Figure A2
Adverse Influences on Early Brain Development and Potential Outcomes

Sensitive Period

Pregnancy | Early Childhood (0–6 years) | Middle Childhood (6–12 years) | Adolescence (12–18 years) | Adulthood

Comorbidities Cascade effects

Dropping out
Depression
Anxiety
Inattention/Impulsivity
Substance abuse
Obesity
Health problems
Violence, etc.
Parental neglect/abuse

Individual trajectories

Emotions
Attention
Stress
Self-control
Learning

STRESS

Parents
(neglect/abuse)

Peers
(victimization/rejection/marginalization)

Other environmental factors (SES, neighbourhood, school, etc.)

GENES

G x E
epigenetics

EXPERIENCE

care & attention
physical environment
nutrition

Third of BC’s 5-year olds are vulnerable at Kindergarten

- The Early Development Instrument (EDI) data collection found 32 per cent of 5-year-olds enter school with one or more vulnerabilities.

- Vulnerabilities include physical health and well-being, social competence, emotional maturity, language and cognitive development, communication skills and general knowledge.
Early childhood education

- International trends take a lifelong approach to learning with early childhood defined as birth to age 8

- ECE refers to programs for young children based on an explicit curriculum delivered by qualified staff and designed to support children's development and learning.

- Attendance is regular and children may participate on their own or with a parent or caregiver.
Special education savings $5,000 per student

Effects of Preschool on Education

Grade Retention 24%

Attended Pre-School

Drop out rates -18%

OECD 2013, Peters, 2010

@ 15 yrs old

+1yr

Reading Age

@ 15 yrs old
Preschool Programs Reduced

POVERTY

For families & Children

Fortin et al, 2012
**BENEFITS OF EARLY CHILDHOOD EDUCATION**

**CHILD**
- A strong start for school and for life

**FAMILY**
- Economic stability and work/life balance

**SOCIETY**
- Equity, prosperity, inclusion

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Every $1 invested in early education returns $2 in reduced social costs and increased tax revenue from working parents.

% of GDP devoted to ECE:

- **2.0%** Countries with mature preschool programs
- **1.1%** OECD* average
- **0.6%** Canada

*The Organization for Economic Cooperation and Development is composed of 34 of the world’s richest countries.

Canadian governments need to invest an additional $8-billion to meet the OECD average.

Canada needs to catch up
Operating expenditure per cc space and per pupil in schools
The need for early education

YOUNG POPULATION
- Indigenous population is young with a median age of 25 years
- 4 times more likely to be teenage mothers than non-Indigenous women
- Children twice as likely to live in a lone-parent family as compared to non-Indigenous Canadians

FEW SUPPORTS
- 67% (of 430) First Nations communities have licensed child care serving 22% of children 0 to 5 years

ECE opportunities are critical for providing a strong foundation on which to build healthy and confident First Nations individuals that succeed in life

First Nations Health Authority on October 1, 2013,
Early childhood education programs are vital to support the development of young children and, by extension, address some of the deficit in parenting skills that is the legacy of residential schools.

**Call to Action**

- We call upon the federal, provincial, territorial, and Aboriginal governments to develop culturally appropriate early childhood education programs for Aboriginal families.

- To close the education and income gaps, there needs to be stable and adequate funding of Aboriginal education that takes into account the challenges of the legacy of residential schools as well as other challenges faced by Aboriginal people. In addition to fair and adequate funding, there is also a need to maximize Aboriginal control over Aboriginal education, and to facilitate instruction in Aboriginal cultures and languages. These educational measures will offer a realistic prospect of reconciliation on the basis of equality and respect.
More attention to governance and oversight
INTEGRATED GOVERNANCE
Majority of ECE workforce have post secondary qualifications

ATTENTION TO THE ECE WORKFORCE
Change in Teacher / ECE Remuneration

Dollars

2011  2014

ECE  Teacher

Canadian Average Income 2015
All provinces have developed Early learning curriculum frameworks.
How play based?

- An analysis of current and previous kindergarten curricula in five Canadian provinces
- Play is integral to kindergarten curricula in SK and ON, but only implicitly mentioned in the AB, BC and MB curricula
- When play isn’t in the curricula it doesn’t play

Access has increased mainly through school-provided programming.
Moving forward

- Federal/provincial/territorial framework on early learning and care
- New federal funding - $400-million/$100-million for Aboriginal ECE
- Base in StrongStart – 326 programs, trained staff, curriculum, integrated with schools
Challenges

- Early years programs are frayed
- Avoid another boutique program
- Expand access and supports without leaving community behind
Thank You