

Playing to Learn in the Early Years



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RBC Learn to Play Webinar Partners:

Sport for Life – www.sportforlife.ca

ParticipACTION – www.participaction.com

Public Health Agency of Canada – www.phac-aspc.gc.ca



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As part of the RBC Learn to Play Project, ParticipACTION developed a suite of communications tools to support the Physical Literacy Consensus Statement released in 2015.

The purpose of these tools is to prioritize and clarify information about physical literacy and increase consistency and accuracy across communications.

These are now available on ParticipACTION's website:

www.participaction.com/en-ca/thought-leadership/physical-literacy



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Remember your own childhood...

Endless hours of playing

- Exploring
- Climbing trees
- Scraping your knees
- Falling
- Testing your limits
- Learning to get along with others
- Growing, developing, learning



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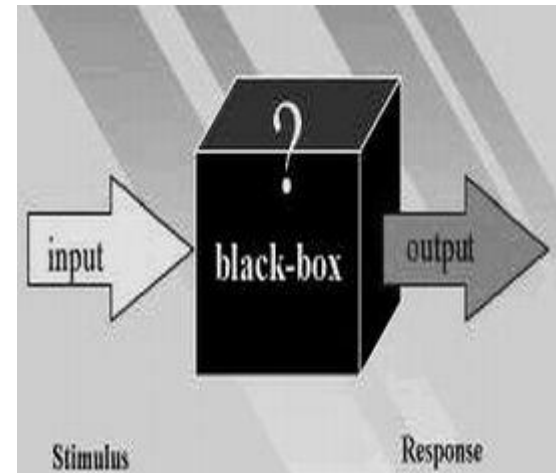
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The Black Box of Early Development

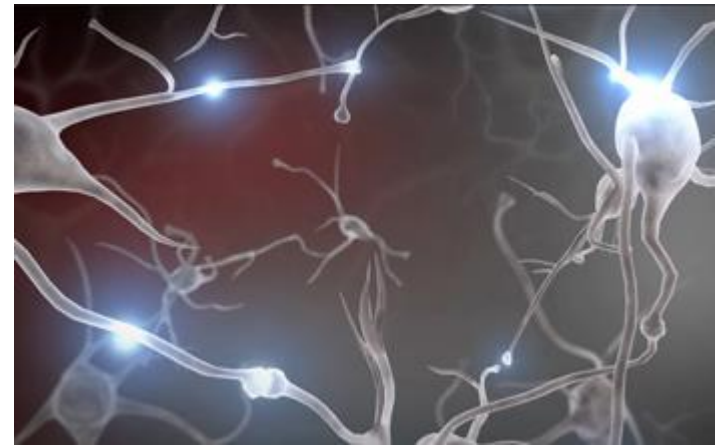


We used to think that....

- The first five years were a time of playing, waiting for the “real life” of school, work and family to come
- Child development was a “black box”
 - Babies went into the box at birth and came out at five ready for school
 - Lack of general understanding about what happens during those years
 - Either went well or didn’t – who knew why? Parents? Genes?

Emerging Scientific Evidence!

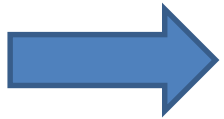
Early brain science is beginning to tell the story
The first five years are an intense period of brain development – the most intense in our entire lives!



In Fact...

The first five years actually set our entire life trajectory!

Child Development



Brain Development



Resilience



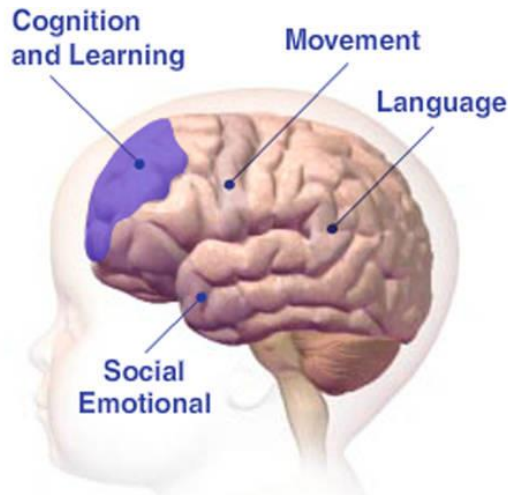
Healthy happy productive lives!

