

The Pre-emptive Nature of Quality Early Child Education on Special Educational Needs

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The Special Education Lens



- 38 years in special education
- Push for early identification/intervention
- Helping children play catch up
- Early Years 3 – Ah ha moment
- Pratt Foundation
 - Integrated governance
 - FDK
- Premier's Task Force
 - Importance of early years
 - Change School's Act – JK & wrap around
- Preemptive nature of ECE on SEN

The ECE Lens



- Early Childhood Educator
- Since 1972ECE in action at the intersection of ECE policy, research & practice
- Early Years Study 1, 2 & 3
- Shift from 'inclusive' ECE settings as 'nice to have' to essential to reduce SEN and improve quality of children's lives

A shared lens



Does quality ECE pre-empt SEN?



Does it mitigate the intensity of supports for those with SEN?



What does the research say?



What data exists?

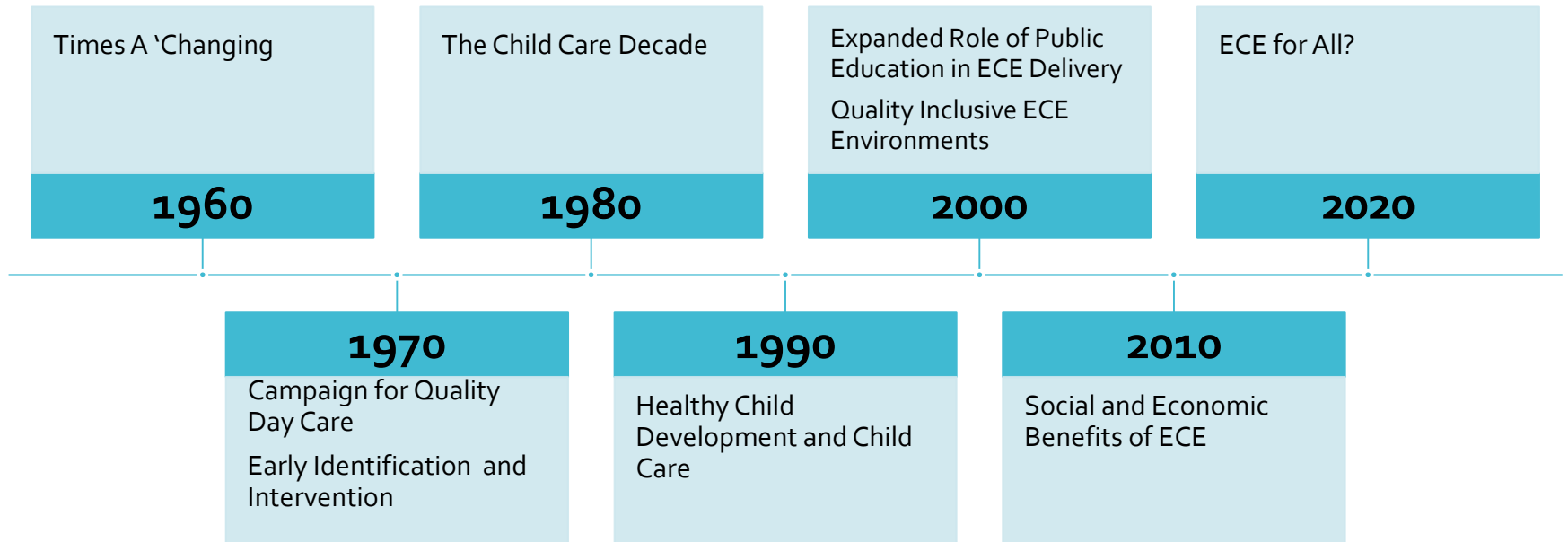
What is the context?

ECE & SEN in Canada

QUESTION 1

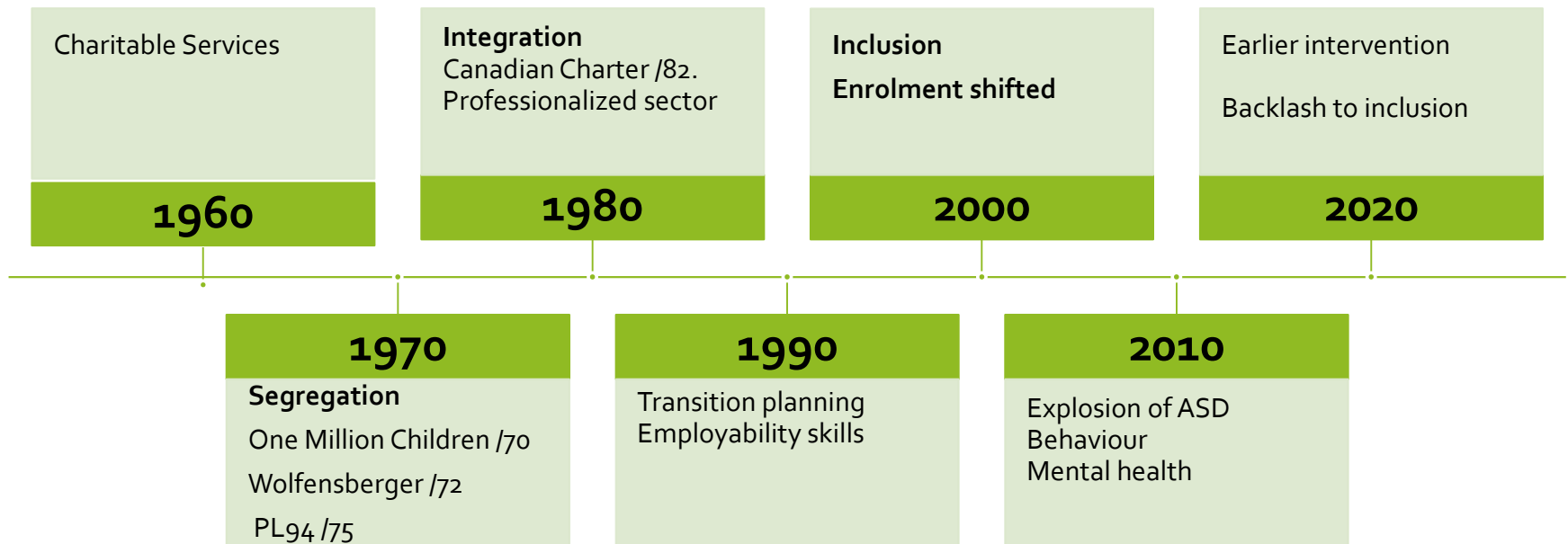
Special Ed and ECE: A parallel history

ECE



Special Ed and ECE: A parallel history

Special Ed



Changes in Spec Ed population

13-15% of population

National Centre for education Statistics (2018)

