential cost-benefit of an ECE program in Canada. These studies show a range of impacts where, for every dollar invested in ECE, the Canadian economy is expected to see an economic return of \$1.6 to \$5.8. Table 2 summarizes the key results from these studies. Even if you use the lowest economic multiplier, the rate of return is very high. 48

Table 2: Benefit-Cost Ratios of Early Childhood Education

Study	Benefit-Cost Ratio	Benefits Covered	Costs Covered
Prentice (2007)	1.6	<ul> <li>Increase in direct and indirect GDP generated from expenditures</li> </ul>	<ul> <li>Staff salaries and benefits</li> <li>Program costs (toys, books, etc.)</li> <li>Office and building space</li> <li>Administrative costs</li> </ul>
Fortin, Godbout and St-Cerny (2011)	1.7	Only revenues from higher maternal labour force participation	<ul> <li>Financial support for childcare centres</li> <li>Childcare centre infrastructure</li> <li>Pension benefits paid to employees working in childcare</li> </ul>
Peters and others (2010)	2.0	<ul> <li>Impact on the use of health, special education, social services, and the criminal justice system</li> </ul>	<ul> <li>Staff salaries and benefits</li> <li>Materials for educational and recreational activities</li> <li>Food for snacks and small meals</li> </ul>
Cleveland and Krashinsky (1998)	2.0	<ul> <li>Implied child development benefits for young children</li> <li>Increased labour force participation of mothers, including increase in wages for some</li> </ul>	Staff salaries and benefits
Fairholm (2012)	2.5	<ul> <li>Long-term benefits to children, such as lower grade failures, less reliance on special education, and lower smoking rates</li> </ul>	<ul> <li>Input-output modelling of costs associated with care outside the home, costs include salaries and benefits to workers, expenditure on supplies, etc.</li> </ul>

<sup>&</sup>lt;sup>48</sup> Studies in other countries have found similar benefits to ECE programs. While the context, including cost of education and labour market, are somewhat different, a recent study in Australia found that for every \$1 invested, Australia receives \$2 back (PwC, 2019).

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Study	Benefit-Cost Ratio	Benefits Covered	Costs Covered
		<ul> <li>Increased hours worked by mothers and potential increased wages</li> </ul>	
Conference Board of Canada (2017)	Lower Bound = 1.67 Upper bound = 5.83	<ul> <li>Revenues from higher maternal labour force participation</li> <li>Revenues from higher future wage earnings for ECE participants</li> </ul>	Funding for new ECE spaces, including instructor wages and school infrastructure

Source: Conference Board of Canada, Deloitte Research, Research Support from Dr. Pierre Fortin.

There is also a body of research that shows how stronger essential skills development carries many non-economic benefits (as discussed in the section on Benefits to Children). However, these additional potential benefits are more difficult to quantify, hence only a few studies in Table 2 attempt to do so. For example, higher literacy skills are associated with better life choices (less likely to do drugs, more likely to make better health choices, more likely to volunteer, more likely to vote, etc.). Economists have studied the myriad of ways that schooling can benefit an adult's life beyond the financial benefits derived from increased incomes, such as the impact of education on the degree to which people enjoy their work, the likelihood of being unemployed, the ability to make good choices for one's health and one's family, and others. <sup>49</sup> These non-pecuniary benefits to education may be just as large or larger than the pecuniary ones and they are more likely to be experienced if children have strong starts in life.

Furthermore, these improved choices are good for society too, potentially leading to reduced need for police services, reduced health care spending, and stronger communities. Further still, improved education options could also encourage parents to have more children on average, the benefit of which would be to support population growth and the future labour force in Canada.

