

PREMIER'S TASKFORCE ON IMPROVING EDUCATION OUTCOMES

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January 20, 2017

St. John's, NL

Today's presentation

1. What is early childhood education and care (ECEC) and why does it matter?
2. ECEC in public education
3. Early Learning Frameworks & K-3 Curriculum
4. Before- and After- School Programming
5. Accountability frameworks
 - Early developmental screening
 - Early Development Instrument (EDI)
 - Early Years Evaluation (EYE)
 - ECE Report
6. Considerations

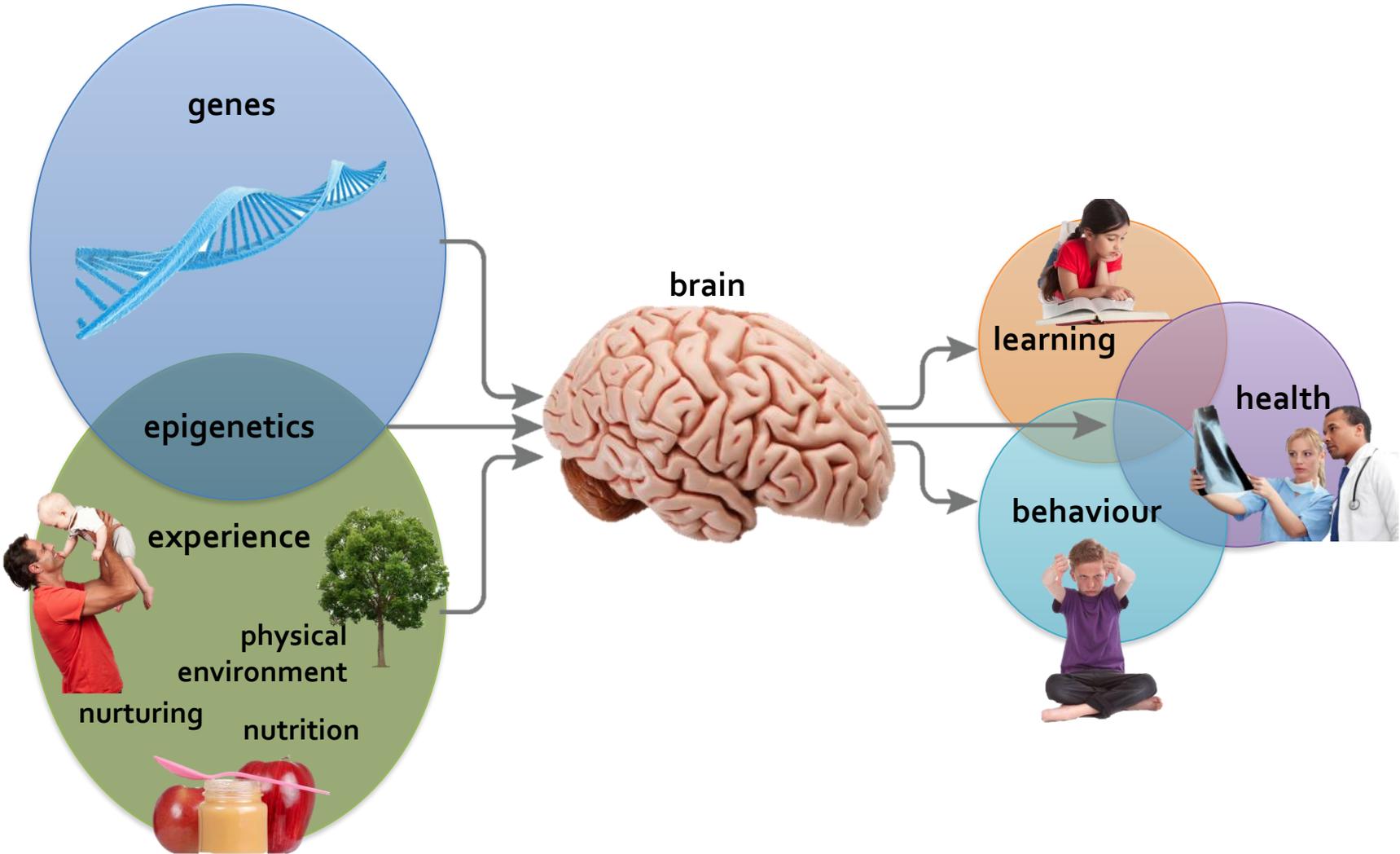
1. What is early childhood education and care?

- **Early childhood education and care (ECEC)** refers to programs for young children lead by **qualified educators**, based on a **play-based pedagogy** designed to support children's development, well-being and learning as well as enable parents to work, study and/or care for other family members. (Attendance is regular and children may participate on their own or with a parent or caregiver. ECEC settings may include child care centres, nursery schools, preschools, pre- or junior kindergarten and kindergarten, headstart and family centres).
- **Play-based pedagogy** is the context for children's early learning environments where children explore, identify, negotiate, take risks and create meaning through play. Children who engage in quality play experiences are more likely to have well-developed memory skills, language development, and are better able to regulate their behaviour, supporting life long learning, health and behaviour. (Bodrova & Leong, 2010).