Early Brain Development

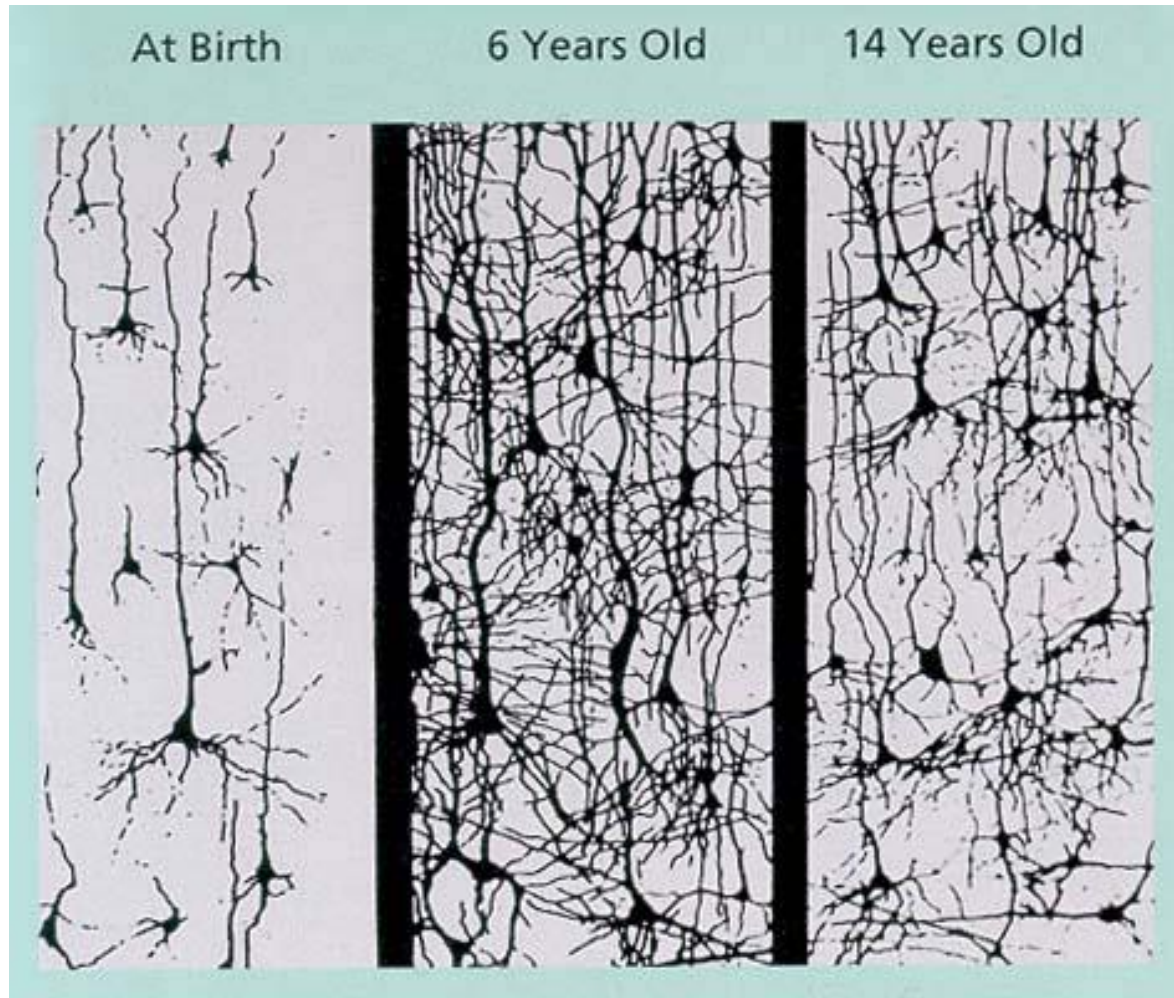
What **EVERYONE**

(ECEs, parents, policy makers,
and the public)

should know about
the first five years
of a child's life!



What's Happening in Children's Brains?