#### **5.2** The Affordability of ECE Investments

Given our constrained fiscal environment, it is natural to question if sustained and broadened public investment in ECE is affordable. To do so effectively, we must look at the fiscal benefits derived from investments in ECE. Table 3 illustrates the estimated net impact on the federal and provincial fiscal balances in 2008, eleven years after the introduction of Quebec's ECE program. Economist Dr. Pierre Fortin and colleagues use the estimated 70,000 additional mothers in the Quebec labour force in 2008 to estimate the increase in provincial gross domestic product (GDP). This increase in GDP is then transformed into an increase in tax revenue using an array of elasticity assumptions based on a tax simulator. Hence, the federal and provincial governments benefit from increased personal employment, personal property, and corporate income tax revenues. Simultaneously, governments would benefit from a reduction in tax expenditures and transfers to families given the improved incomes of mothers. Altogether, federal and provincial revenues would have increased by roughly \$2.2 billion. The potential government savings from reduced reliance on special education, which governments currently spend significantly on (see ECE as an Enabler for Equality), is unaccounted for in this analysis but is another important benefit, both in the short- and long-term, for further consideration. The Quebec government spent roughly \$1.2 billion funding the tax subsidy, resulting in a net fiscal improvement of roughly \$900 million.

Dr. Fortin's analysis suggests that governments received \$1.75 in revenues for every \$1 spent on ECE investments. The benefits are greater than the costs even including social insurance costs, suggesting that an ECE program similar to Quebec's would pay for itself.

Table 3: Net Fiscal Impact of the Quebec ECE Program (estimated for 2008)

	Level of Government		
Source of impact	Federal	Provincial/Municipal	Overall
Increase in tax revenue	530	1,129	1,659
from personal employment income	231	349	580
from personal property income	34	39	73
from corporate income	95	78	173
from production and other sources	170	663	833
Decrease in tax expenditure	43	170	213

<sup>&</sup>lt;sup>49</sup> Oreopoulos, P., & Salvanes, K. G. (2011).

<sup>50</sup> A summarized analysis was provided by Dr. Fortin to Deloitte for the purposes of this report.

<sup>&</sup>lt;sup>51</sup> Fortin relies on Solow's proportionality theorem such that a 1.8% increase in employment (represented by the additional 70,000 workers) would translate to a 1.8%-increase in GDP. The percentage increase in taxes is taken to also be roughly 1.8%.

	Level of Government		
Source of impact	Federal	Provincial/Municipal	Overall
Economy in transfers to families	100	179	279
Increase in revenue	+673	+1,478	+2,151
Increase in childcare costs	0	-1,232	-1,232
Change in fiscal balance	+673	+246	+919
Memo: Increase in contributions to social insurance plans <sup>1</sup>	55	318	373

Source: Fortin, Godbout and St-Cerny (2013, Tables 5, 7 and 8). Summarized and shared by Dr. Pierre Fortin.

#### 5.3 Choosing a Funding Mechanism for ECE

Another dimension to the affordability question is how Canadian governments can support families to enroll their child in ECE. A critical consideration in providing ECE to all children is whether to fund a program via the demand-side (e.g., putting money in the hands of parents via a tax credit or subsidy) or supply-side (i.e., government regulated education, but not necessarily government operated or delivered ELCC) mechanisms. When making this assessment, it is necessary to consider which mechanism will result in the highest quality, given that programs must be high-quality to maximize the benefits of the investment.

- Traditional economic thinking would argue that in a competitive market (i.e., unregulated by government), education providers could compete and effectively provide low-cost quality education.
- In reality, this is typically not the dynamic. Parents choose an education provider based on geographic location, meaning that only a few education centres are required to compete with one another. The result is that there is limited competition among education providers, typically on price not quality, and it is difficult for parents to monitor either absolute or relative quality of education.<sup>52</sup>

Again, ECE programs in Quebec highlight the potential difference in education quality based on the type of education provider. Quebec reformed its childcare funding in 1997 and ended up with a system of not-for-profit (i.e., CPEs), licensed family childcare, and for-profit childcare providers. Unfortunately for the children and the state, the quality of education at family and for-profit childcare providers in Quebec varied greatly and in aggregate was not as high as the regulated CPEs, resulting in below optimal outcomes for children (Figure 5).<sup>53</sup>

Figure 5: Share of Quebec Children 18-66 months by Quality and Type of Care



Source: Cleveland (2018). Institut de la Statistique du Quebec (2004 and 2015). Note: "CPE" = Early childhood centres (in 2014); "Family" = Licensed family childcare (in 2003); "Profit" = For-profit full-fee garderies (in 2004).