Educators are the heart of ECEC programs

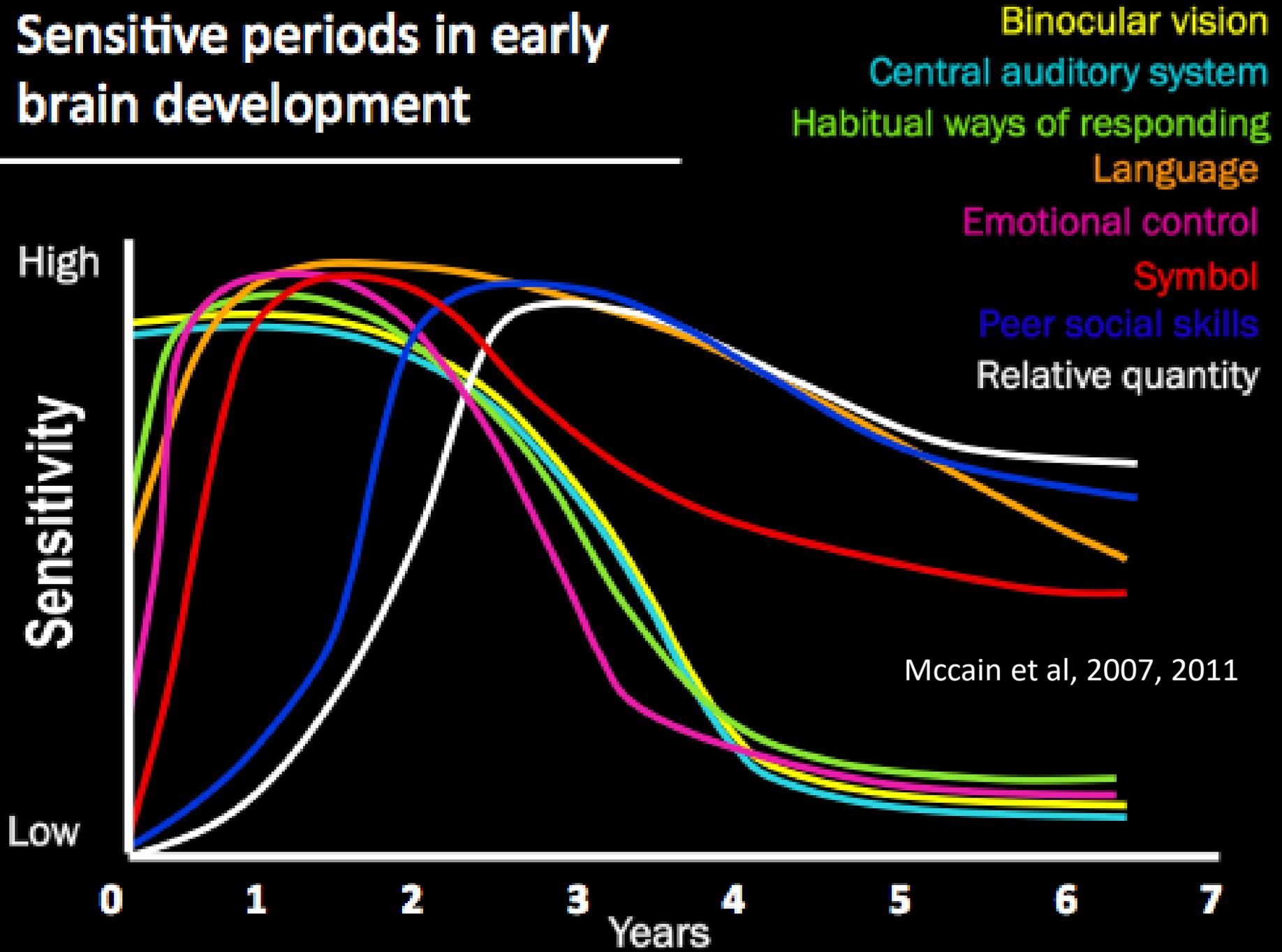
- ***Qualified educators*** have post secondary level training in early childhood development and pedagogy. They are learning guides -- the coaches who encourage, make suggestions, and model communication and cooperation. They keep children safe while facilitating opportunities for them to explore and test their place in the world. They are the researchers who help further the knowledge base about how children learn.