THEN	NOW
Dominated by:	Dominated by (60%):
<ul style="list-style-type: none">• Intellectual disabilities	<ul style="list-style-type: none">• Academic lags in literacy, numeracy, writing
<ul style="list-style-type: none">• Physical disabilities	<ul style="list-style-type: none">• Speech / language issues
<ul style="list-style-type: none">• Genetic disabilities	<ul style="list-style-type: none">• Emotional/behavioral challenges
<ul style="list-style-type: none">• Low SES	<ul style="list-style-type: none">• Low SES
	Highly responsive to ECE

Canadian Snapshot

2017

BC ENROLMENT

LD = 30%

Behaviour = 23%

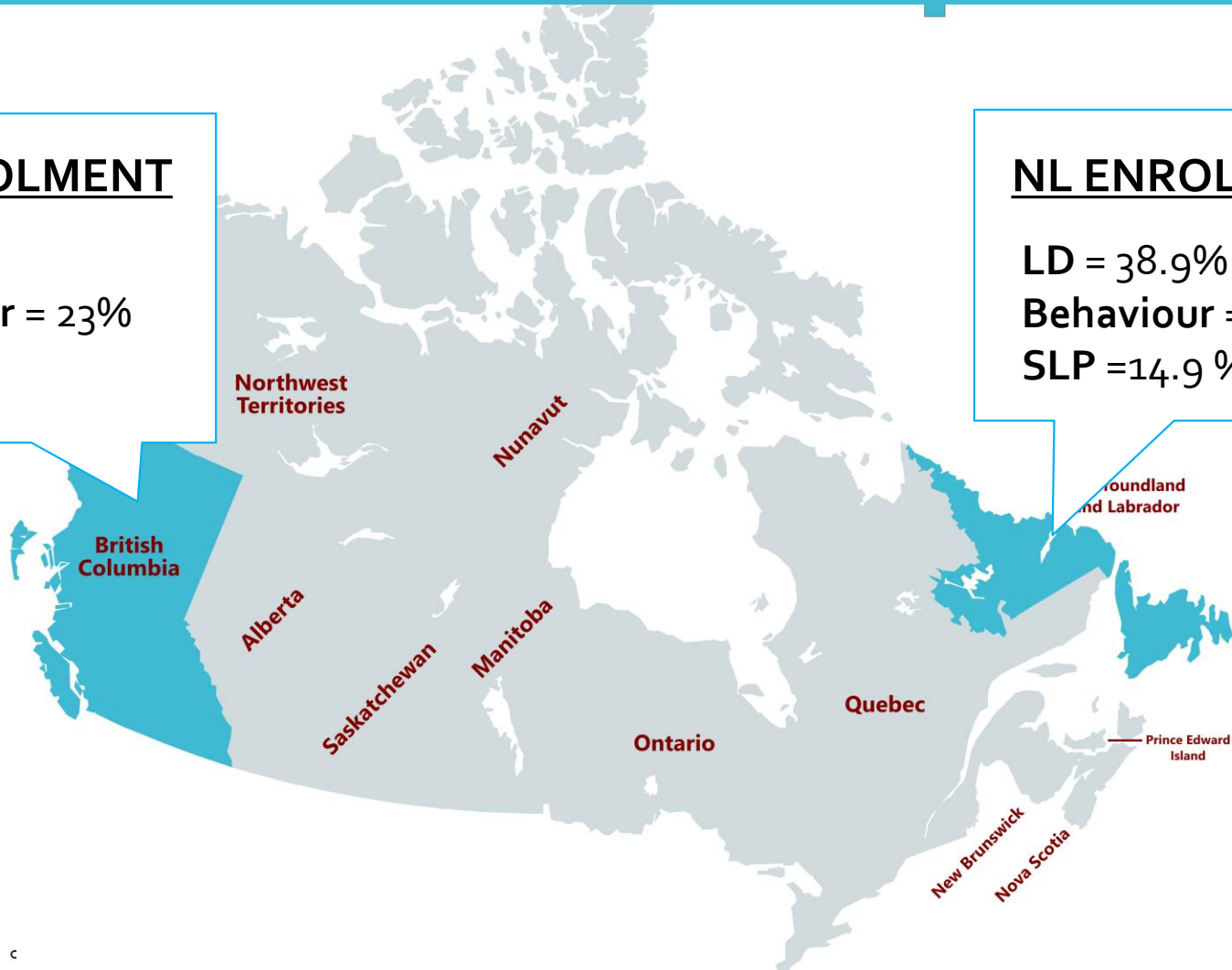
SLP =

NL ENROLMENT

LD = 38.9%

Behaviour = 19%

SLP = 14.9 %



**Can quality ECE
reduce SEN?**

QUESTION 2

60 years of longitudinal data

	Literacy/ Math	Language Skills	Soc-Emot Skills	Low SES	Reduced Spec Ed	C. Group	Cost Benefits
Abbot	✓	✓		✓	✓	✓	✓
BBBF	✓	✓	✓	✓	✓	✓	✓
Chicago	✓	✓		✓	✓		✓
High Scope	✓	✓	✓	✓	✓	✓	✓
EPPE	✓	✓	✓	✓	✓	✓	
EPPSE	✓	✓	✓	✓	✓	✓	✓
EYTSEN	✓	✓	✓	✓	✓	✓	
Abecedarian	✓	✓	✓	✓	✓	✓	✓

Research: Intersection of ECE & Spec Ed

Benefits of ECE	Enhanced literacy & numeracy	Enhanced language skills	Stronger behavior regulation	Benefits low SES the most
Reasons for Special Ed	Literacy & numeracy lags	Language delays	Behavior problems	Low SES over represented

Meta analysis on 22 US longitudinal ECE studies from 60's – 2016

(McCoy et al, 2017)

Concluded that enrolment in quality ECE:

- ↓ participation in special education programs by 8%,
- ↓ grade retention by 8.29%, and
- ↑ high school graduation by over 11%

Skills typically impacted by ECE programming (including cognitive skills in language, literacy, and math, and socio-emotional capacities in self-regulation, motivation, engagement, and persistence) are likely precursors of children's ability to maintain a positive academic trajectory

Ready for Life

(Alexander et al, 2017)