Ultimately, the current funding model follows a reactive approach, where poor school readiness (i.e., from the absence of ELCC) leads to high spending on special education and social programs that attempt to catch children up. Focusing on funding high-quality ELCC as an extension of the public education system helps reduce the need for spending in this manner while simultaneously benefiting child and eventually workforce development. It also simplifies the decision for parents, ensuring that children are not missing out on education because parents cannot afford it. Indeed, research by Privy Council Office found that while cost was a major barrier to childcare, survey respondents cited waiting lists, the availability of spaces, and quality of available education as the next most common barriers, cited by 47 percent, 45 percent, and 26 percent of respondents, respectively. These dynamics suggest ECE programs should be funded via supply-side mechanisms, with regulations to ensure quality – and not by tax credits or transfers to parents since that approach is less likely to create quality ELCC programs.

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<sup>1.</sup> The increase in contributions to social insurance plans is not part of changes in fiscal balances because they are assumed to generate equivalent future benefits.

<sup>52</sup> Cleveland (2018).

<sup>53</sup> According to Cleveland (2018), several studies have shown that CPEs are generally of much higher quality than other forms of childcare in Quebec.

<sup>&</sup>lt;sup>54</sup> Global News (2021). PCO survey results were obtained by Global News via an access to information request.

# 6.0 Recommendations

- This report finds significant benefits to investing in early childhood education. Timely investments have the potential to help us build a better future for Canadians, one that is more inclusive and has stronger economic growth.
- We recommend the federal government support an enhanced early learning and childcare initiative as part of its overall COVID-19-recovery economic plan.
- Investments should be made with the goal of providing a universal, high-quality early learning and childcare program that is curriculum-based, aligned with the public education system and delivered by certified educators. Since the provinces have responsibility for education and childcare under the Constitution but lack the fiscal capacity to make the needed investment, ELCC expansion requires collaboration by all levels of government.

The benefits of investing in early learning and childhood education are clear. And yet, Canada has underinvested in this space for years. As tragic as the pandemic has been, it has shined a light on the criticality of childcare. The linkage between the economy and childcare now resonates with policymakers and the public. This creates an incredible opportunity to make large scale investment in ELCC as fundamental social and economic infrastructure. And, governments can do this despite large deficits because we can have confidence on the large returns from the investment over time.

To realize this opportunity, government leadership is required. There are mechanisms through which federal, provincial and territorial governments can work together multilaterally to fund and support early childhood education<sup>55</sup>. In addition, momentum is growing. In the fall of 2020, the Government of Canada announced its intention to collaborate with provincial and territorial governments to establish an early learning and childcare system and expand before-and after-school programs across Canada. This is an important initial step but more has to be done. Ultimately, Canadian governments should consider supporting an enhanced ELCC program as part of its overall COVID-19-recovery economic plan. Canada needs a pro-growth strategy to prosper in the post-pandemic world – ECE could be an important part of that strategy. In particular, based on the results of this research, we make the following recommendations.

### 1. Governments should invest in universal, high-quality early learning and childcare that is curriculum-based and delivered by certified educators

Some provinces particularly, Ontario, Quebec, the Northwest Territories, and Nova Scotia have made significant gains in recent years by ensuring ECE coverage through public education for children aged 4. They should now expand service provision to children aged 3. For provinces that have not yet made these investments, they should focus on ensuring access to at least two years of ECE and then expand ECE services to children aged 3 once they have provided full-day programming to kindergarten students. The underlying recommendation is that after getting full coverage of 4-year olds, enrollment should increase to 3-year olds in order to increase the duration which children receive ECE as that is tied to skills development. Ultimately, Canada should address the scarcity in supply of ELCC across the country to reap the gains from such investment, including the future savings in special education funding that could take some pressure off of provincial education systems.