Experienced-based brain development

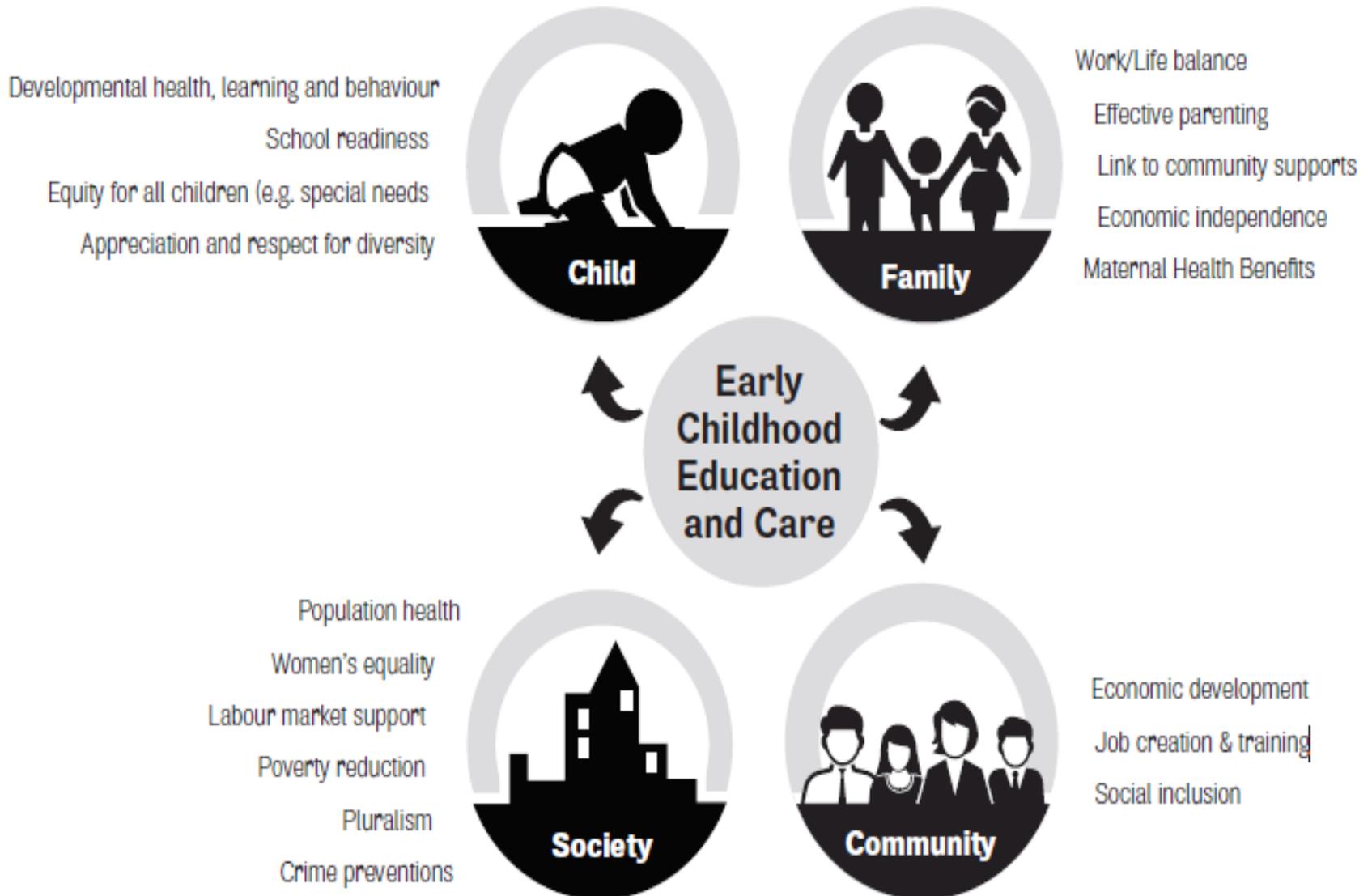


Adapted from: Fields, D. (2011); Kandel, E., Schwartz, J. & Jessell, T. (2000); McCain, M., Mustard, J.F. & Shanker, S. (2007).

Sensitive periods in early brain development



Early childhood education and care provides multiple benefits to individual, families and society



Early childhood education and care is a major game-changer for children..... not all programs are

Direct participation in early childhood education opportunities benefits children's language, self-regulation, cognitive and social-emotional well-being. (Akbari, Bovin, Jenkins, 2015).

Providing parent information through classes, home visits, or workshops is not associated with further improvements in children's skills. (Yoshikawa et al, 2013).

The dose effect - time + quality

- Consistent finding from early learning programs accrue when
 - Children attend consistently for at least 15 hours/week for at least one year (better with 2-3 years) before kindergarten (Sylva et al., 2014).
 - Programs are high quality -- play-based learning environments with other children, guided by educators and coherent pedagogy (Yoshikawa et al, 2013).
- In OECD and middle income countries universal preschool is now the norm at age 3 (OECD, 2012).

2. ECEC in public education

Public delivery associated more equitable access:

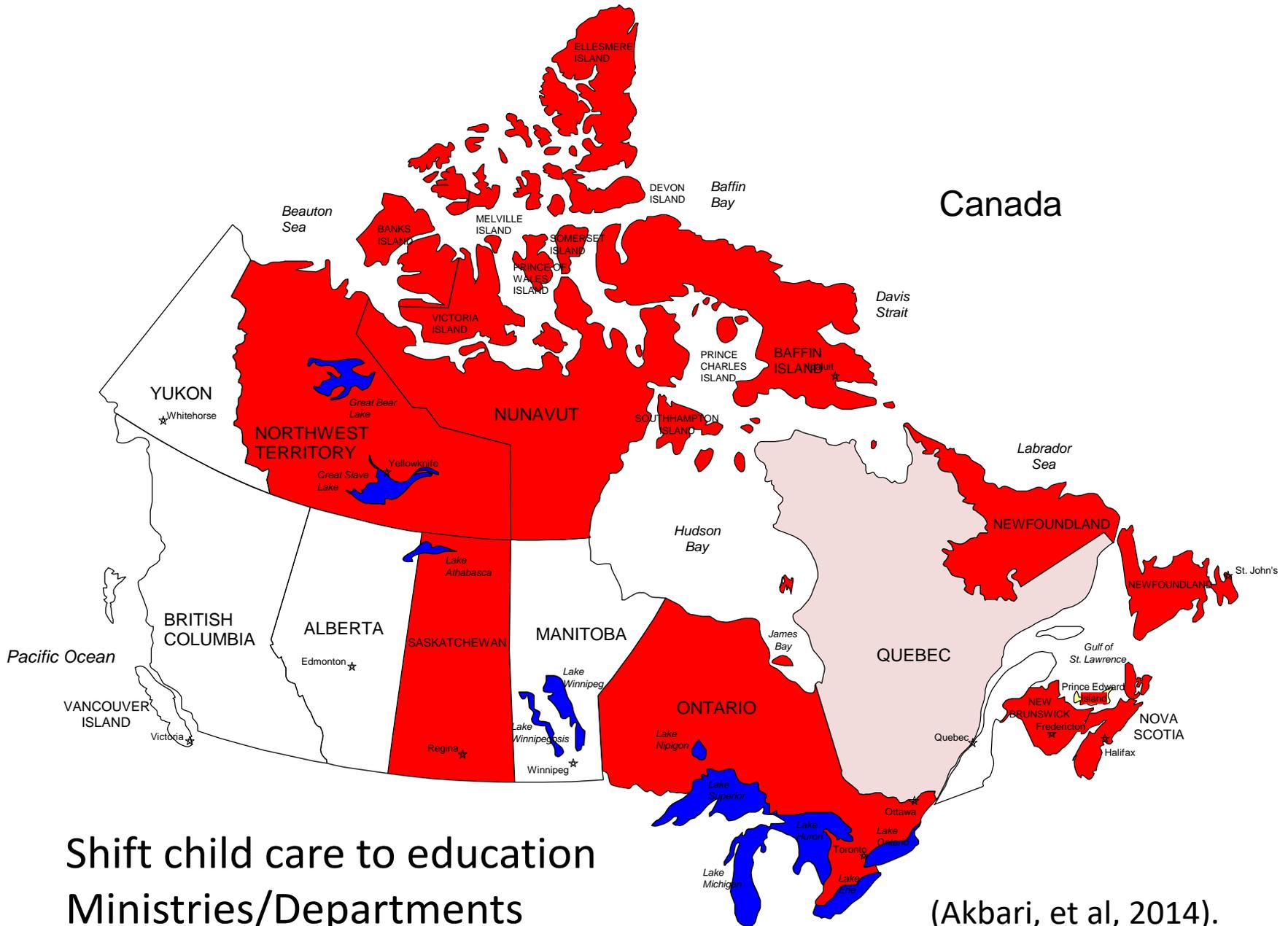
- 21% of children whose mother have high school or less attend regulated child care compared to 52% of those whose mother have graduate degrees although public dollars for child care fee subsidies target low-income families (Akbari, et al, 2014).
- In Quebec, low SES children less likely to access low-cost child care than more affluent children (McCain, et al, 2011).
- When ECEC programs are universal, higher participation children attend i.e. FDK 97% participation rate. (Akbari, et al, 2014).
- The majority of ECEC for 3 – 5 years is delivered **by** schools (Akbari, et al, 2014).
- The majority of 0-12 year (out of school) programs is delivered **in** schools (Akbari, et al, 2014).
- This is also true in the US, UK and Australia -- no other early childhood or family program comes to close to the participation rates as those offered by schools (OECD, 2011).