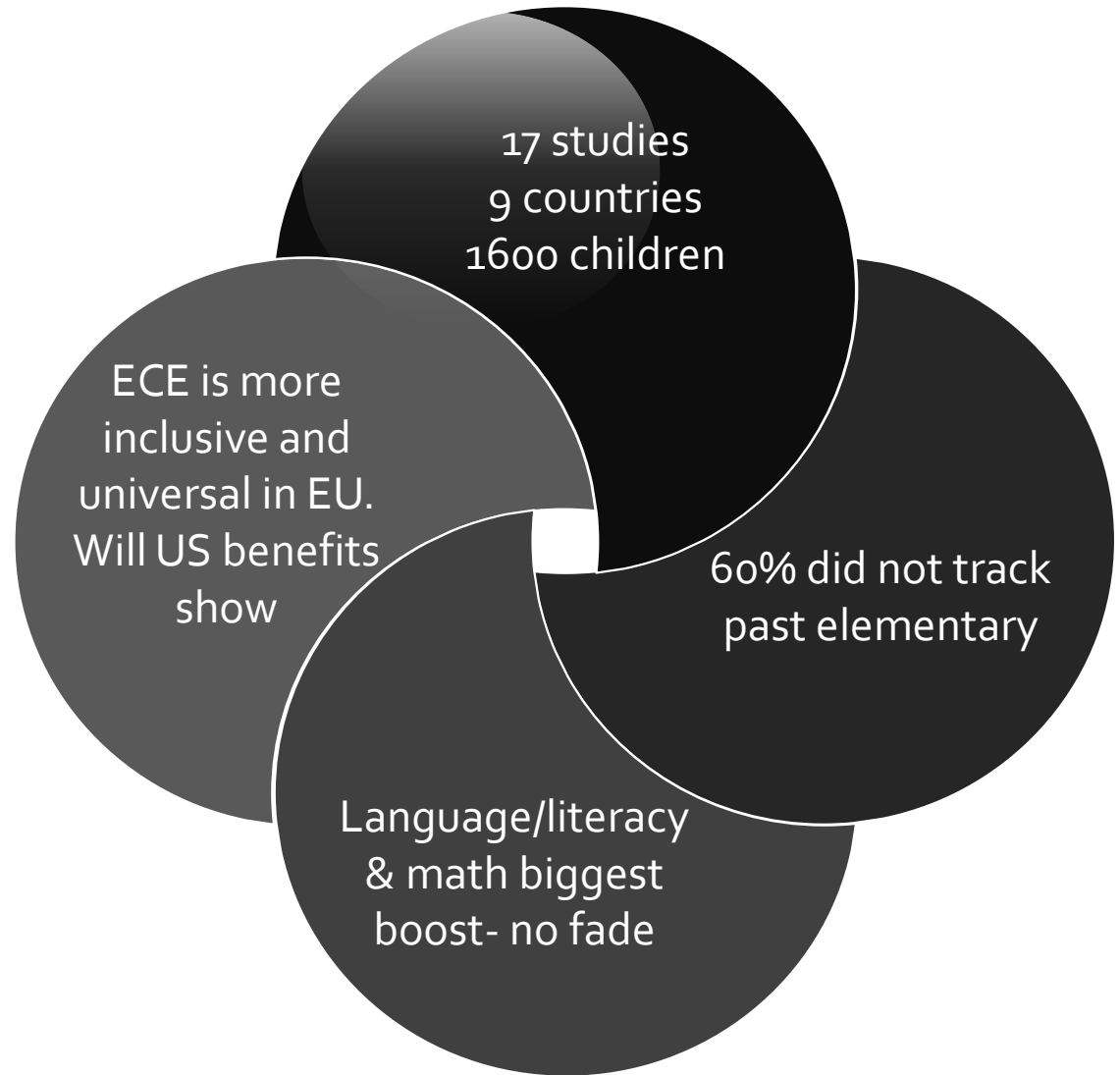
Two years of quality ECE before age 6 is key, especially for children with low SES.

- Boosts families and economies
- Permanent boost to literacy/numeracy, language, social skills and self regulation
- Boosts human capital skills, education, employment & earnings

Majority of kids in Canada under 5 years do not have access to ECE – only 1 in 3

EU collective review of longitudinal studies

(Ulferts, et al, 2019)



"Policy aiming at improving regular provision can have widespread implications for societies and economies given the enormous and increasing number of children in regular ECE..."
(p. 1485)

Effective Provision of Pre-School Education Project (EPPE) UK

(Taggart et al, 2015)

**Tracked 3000 students beginning in 1997 to
graduation**

Rich and diverse data set, still in existence

Students with 2 years of high quality ECE

- **higher literacy/numeracy, language, self-regulation,
social skills, higher graduation, higher
post-secondary, greater citizen involvement,
higher incomes and lower crime and violence**
- **impact was greatest for children with low SES**

**At age 4, 30% of children had SEN.
At age 6 it was 20%.**

Early Years Transition & Special Educational Needs (EYTSEN)

(Sammons et al, 2003)

NO ECE

- 51% at risk for cognitive development
- 44% at risk for reading
- 37% at risk for math
- 51% at risk for social struggles

2 YEARS OF ECE

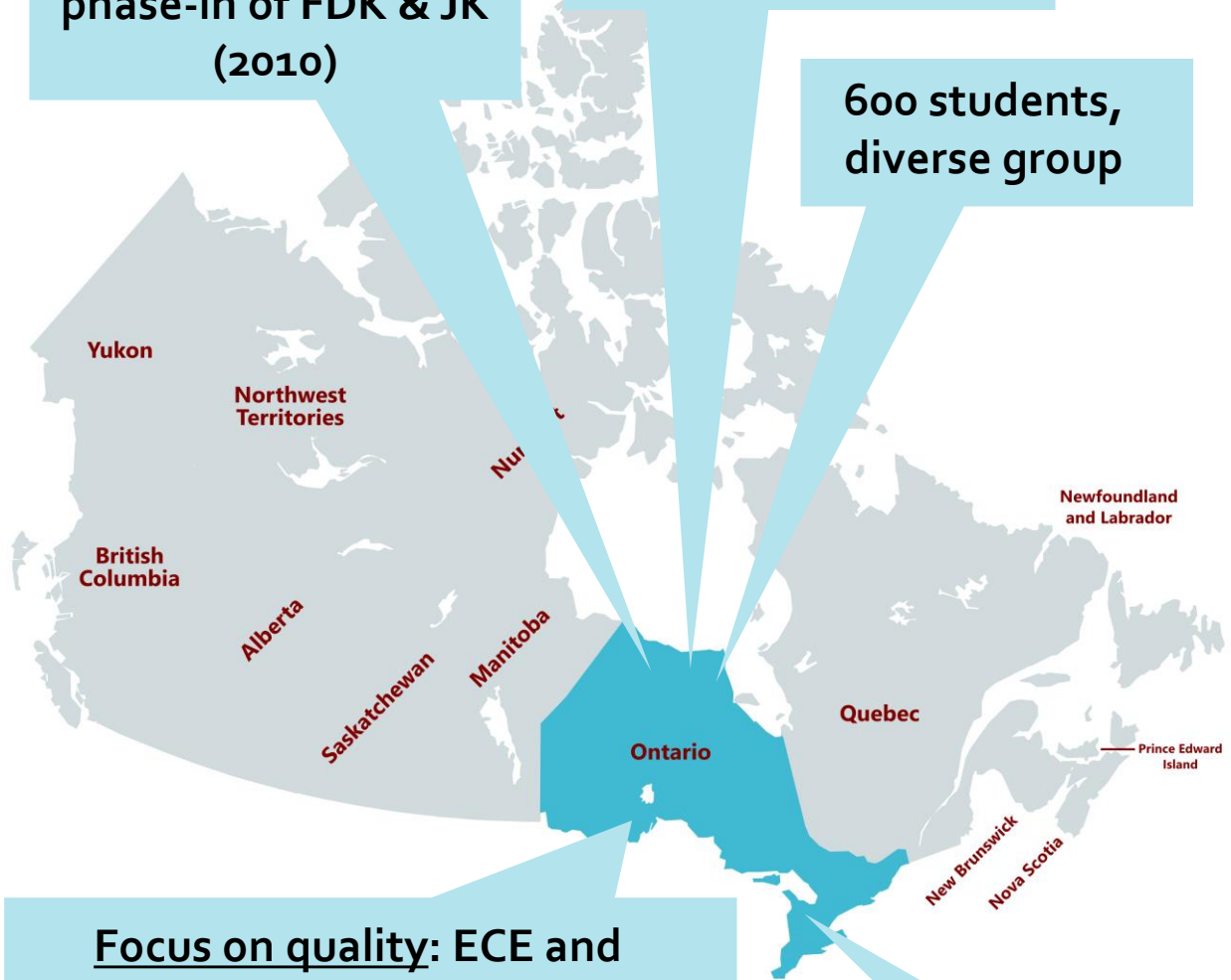
- 21% at risk for cognitive development
- 23% at risk for reading
- 16% at risk for math
- 21% at risk for social struggles

