



Early Learning and Childcare as Key Economic Infrastructure

April 2021



The Economic Imperative: Why Now is the Time for Canada to Invest in ECE (1/2)

- 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.
- There has been a dramatic shock to the labour market, with unemployment currently over 8% for both men and women. In the early stages of the downturn, the closure of schools and early learning centres across the country pushed many parents out of the labour force, particularly women who bear the greatest burden for childcare. This highlighted that childcare is critical infrastructure to our economy.
- Although there has been a recovery in jobs and reopening of schools and childcare centres, there were 78,000 fewer women in the labour market as of February 2021.
- I think we all agree that Canada needs the strongest labour market recovery possible from the current recession. However, I think there is less awareness that Canada was not on the path to prosperity before the pandemic. Due to an aging workforce, labour force growth was decelerating while productivity growth was slowing due to a host of factors, including: 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.
- 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.
- By investing in high quality, universal early learning and childcare, we can offset some of these structural trends by boosting female labour force participation and giving children a better start in life that helps creates more resilient workers of the future.



Investments in Early Learning and Childcare are beneficial to children, parents, economy and society

How does early learning create economic gains?



First and most immediately, there are the **benefits to parents**. Female labour participation is increased by access to childcare. This can be empirically shown by the experience in Quebec with its subsidize childcare programs. Moreover, the international experience is that high enrollment rates in early learning facilities correlates to reduced barriers to success for women in the labour market, including a low gender wage gap. Although correlation is not causation, it is intuitive that if women do not leave the labour market for a considerable time after having children, they face less disruption to their work experience and career path. Increased childcare also reduces stress on parents.



Then there are the **benefits to children**. If one invests in childcare, it creates the opportunity for children to spend more time learning. The gains are maximized if the early learning is delivered by a qualified educator that is delivering a circular based program. Such programs help children develop essential skills, such as early numeracy and literacy skills, and soft skills, such as better self control and interaction with others. This makes children more school ready.



It also **reduces the need for special education** to address learning challenges. It is easier and cheaper to overcome learning barriers earlier in life.



Increased investment in early learning and childcare can also be a **means for promoting equality**. Right now, many parents do not have access to early learning and childcare, but the issue is most acute for lower income families. Indeed, 43 percent of families with mothers outside of the labour market in 2017 had an income below \$36,000. Children from lower income families also face greater challenges in skills development in primary and secondary education.



The State of Early Learning in Canada

- Many parts of Canada have little access to ELCC, creating challenges for parents.
- Canada lags OECD countries both in terms of ELCC enrollment and duration.
- Duration is particularly important because it is a major factor in determining the extent of skills development for children.
- Canada has lower staff training in the delivery of ELCC than international peer countries.
- In order to maximize benefits, programs should offer high-quality early learning, which includes early learning opportunities for several years, provided by trained educators, with a high educator-to-child ratio, and a play/curriculum-based program.
- 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. 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 similar levels of enrollment in and duration of ECE as experienced in OECD countries – and what matters is the impact of funding on children.



Cost-Benefit Analysis of Early Childhood Education

- The literature on ECE investment points to positive benefit-cost ratios – in other words there is a high return on investment (ROI).
- Benefits are derived from higher rates of labour market participation, better outcomes for children who receive ECE, and reduced spending on social supports. While costs range from staff salaries and benefits, administrative costs, office and building space, and program costs (e.g., materials for educational activities).
- Benefit-cost ratios show a range of estimates with every \$1 invested generating an economic impact of roughly \$1.6-\$5.8.
- Even if you use the lowest economic multiplier, the rate of return is very high.

Table 2: Benefit-Cost Ratios of Early Childhood Education

Study	Benefit-Cost Ratio	Benefits Covered	Costs Covered
Prentice (2007)	1.6	<ul style="list-style-type: none"> • Increase in direct and indirect GDP generated from expenditures 	<ul style="list-style-type: none"> • Staff salaries and benefits • Program costs (toys, books, etc.) • Office and building space • Administrative costs
Fortin, Godbout and St-Cerny (2011)	1.7	<ul style="list-style-type: none"> • Revenues from higher maternal labour force participation 	<ul style="list-style-type: none"> • Financial support for childcare centres • Childcare centre infrastructure • Pension benefits paid to employees working in childcare
Peters and others (2010)	2.0	<ul style="list-style-type: none"> • Impact on the use of health, special education, social services, and the criminal justice system 	<ul style="list-style-type: none"> • Staff salaries and benefits • Materials for educational and recreational activities • Food for snacks and small meals
Cleveland and Krashinsky (1998)	2.0	<ul style="list-style-type: none"> • Implied child development benefits for young children • Increased labour force participation of mothers, including increase in wages for some 	<ul style="list-style-type: none"> • Staff salaries and benefits
Fairholm (2012)	2.5	<ul style="list-style-type: none"> • Long-term benefits to children, such as lower grade failures, less reliance on special education, and lower smoking rates • Increased hours worked by mothers and potential increased wages 	<ul style="list-style-type: none"> • Input-output modelling of costs associated with care outside the home, costs include salaries and benefits to workers, expenditure on supplies, etc.
Conference Board of Canada (2017)	Lower Bound = 1.67 Upper bound = 5.83	<ul style="list-style-type: none"> • Revenues from higher maternal labour force participation • Revenues from higher future wage earnings for ECE participants 	<ul style="list-style-type: none"> • Funding for new ECE spaces, including instructor wages and school infrastructure