The starting point: Child care or early learning

Child Care	Early Childhood Education and Care
<p>Purpose Labour force participation Poverty reduction Reduce social assistance</p> <p>Public policy Low levels of public funding Underdeveloped infrastructure Regulatory oversight</p> <p>Service delivery Targeted/fee for service/low levels of participation Mix of providers/locations Various program approaches Low levels of qualified educators Accountability limited to licensing</p>	<p>Purpose School readiness Child development Early intervention</p> <p>Public policy Adequate public funding Developed infrastructure School boards/parent councils</p> <p>Service delivery Universal access Public provision Defined program Qualified educators Accountability mechanisms</p>

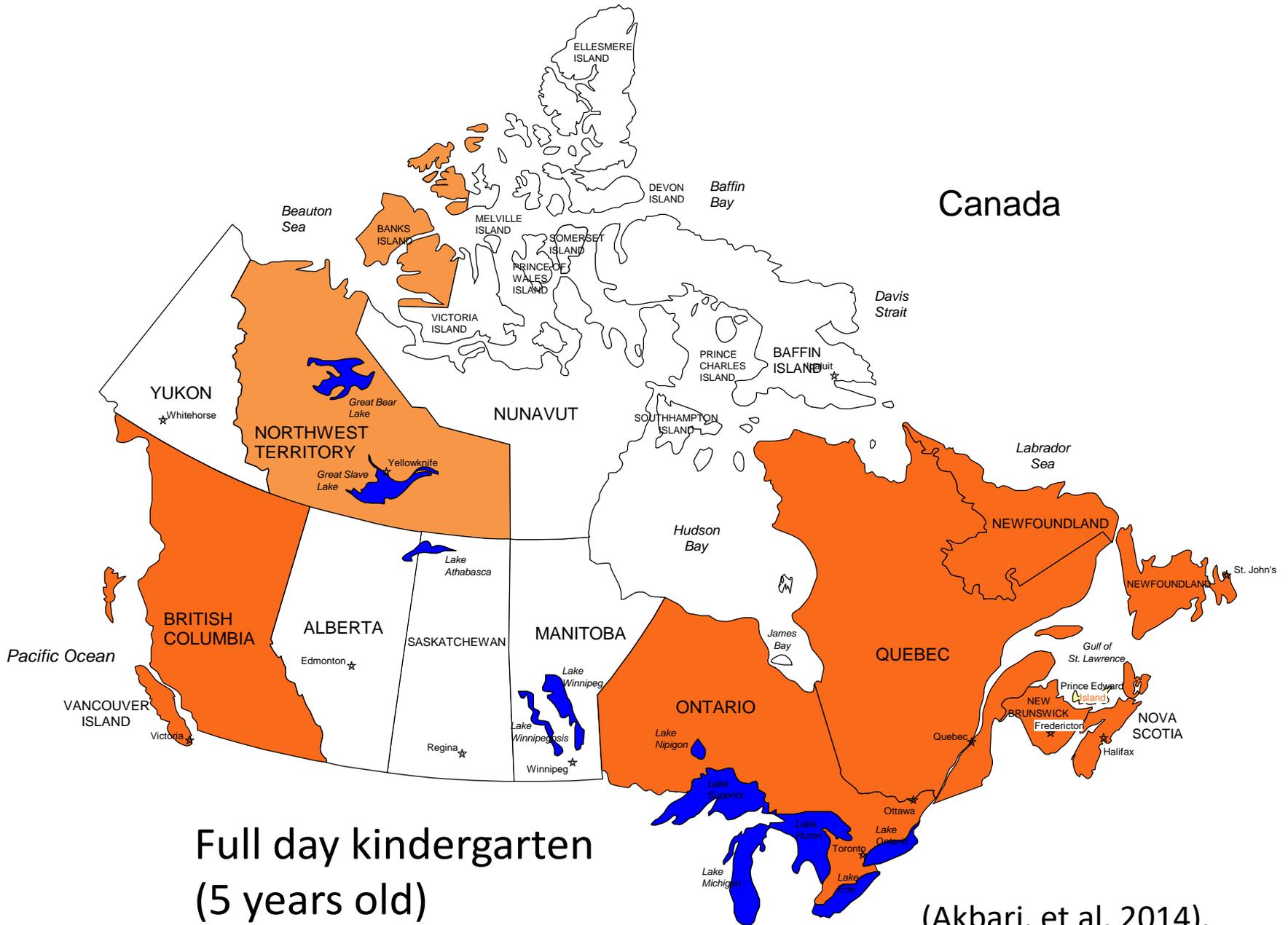
Benefits of ECEC in public education

- All p/t education departments/ministries are involved in Kindergarten and some early education programming.
- Across Canada, p/t governments are turning to public education to expand access to early learning experiences before entry to Kindergarten.
- School systems have extensive, existing infrastructure; are present in every community and are better able, with special efforts, to reach marginalized families.
- School-based programs are successful more in attracting newcomer families
- Schools are a major support for parental labour force participation
- More equity in access



Shift child care to education
Ministries/Departments

(Akbari, et al, 2014).