Ontario's study on JK & FDK

Longitudinal study of phase-in of FDK & JK (2010)

Natural control group for comparison

600 students, diverse group




Focus on quality: ECE and Kindergarten teacher co-teaching, play based curriculum, with mixed group for two years, extended day


Multiple & rich data collected

Findings: to Gr. 3


(Pelletier & Corter, 2018)




FDK significantly higher in all areas: social, language self-regulation and reading (provincial tests)




Also significantly higher in direct measure of number knowledge, writing and drawing



FDK children more likely to talk about play as important



FDK parents who both work outside the home report fewer daily hassles




ECEs and K teachers increasingly aligned in their perspectives about roles and responsibilities


A closer look for Impact of quality on Spec Ed indicators

Dr. Edward Melhuish
re-examined the EPPE
data for indicators
through **to high school
completion**, not just
primary (Melhuish,
2019)

Dr. Jan Pelletier
examined the ON study
for indicators of Spec Ed
through **to end of
Elementary**, not just
primary (Pelletier &
Fesseha, 2019)




Both defined risk
as >1 SD below
the mean




Cognitive risk was
identified by
performance in
literacy and
numeracy on both
standardized
measures and
government exams

Revisiting EPPE



LOW QUALITY

- 36% reduction in cognitive risk at age 5
- 40% reduction in cognitive risk by age 16
- 5% reduction in social/behavioral risk by age 11



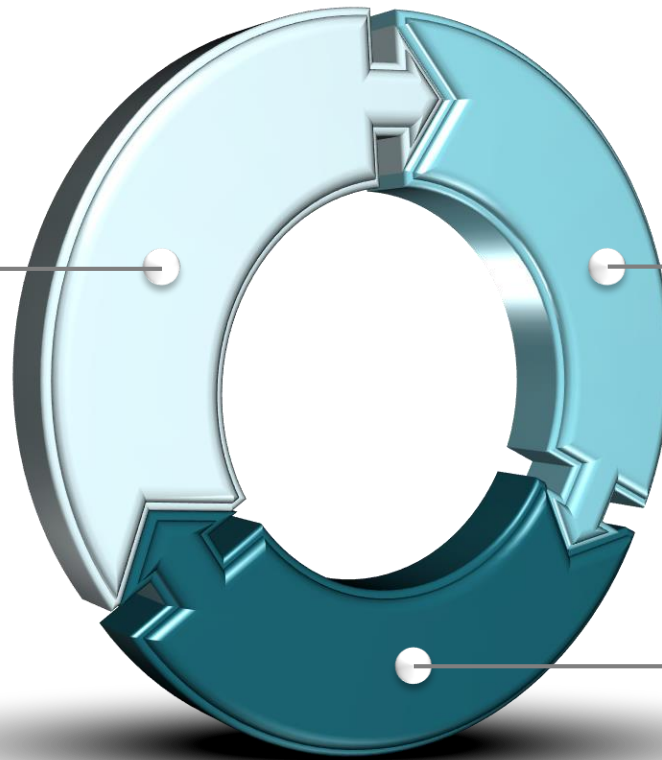
HIGH QUALITY

- 45% reduction in cognitive risk by age 5
- 55% reduction in cognitive risk by age 16
- 39% reduction in social/behavioral risk by age 11

Revisiting Ontario

Self-regulation:

HDK students were **3 times** more likely than FDK students to be >1SD



Vocabulary:

HDK students were **1.5 times** more likely than FDK students to be >1SD

Reading: HDK students were **2 times** more likely than FDK students to be >1SD

Multiple lines of evidence of the pre-emptive nature of ECE on SEN

Quality of ECE determines the amount of the impact

Emergent studies match the longitudinal studies but show a greater impact because quality of ECE has improved