Quebec experience shows a positive net fiscal gain from investment in early learning and childcare

- Given our constrained fiscal environment, it is natural to question if sustained and broadened public investment in ECE is affordable.
- 11 years after the introduction of Quebec’s ECE program, there was a fiscal gain at both the federal and provincial level.
- The program lifted Quebec’s female labour force in 2008 by roughly 70,000, adding to jobs and income in the province. The additional income provided additional tax revenues. Simultaneously, governments benefited from a reduction in tax expenditures and transfers to families given the improved incomes of mothers.
- Altogether, federal and provincial revenues increased by roughly \$2.2 billion. The Quebec government spent roughly \$1.2 billion funding the tax subsidy, resulting in a net fiscal improvement of approximately \$900 million.
- Dr. Fortin’s analysis suggests that governments received \$1.75 in revenues for every \$1 spent on ECE investments.

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

Source of impact	Level of Government		
	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
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 ³	55	318	373

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

1. A summarized analysis was provided by Dr. Fortin to Deloitte for the purposes of this report. See full report for further details.

2. 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%.

3. 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.

Investment in ELCC could create savings from reduced demand for special needs education

- One pushback heard against investments in early learning is that there is scope for children that do not have early learning catchup during primary and secondary school. This is possible, but at what cost?
 - The cost of educating children with special needs education (SNE) 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.
 - It is easier and cheaper to help children overcome learning challenges earlier in life.

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

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.

1. Worton et al. (2014).
 2. Melhuish (2019).

Recommendations (1/3)

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

1

- Some provinces have made significant gains in recent years by ensuring ECE coverage for children. 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 of ECE for children, as duration is tied to skills development.

2 Ensure funding is adequate and sustained

2

- To achieve the recommended outcomes, both federal and provincial governments will need to work together to develop co-funding models that shift investment in ECE away from individuals and from demand-side tax credits towards incorporating ECE as a public service akin to healthcare and 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.¹ 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 operating costs and partly for infrastructure.²

1. Alexander et al. (2017).

2. Yalnizyan & McCuaig. (October 2020). A Year-by-Year Approach to Investing in Early Learning and Child Care. Toronto: Atkinson Centre



Recommendations (2/3)

Ensure an adequate supply of quality ECE educators.