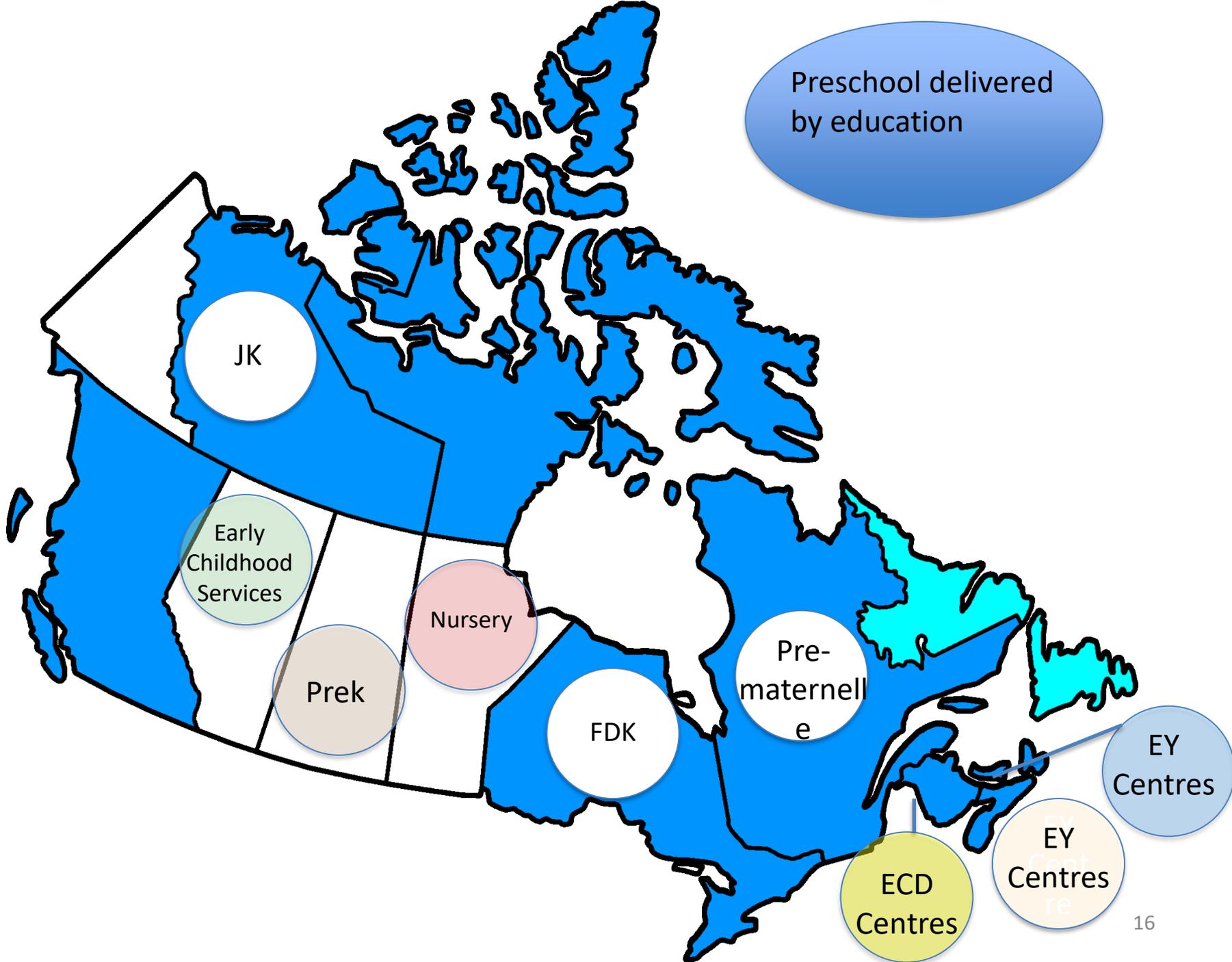
Full day kindergarten
(5 years old)

(Akbari, et al, 2014).

Full Day Kindergarten in Canada

- FDK is often the only ECE experience most children will have before school entry.
- Full day kindergarten offers the intensity of programming that influences enduring outcomes (Barnett 2011).
- Participation rates increase with FDK (Akbari et al, 2014).
- Parental stress reduced (Janmohamed et al, 2014; Pascal, 2009).

Preschool delivered by education



Pre-k programs across Canada

NS: Eight demonstration sites offer full day Early Learning Program for 4-year-olds delivered as part of school. Other 4 year old school based programs are offered within Francophone school district and in about 10 other locations. Expansion expected in 2017.

QC: Expanding access to full day 4-year-old Kindergarten in disadvantaged communities to address the underrepresentation of vulnerable children child care..

ON: Universal full day kindergarten for four-year-olds. All children who are 3.8 years old by September 1 are offered FDK. Uptake is about 96% - up from 85% when JK was a part day program.

MB: Half-day nursery school for 3 – and 4-year-olds offered within several school districts including Winnipeg School District 1 (largest school district in Manitoba). Offered to all living within school catchment.

SK: Pre-K 3 & 4 year olds, 12 hours week in 230 schools. About half of public schools offer preschool programs to 3- and 4-year-olds in more disadvantaged communities. Offered to all living within school catchment.

AB: Publicly funded preschool programs from age 2.5 years for children with severe developmental delays; from age 3.6 for disadvantaged, English Language learners or children who are gifted or who have mild delays. Half day kindergarten is universal. Programs provided by schools or approved non-profit agencies (fees may be charged). Local authorities have wide discretion.

NT: 4 year old kindergarten in remote communities where there are few if any other ECEC programs therefore addressing inequitable opportunities between more urban areas and remote regions. Optional for board to provide

Other ECE initiatives through public education:

- BC: Strong Start in 326 schools plus outreach programs
- Ontario: Parenting & family literacy centres
- NL: Kinderstart
- Several provinces/territories: Welcome to Kindergarten
- Quebec: Passe Partout for 4 year olds

Benefits of 4 year old pre-K (Ontario).