ON study is vital to measuring this link

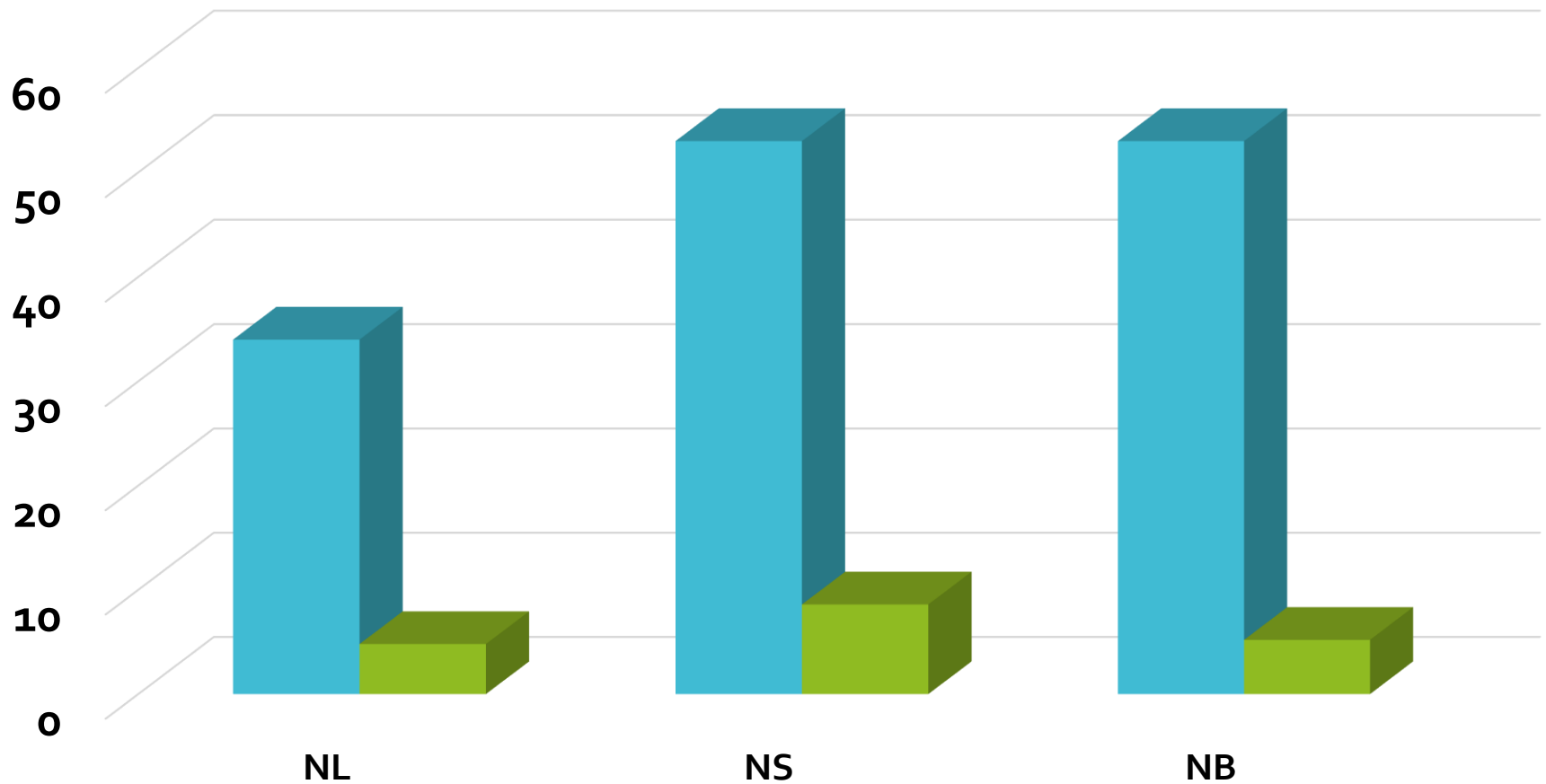


CONCLUSIONS

QUESTION 3

**CAN quality ECE
mitigate the
intensity of later
supports for children
with SEN?**

Children with SEN in ECE programs



■ % of children attending ECE ■ % of those children who require additional staff supports

SEN during the early years

OECD/2018 report less than 25% of SEN children are in ECE programs

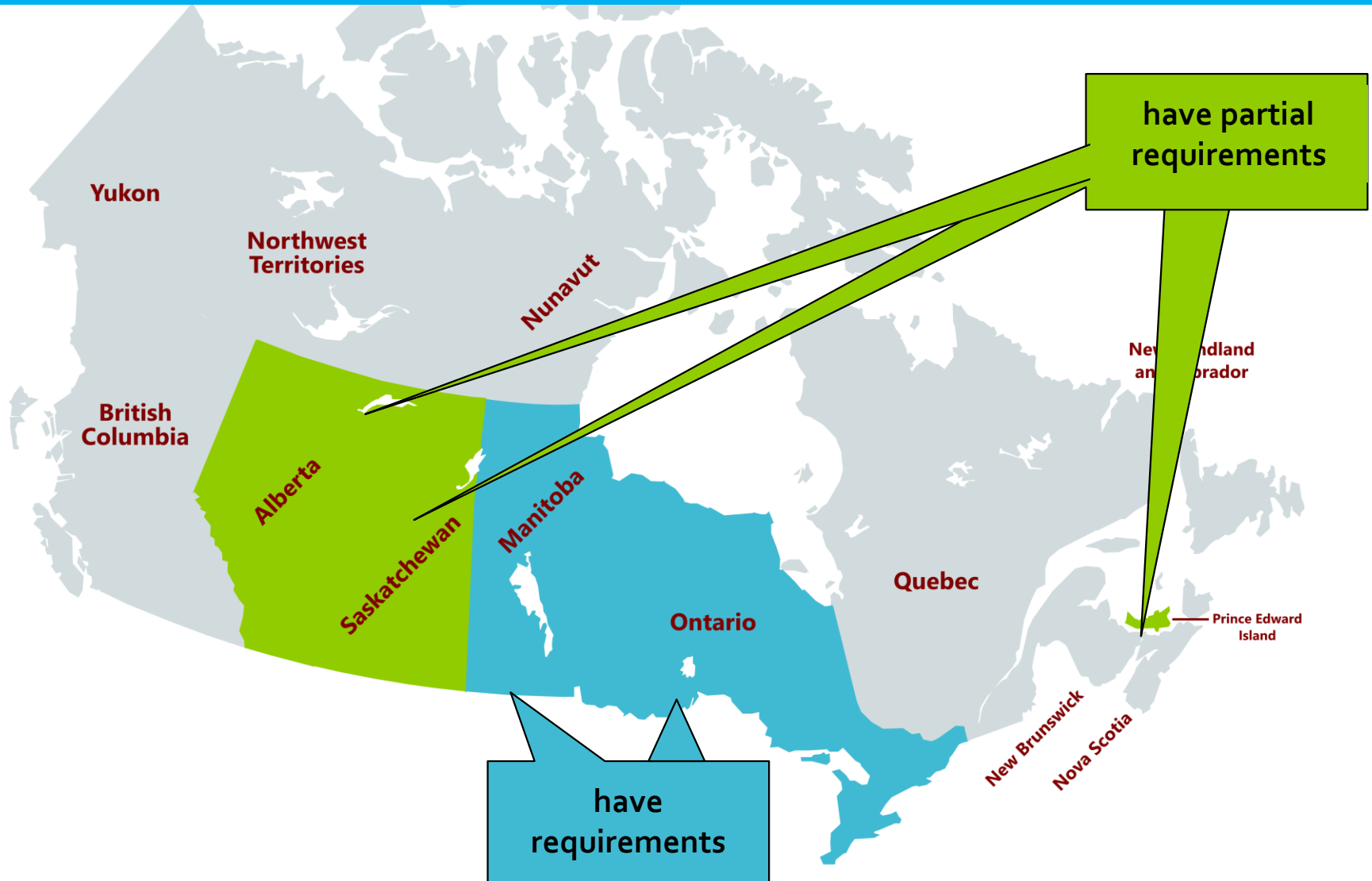
Each province has inclusive ECE policy / diverse funding models