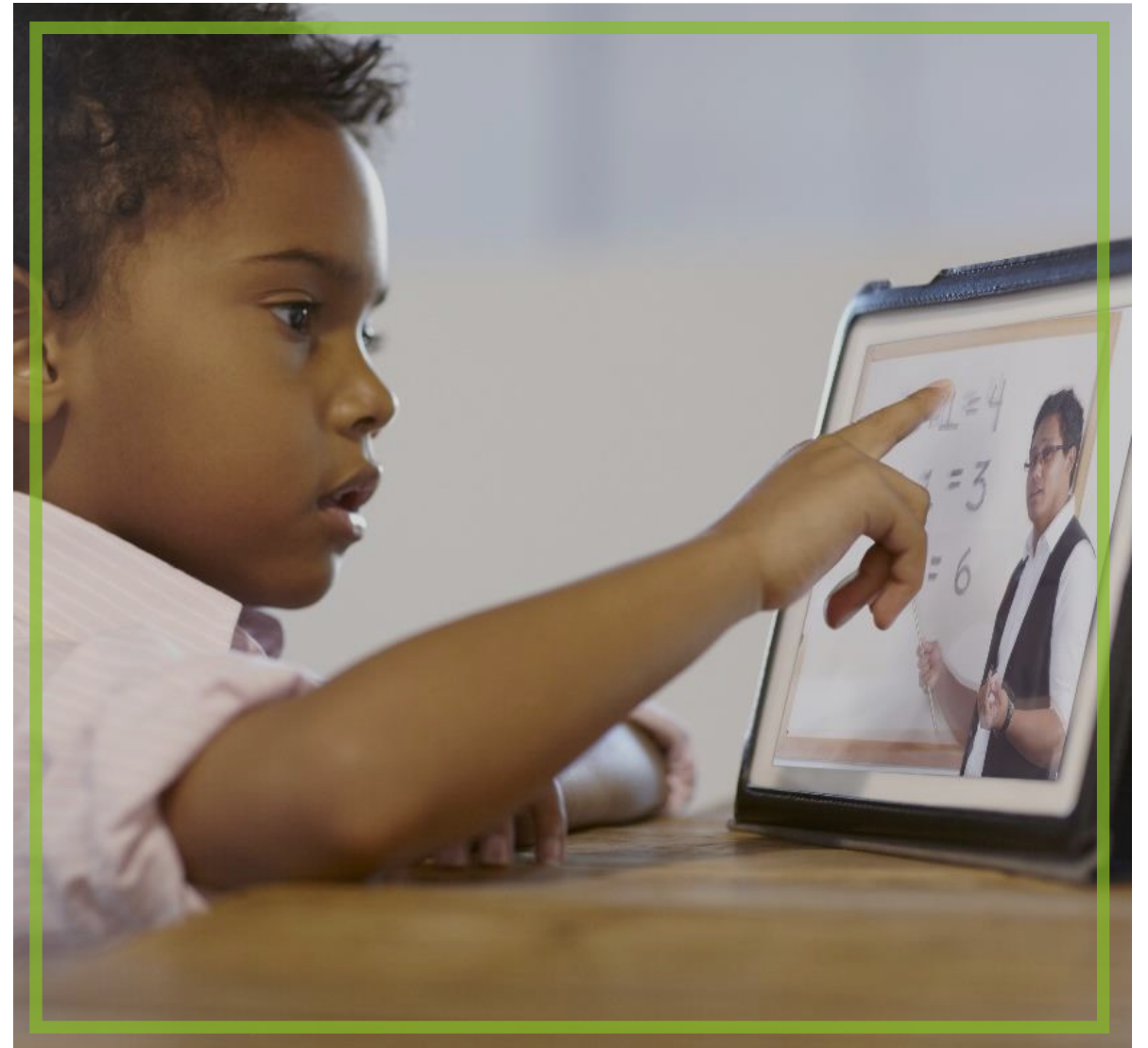
3

- Currently, there are not enough ECE professionals to support our recommendation of universal, high quality early learning. Moreover, wages are often low which could contribute to the high turnover of educators at ECE centres.
- By providing stable and sufficient funding, we can provide competitive wages, and ensure that educators have the skill sets and experience to provide high quality care and learning opportunities for children.

Provide effective oversight to the institutions delivering the programs

4

- 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 education 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.



Recommendations (3/3)

Enhance awareness of ECE's benefits

5

- In order to achieve the gains outlined in this paper, ECE enrolment needs to improve.
- Therefore, we need to better communicate the link between ECE and individual learning outcomes to help families make informed choices on childcare.
- It would also be helpful if the business community 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. ELCC provides businesses with more workers and more productive workers.

Broader infrastructure investment

6

- The ideal location of early childhood education is within schools to provide a seamless transition to primary school. However, some schools may require capital investment to ensure adequate space.
- Ultimately, the investment will need to cover annual operating costs and infrastructure requirements. This capital spending will need to be factored into early learning and childcare policy decisions.





About Deloitte

Deloitte provides audit and assurance, consulting, financial advisory, risk advisory, tax, and related services to public and private clients spanning multiple industries. Deloitte serves four out of five Fortune Global 500® companies through a globally connected network of member firms in more than 150 countries and territories bringing world-class capabilities, insights, and service to address clients' most complex business challenges. Deloitte LLP, an Ontario limited liability partnership, is the Canadian member firm of Deloitte Touche Tohmatsu Limited. Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee, and its network of member firms, each of which is a legally separate and independent entity. Please see www.deloitte.com/about for a detailed description of the legal structure of Deloitte Touche Tohmatsu Limited and its member firms.

Our global Purpose is making an impact that matters. At Deloitte Canada, that translates into building a better future by accelerating and expanding access to knowledge. We believe we can achieve this Purpose by living our shared values to lead the way, serve with integrity, take care of each other, foster inclusion, and collaborate for measurable impact.

To learn more about how Deloitte's approximately 312,000 professionals, over 12,000 of whom are part of the Canadian firm, please connect with us on [LinkedIn](#), [Twitter](#), [Instagram](#), or [Facebook](#).

© Deloitte LLP and affiliated entities.