- Ontario's FDK for 4- and 5-year-olds points to positive outcomes (particularly for vocabulary and self regulation) for children attending full day 4- and 5-year old kindergarten, compared to children who attended half-Kindergarten (Pelletier 2012; 2017).
 - Rates of childhood vulnerability reduced as measured by EDI
 - Positive impact on Grade 3 EQAO results
 - Ontario Education Ministry revising Grades 1-3 curriculum in response to FDK cohort
- 2 years of kindergarten in French-language schools associated with improved Grade 9 math scores (Akbari, McCuaig, Jenkins, in press).

International research benefits of Pre-K

- Extensive longitudinal research in UK points to significant academic and social-emotional benefits for every year of preschool before entry to Kindergarten at age 5 that carry forward into high school. Increased mathematic skills are independent of family SES (Sylva, et al, 2013).
- Extensive evaluation of Pre-K programs in U.S. point to clear academic and social-emotional benefits of 3- and 4-year-old programs IF provision is of high quality – i.e. qualified educators and intentional pedagogy that builds on play based learning (Barnett, 2011, 2013; Wieland & Yoshikawa, 2013).

Other ECE/school innovations

- Schools First policies
 - ECEs programs in all new & renovated schools
 - Surplus space repurposed for ECEC programs
 - Security of tenure for ECEC programs in schools
 - Local management of ECE services provided by school boards
 - Demonstrations to inform policy: Toronto First Duty (ON) ; Early Childhood Development Centres (NB) ; Early Years Centres (NS) ; Multi family & child service agency (PE).

Post-secondary ECE – A defined area of academic inquiry

- PhD programs specifically in ECE provinces (BC and Ontario).
- Undergraduate and Master level programs in four provinces
- Degree programs in nine provinces – rapidly expanding and in demand
- Research centres focused on ECE policy, practice & research at UNB and OISE
- ECE research is attracting Tri-Council funding
- Recommendations for 0 – 8 ECE degree recognized in early childhood settings and K – 3 (e.g. Allen & Kelly, 2015).

3. Early Learning Curriculum Frameworks & Kindergarten/Primary Curriculum

- Playification not schoolification - play-based strategies are reaching up into the elementary grades
- Aligning pedagogy and understanding of early learning (child development & dispositions versus subject areas)
- Professional learning communities for educators – horizontal and vertical
- Instructional coaching
- Sustain gains in pre-K by aligning standards, curriculum, and instructional practices from pre-kindergarten through the third grade (US Dept of Education, 2016).

Salience of play

- Play builds strong oral language skills, confidence, abilities to make friends, be persistent and creative in completing tasks and solving problems and excitement and awareness about learning. Children benefit when educators engage in *meaningful* ways in play experiences to extend learning. Pretend play leads to sense of narrative, socio-dramatic and inquiry play. (Lillard et al, 2013).

Play associated with self-regulation/language

- Self –regulation – the capacity to manage our behaviour, emotions and attention – shapes the quality of thinking abilities and coping essential to emerging literacy, numeracy and inquiry skills. Between three and six years, the brain’s neural circuit networks responsible for maintaining attention and focus undergo a growth spurt, building on earlier neural pathways that manage emotions and behaviour (Blair & Diamond, 2008; McCain, Mustard & McCuaig, 2011).
- Oral language & vocabulary are predictive of later achievement – also linked to immediate experiences with others. Children’s oral vocabulary knowledge is an important indicator of language development and subsequent reading success or failure during formal schooling. Children’s oral vocabulary continues to grow rapidly throughout early childhood and to overlap with reading acquisition in primary school (Li et al, 2013; Camilli et al, 2014; Sylva et al. 2014).

The salience of play



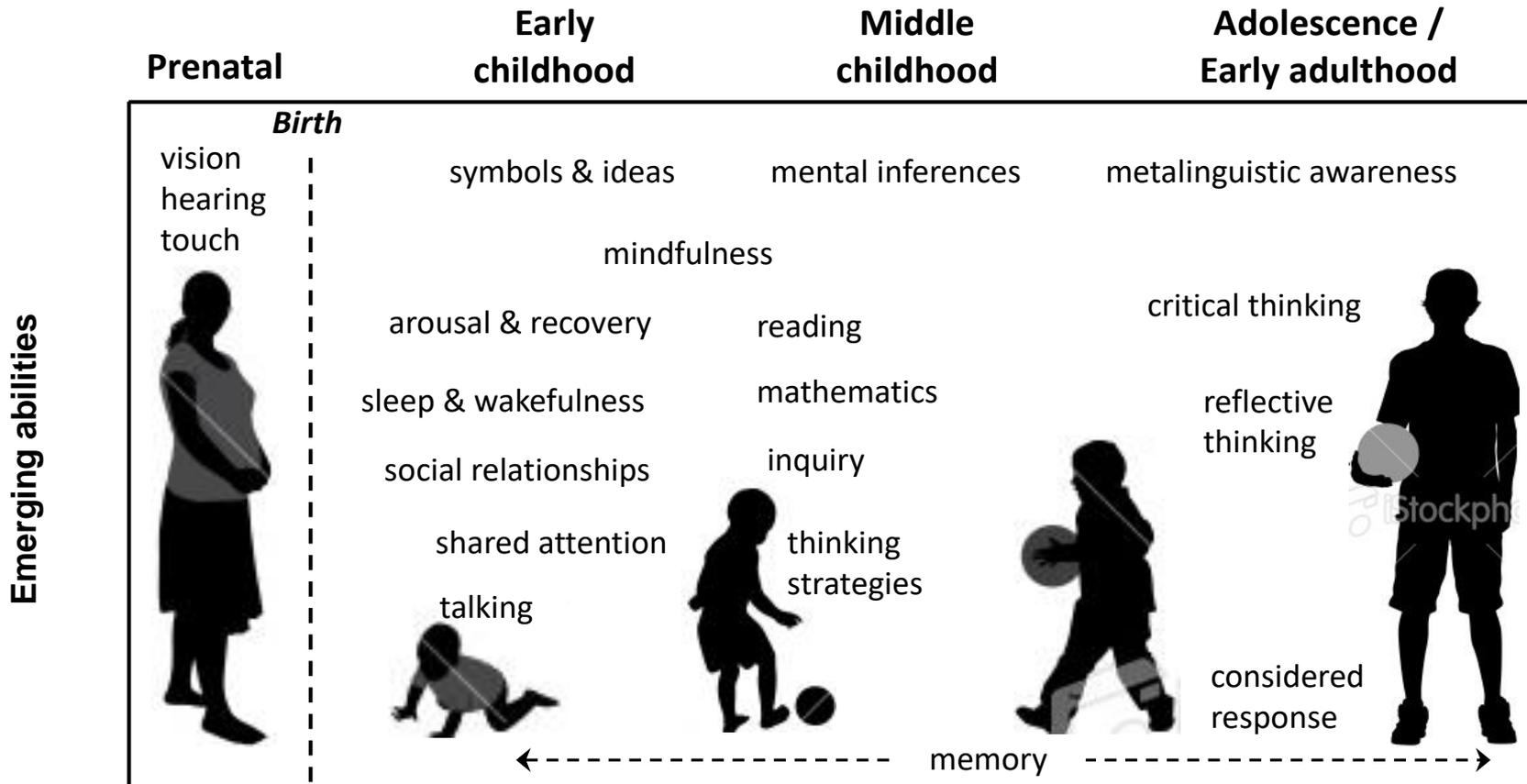
I am playing with my friends Pelletier, 2012