Federal bilateral agreements prioritizes inclusive ECE programs

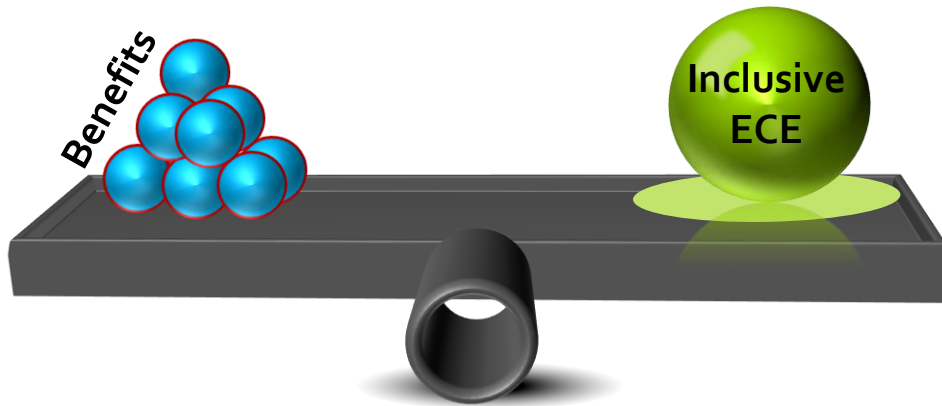
HR and training a challenge

Early Childhood Education Report 2017, benchmark for: “funding conditional on including children with special needs in licensed child care”

- Benchmark has hardly improved since monitoring of ECE was launched in 2010



Benefits of inclusive ECE programs



Families

- both parents continue to work
- crucial to meeting SEN related expenses
- the family's economic / psychological well-being

Children

- have stronger understandings of disabilities
- are more tolerant of diversity
- have greater empathy
- have more positive attitudes toward children with SEN

Educators

- acquire inclusive pedagogies
- collaborate more effectively
- become better at directing play among diverse learners

Growing research for continuity of learning



Home/school relationships
established early



Interprofessional teams
established



Teams learn what works
by school start

Programs are in place



Resources are identified
early



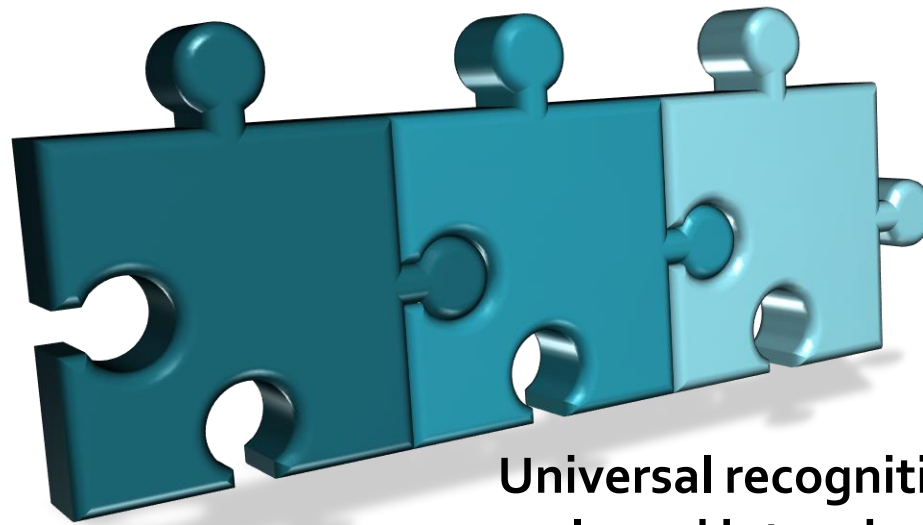
Child development
optimized before school
start



OECD /2017 identifies that integrated governance no assurance of effective transition planning and calls for **continuity of policy, training, pedagogy, and curriculum** between ECE and primary school

Autism Spectrum Disorder & ECE

**1 in 66 Canadians
aged 5 to 17**

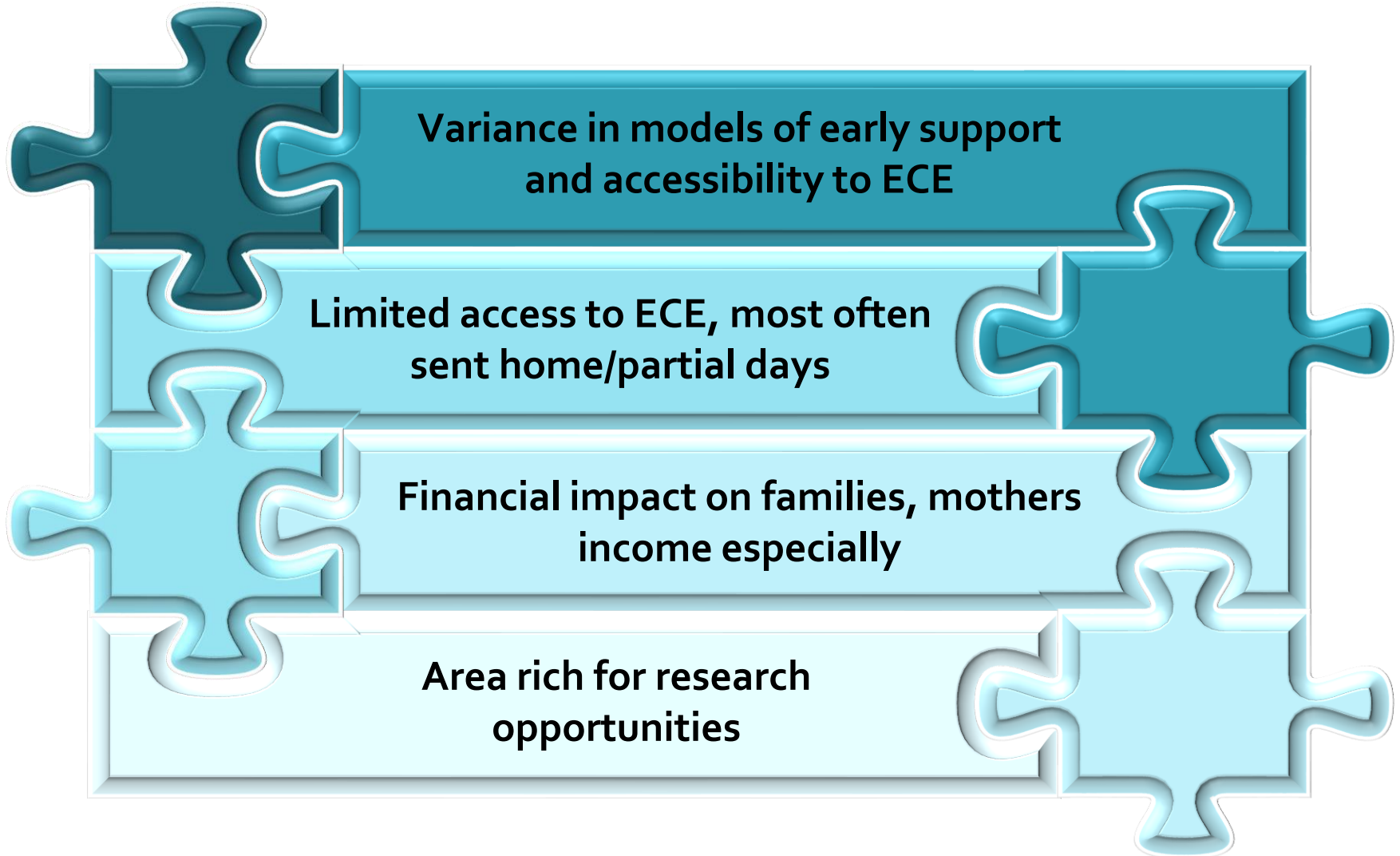


**56% diagnosed
during the early
years, 75% by
age 8**

**Universal recognition of the need for
early and intensive intervention
during the early years to address
(ABA & Jaspar):**