#### 2. Ensure the funding is adequate and sustained

- An inherent challenge for governments to work on is the fact that education and childcare are both provincial responsibilities, but the federal government has the fiscal capacity required for universal ELCC. To achieve the recommended outcomes, both federal and provincial governments will need to work together to develop co-funding models that shift investment in ELCC away from individuals and from demand-side tax credits or government transfers to individuals and rather towards incorporating ELCC as a public service akin to healthcare and primary education. In fact, early learning should be viewed as simply an extension of primary education.
- To give an idea of the required investment, the estimated cost of raising enrollment in early learning to the OECD average according to the Conference Board of Canada in 2017 was \$3.3 billion for operating costs and \$3.7 billion in infrastructure, for a total of \$7 billion. A more recent report from the Atkinson Centre in 2020 estimated that the federal government would need \$8 billion of investment to reach OECD average enrollment, again partly for annual

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<sup>55</sup> Mechanism already exist in the Fed/prov/territorial LCC Multilateral Framework and Bilateral agreements. With minor modifications that remove the prohibition on using federal funding for workforce compensation and for expansion of ELCC within public education, Canada has a ready-made platform to effectively expand ELCC without getting bogged down in a new round of inter jurisdictional negotiations.

operating costs and partly for infrastructure.<sup>56</sup> Notably, the level of funding afforded to the sector needs to account for various dimensions including capital/infrastructure costs, operating costs and the ongoing training, re-skilling, and leadership development of ECE educators. Only then will Canada be able to secure universal, quality ECE options.

#### 3. Ensure an adequate supply of qualified ECE educators

Currently, there are not enough ECE professionals to support our recommendation of universal, high quality early learning. Wages are often low for ECE professionals, which could contribute to the high turnover of educators at ECE centres. For example, ECE professionals are often waiting to work for provincial school boards given the low wages in the ECE sector. If ECE jobs are seen as temporary, it will impact the quality of learning experienced by children. By providing stable and sufficient funding, we can attract quality talent, provide competitive wages and ensure that educators have the skill sets and experience to high quality care and learning opportunities for children.

#### 4. Provide effective oversight to the institutions delivering the programs

Early childhood learning will only achieve the required benefits and gain widespread support if it is high quality.
 Governments should establish effective, flexible research and monitoring frameworks that help ensure ECE is achieving its intended learning and developmental outcomes and help support educational policy in Canada. The federal government could play an important role in establishing standards and collecting the statistics on quality and performance, which could help to create more harmony across provincial and territorial ELCC programs.

#### 5. Enhance awareness of ECE's benefits

- Given the benefits of early learning and childcare, why has Canada underinvested? One possible answer is that the price tag to government is high and the return on investment is beyond the election cycle. But, there is also a societal issue. The Canadian public often does not appreciate the benefits to children, parents, governments and society.
   Moreover, early learning settings are often viewed as only basic childcare keeping children fed and safe. However, this perspective misses the education component of early learning (i.e. ECE) that differentiates it from daycare.
- In order to achieve the gains, we have outlined in this report, enrolment needs to improve. Even in Ontario where junior kindergarten is publicly funded, enrolment remains lower than the top performing countries. Families need to understand the differences in experience, and characteristics between ECE and other forms of early childcare. We need to better communicate the linkage between ECE and individual learning outcomes to help families make informed choices on childcare. It would also be helpful if the business community also fully appreciated the impact of childcare as a critical infrastructure for their labour force and added their voice in support of government investment in ELCC. In truth, ELCC provides businesses with more workers and more productive workers. In the final analysis, greater public and business support would help politicians to explain why they are using the public purse to ELCC.

#### 6. Broader infrastructure investment

The investment will need to cover annual operating costs and infrastructure requirements. The ideal location of early childhood education is within schools to provide a seamless transition to primary school. Some schools may require capital investment to ensure adequate space. However, even if the infrastructure is not attached to schools, the expansion of investment towards universal access to ELCC will require additional facilities. This capital spending will need to be factored into early learning and childcare policy decisions.

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<sup>&</sup>lt;sup>56</sup> Yalnizyan, A. & McCuaig, K. (2020).

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