A continuum of play-based learning



Adapted from Miller, E. & Almon, J. (2009). *Crisis in the Kindergarten: Why Children Need to Play in School*. College Park, MD: Alliance for Children.

Continuum of learning



Instructional coaching for effective play-based learning

While early education generally provides good levels of physical environment organization and emotional support for children, the average level of instructional support* when rated across a range of settings is low (Weiland & Yoshikawa, 2013).

*Includes quality of back & forth exchanges, introduction of concepts, targeted direct instruction, feedback to children, responses that expand children's language repertoire (cognitive responsiveness)

Sustained, shared thinking: An episode in which two or more individuals 'work together' in an intellectual way to solve a problem, direct instruction of a needed skill, clarify a concept, evaluate activities, extend a narrative etc. Both parties must contribute to the thinking and it must develop and extend the understanding (Siraj-Blatchford et al., 2010). Sustained, shared thinking is an essential pedagogical strategy for play-based learning.

Innovative practice: St. John's, NB.

- Creates partnerships between educators in early childhood centres and kindergarten classrooms. Participants in the project have the opportunity to explore their respective curricula together and observe each other in their learning environments.
- In early fall 2016, 12 kindergarten teachers and 12 early childhood educators met to launch the project for the year. The kindergarten teachers were provided with professional learning on the New Brunswick Curriculum Framework for Early Learning and Childcare while the educators received professional learning on the K-3 English Language Arts Curriculum.
- Participants engaging in back and forth observations and then incorporate a practice which supports oral language development and is typically found in their partner's learning environment.
- Book study and May workshop focused on *Already Ready*, Matt Glover

4. Extended day – before and after school day

- Before- and after-school programs that extend the school day for children from K to Grade 6 are offered across Canada, often located in schools
- Delivered by schools, non-profit agencies or owner-operators
- Licensed child care facilities or recreation programs
- Typically fee-based and fee subsidies conditional on parental employment and income

School delivery in legislation

- Quebec: Legislation requires schools provide before- and after-school care – constitutes the majority of regulated child care spaces in the province
- Ontario: Schools responsible for before and after school programs (extended day). and have choice of direct delivery or contracting with community providers
- Ontario has seen better results with school delivered programs - economies of scale resulted in no wait lists, lower parent fees, higher staff wages, expanded access, particularly in disadvantaged communities (Janmohamed, et al, 2014).
- Education legislation in many jurisdictions allows public education to directly delivery regulated child care programs.

6. Accountability frameworks

- Early development screening
- Early Years Evaluation
- Early Development Instrument
- Data linking
- Early Childhood Education Report

Early development screening caution

- Canadian Task Force on Preventive Health Care (CTFPHC). released a recommendation that primary care doctors not use a screening questionnaire at the 18-month visit (or any other visits). based on a systematic review of the available evidence. Instead of using a screening tool, we advise that doctors discuss with parents, at every visit, how their child is developing and listen carefully to any concerns raised by parents.
- Recommend against screening for developmental delay using standardized tools in children aged 1 to 4 years with no apparent signs of developmental delay and whose parents and clinicians have no concerns about development. (*Strong recommendation; low quality evidence*).
- The evidence revealed that available screening questionnaires were not particularly accurate and had the potential to result in 'false positive' tests, meaning that children are identified with developmental concerns when in fact their development is on track.
- The CTFPHC also found that there was no evidence to suggest that using parent-completed screening questionnaires leads to improved development or academic performance.
- Overall, the CTFPHC concluded that there is a serious lack of high-quality research studies on monitoring or screening for child development and how to best identify any delays. We believe that more research on this topic should be a high priority. More research is also urgently needed to determine the best treatments for children with known developmental delays.

See <http://www.cmaj.ca/content/early/2016/03/29/cmaj.151437>

Early Years Evaluation (EYE). - Plus and minuses

- EYE-DA and EYE-TA focus on individual children and identify specific skill levels
- Feedback through online technology is quick
- Used to inform teachers and pedagogical decisions
- Testing items are not aligned to child-centred learning embedded in Canadian early learning frameworks or play-based learning.
- EYE-DA results can be skewed by analysis (bell curve). and nature of young children (who may not demonstrate what they know and can do).
- To date, EYE data have not been reported at the population level – only used as an individual assessment.

The EDI uses and misuses

The EDI can...