- **Communication and language lags**
- **Sensory needs**
- **Disruptive behaviors**

Autism Spectrum Disorder & ECE



Mental health and ECE

Research indicates:

Rapid rise in student MH concerns – trends difficult

10-25% of young children are impacted

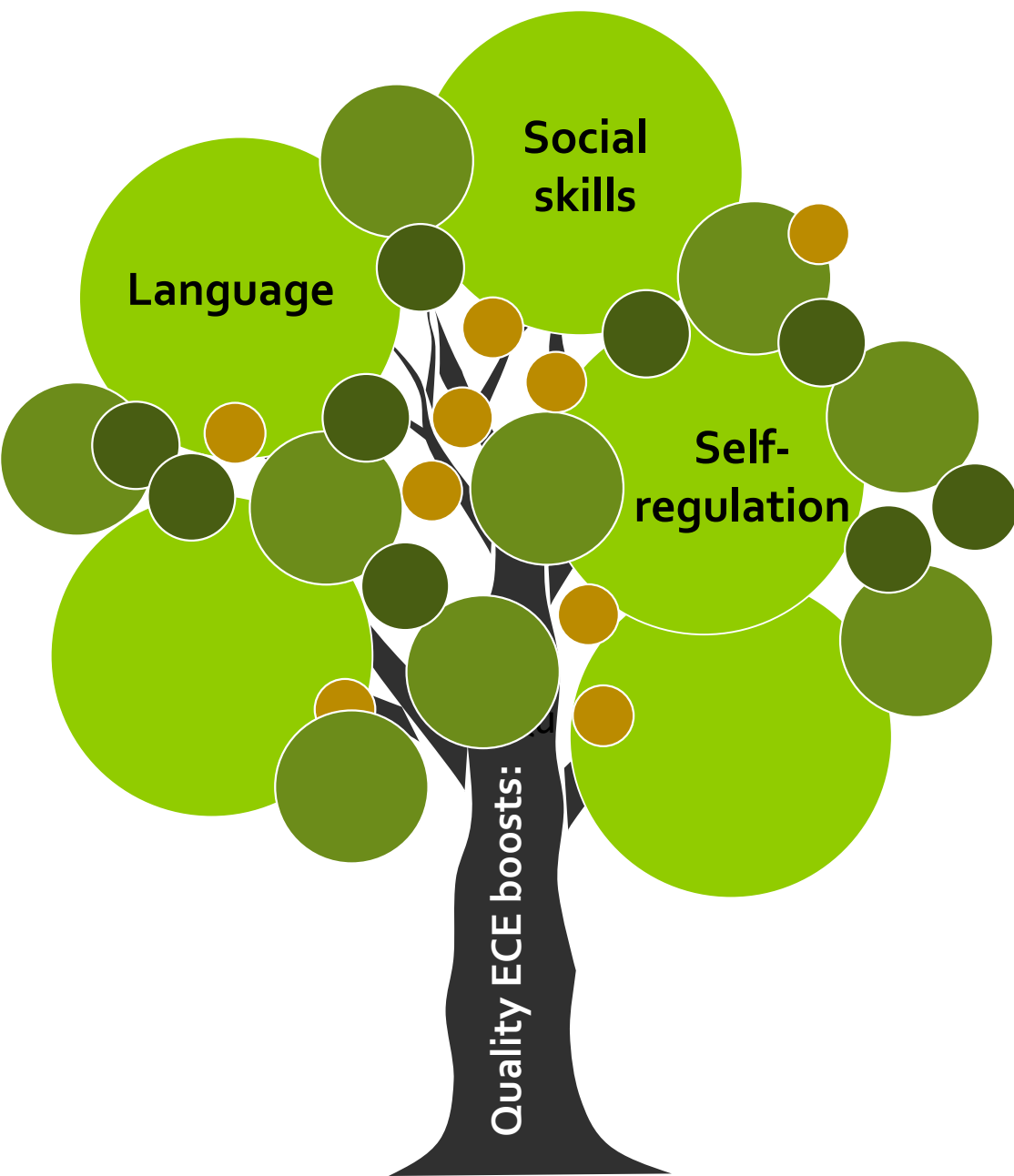
MH in young children often unaddressed

Transitions during the school day raises child stress

Maladaptive behaviors, once entrenched, are more difficult and costlier to remediate

The mental health of the early child educator can impact the child, positively or negatively

Inconsistent or unstable child care placement raises child stress



Mental health and ECE

Lags in those three areas are indicative of MH issues.

Hence a compensatory nature of ECE.

Research shows that the quality of child's relationship with early childhood educator & quality/stability of ECE placement highly predictive of future mental health of child **ESPECIALLY** for children most at risk.

Importance of early curriculum frameworks



**Explicit social
and emotional
learning (SEL)
outcomes**

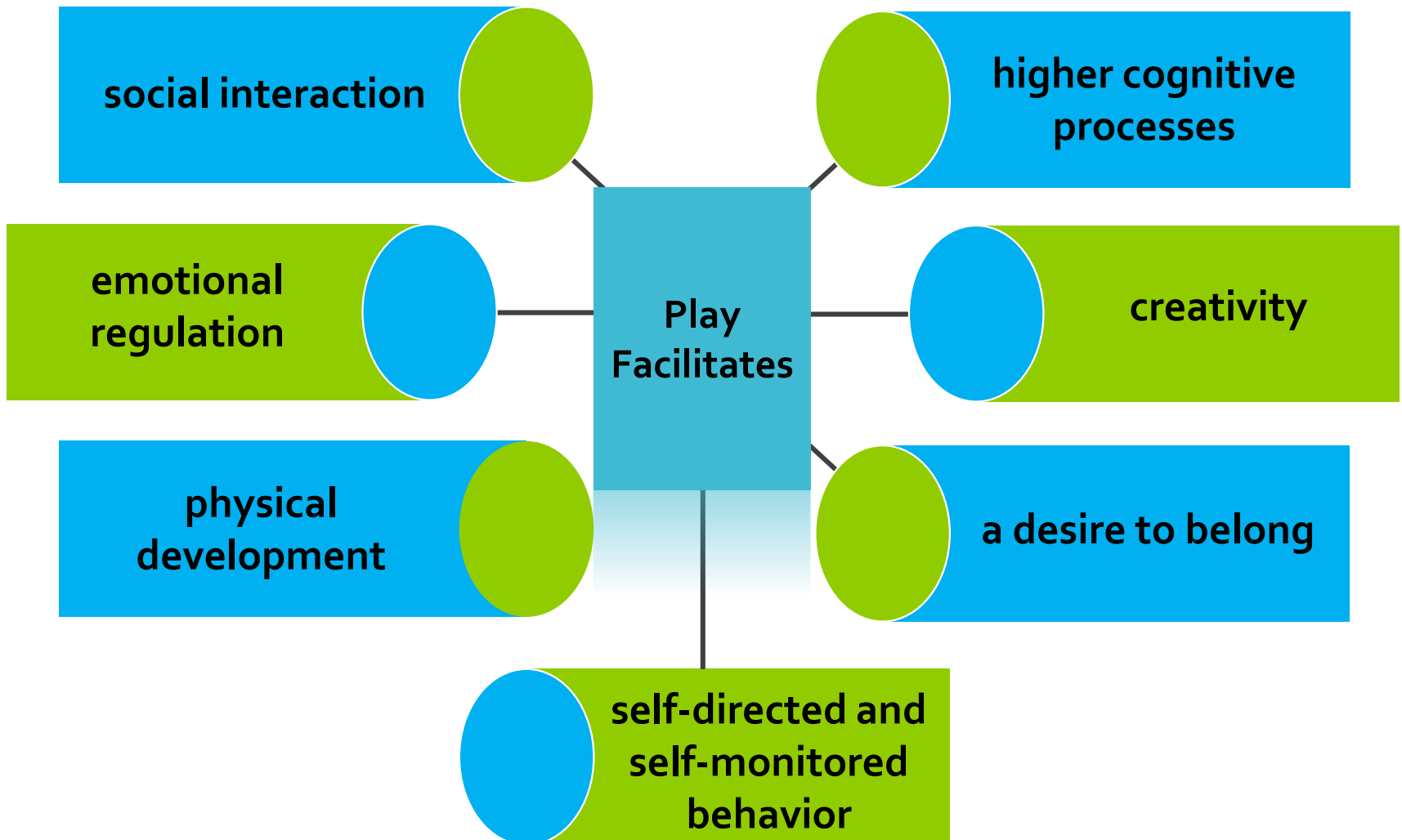


**Responsive
teaching
toward
outcomes**

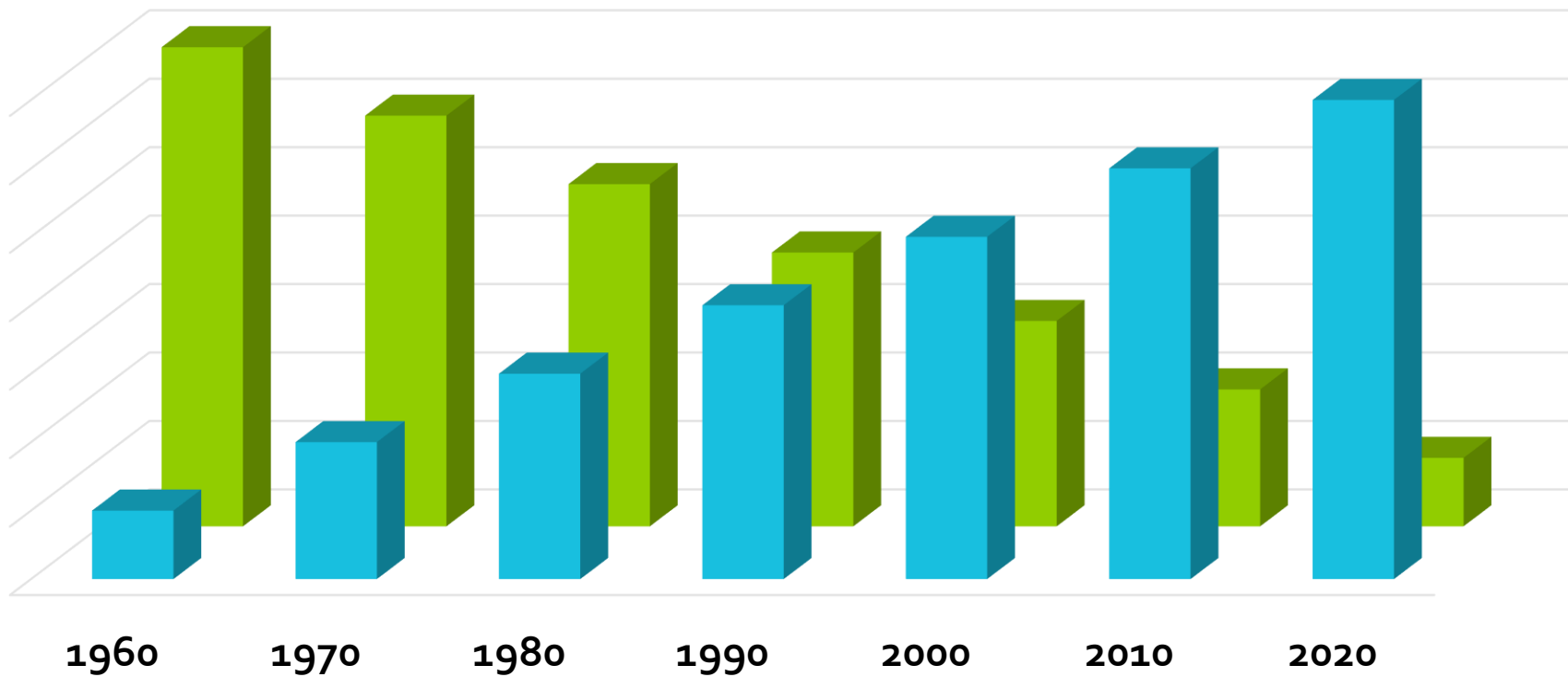


**Education &
training to
ensure
outcomes met**

Play-based pedagogy



Inoculative factors for MH concerns



■ Mental & Physical Health Challenges

■ Free Play

Conclusion

Multiple lines of evidence reveal children with SEN, who will always need support, can have a radically easier transition to school

Families of children with complex needs, who require strong relationships with educators, can have those relationships initiated earlier

PRE-EMPTIVE NATURE OF ECE ON SEN

The impact of quality ECE on children's mental health and behavior regulation is undeniable

The earlier we engage the children and families facing the biggest challenges the less resources they will require

Set out to create a shared lens

Collaborative Focus on Inclusion



Policy

ECE public funding requires inclusion of ALL children.
SEN follows up on ECE IPPs.

Professional Learning

Join-Up ECE & teacher education pre-service & in-service.

Practice

Portfolios and IPPs follow the child.
Focus on individual child's participation, not diagnosis or 'what's normal'.

Research

Explore benefits of inclusive ECE and early intervention into school system.

Report & Journal available

The Preemptive Nature of Quality Early Child Education on Special Educational Needs in Children

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<https://research.library.mun.ca/13571/>



<https://ir.lib.uwo.ca/eei/>

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