- Report on populations of children in different communities
- Monitor populations of children over time
- Predict how children will do in elementary school

The EDI cannot...

- Provide a clinical diagnosis
- Be used as an early screen

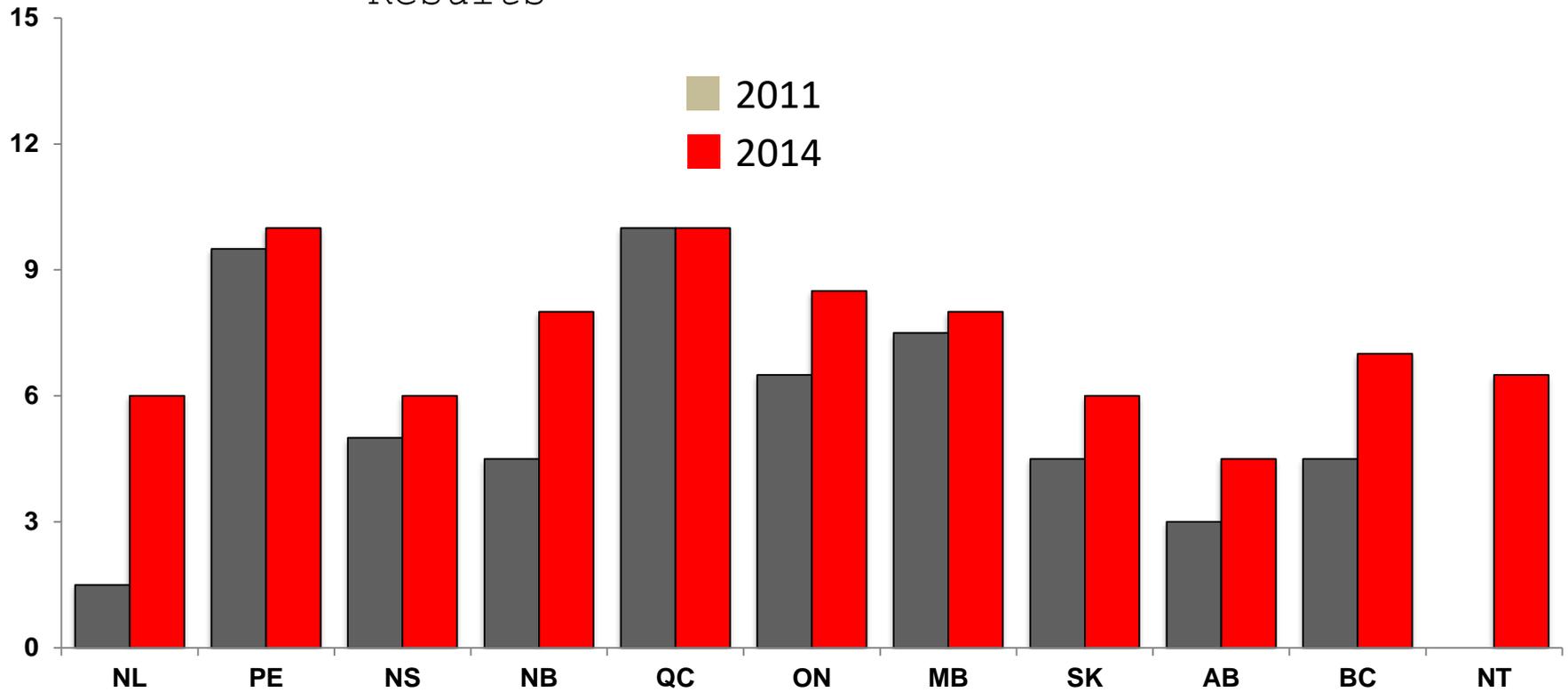
The EDI was not designed to measure excellence or high levels of ability, so ceiling effects are likely.

- EDI is widely credited with increasing community awareness of early childhood issues and engaging the community in working toward solutions.
- Coalitions among service providers and advocates were created, strengthened and better focused.
- Funding constraints and program rules make it difficult to adapt programs based on EDI results, making it difficult to maintain community enthusiasm.
- Data have been used inappropriately or have been taken wrongly as a poor reflection on schools.
- Limitations for community planning mobilization around ECD (utilization of data for change requires access to policy levers).

Early Childhood Education Report: OECD policy elements adapted to Canadian context

- **5 Categories/equally weighted:** Governance, Funding, Access, Early Learning Environment, Accountability
- **19 Benchmarks**
 - Limited by the availability of consistent data across jurisdictions
 - Availability of similar information in future to allow for across time comparisons
- **Thresholds**
 - Influenced by those established by UNICEF (2008). and UNESCO (2010). to support international comparisons
 - Adapted to Canada – had been achieved, or be in development, in at least one jurisdiction

Change in ECE Report Results



6. Considerations – Educator training

- Pre-service training in play-based learning for primary level educators as a requirement of teacher certification
- A 0-8 degree that qualifies for teaching in primary grades and early years – aligns with kindergarten and early learning framework
- Align competencies between ECE and teacher post-secondary education
- Effective professional development
- E-learning - Science of Early Childhood Development; Atlantic on-line degree (UNB).

Considerations – school mandates

Amend the School Act to:

- Expand opportunities for 4 year old pre-k
- Deliver out of school programs
- Institute a Schools First Policy
- Allow schools to directly deliver child care and other early years programs in schools
- Repurpose surplus school space for early years

Considerations: Continuum of learning

- Align the early years with the school system – this requires a more publicly managed, publicly delivered early years service system
- Develop demonstration sites in schools to test service models, inform public policy

Considerations: Accountability

- Collect data with purpose
- Avoid universal early childhood screening prior to kindergarten
- Review the alignment of the EYE with the NL Early Learning Framework, play-based learning and Kindergarten curriculum
- Explore with the other Atlantic provinces using the EDI to develop a baseline across the region.
- Work with other Atlantic provinces to develop a longitudinal study on children and youth in Atlantic Canada
- Develop a data repository to track early childhood development trajectories

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