Building a Brain is like Building a House



Four Walls of the House

Cognitive

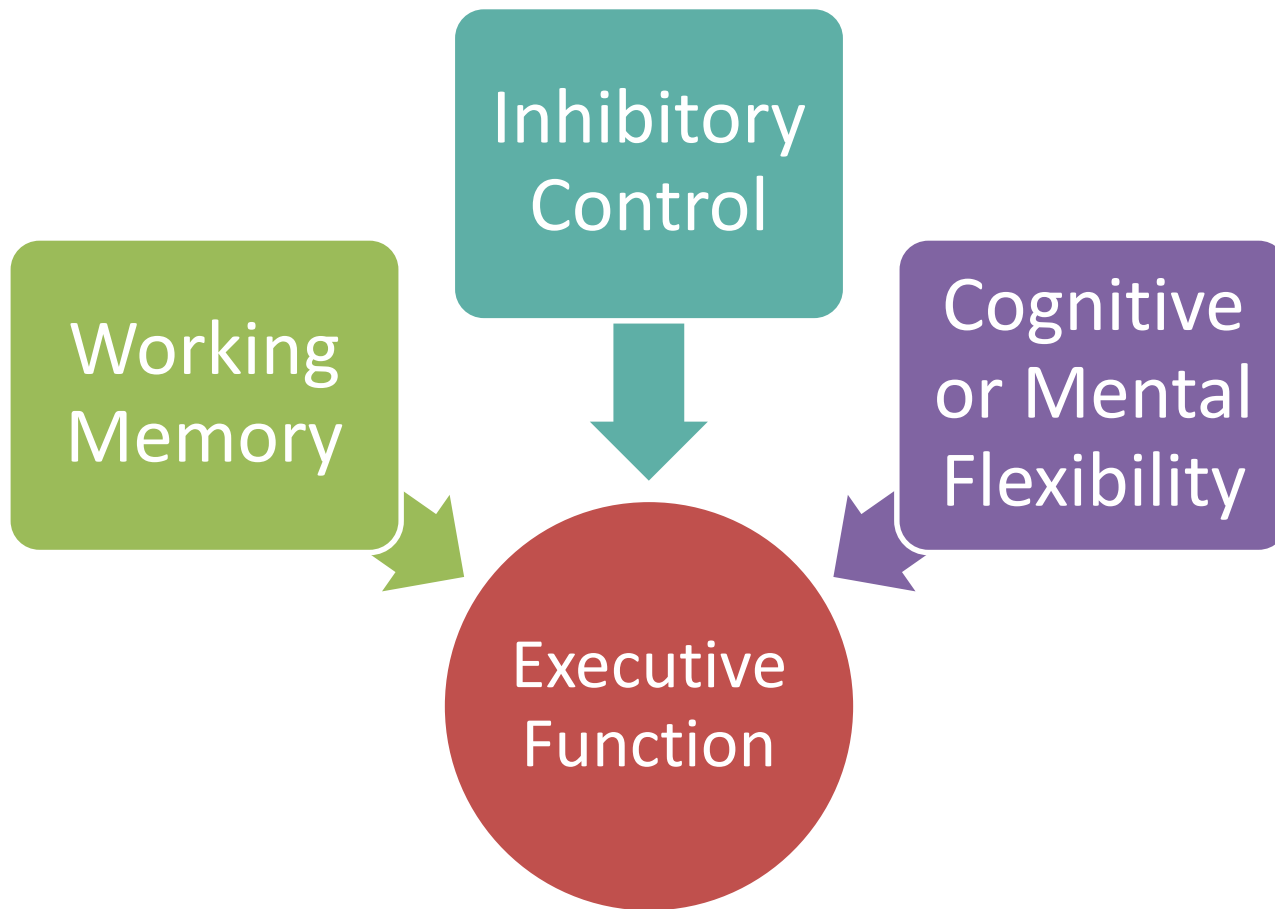
Social

Emotional

Physical

The hearth or heart of the
house is spiritual

A Set of Mental Skills



Executive Function

Air Traffic Control System

- Focus and pay attention
- Ignore distractions
- Plan
- Respond to changing circumstances



Enhancing Resilience

Resilience develops when learning to make decisions in the face of adversity or risk

Active energetic play

- Running, jumping, climbing

Risky play

- Running faster, jumping further, climbing higher

Learning to manage risks



We know all this, so why?

35% of children in Canada aged 2 – 5 are **overweight or obese**

Young children are **inactive** for more than **75%** **of their waking day**

Even very young children are becoming attached to “**screen time**” – TV, smart phones, tablets, laptops....

Why is this happening?

General lack of knowledge about child development

- AB Benchmarks Study, 2007, 2013

Focus on school “readiness”

- Misunderstood as reading, writing, math

Safety, protect from risks

Screens are just such great babysitters and soothers!



Screen Time



CSEP 2011 Guidelines

- Infants to 2 years of age = zero screen time!
- 2 to 5 year olds = no more than one hour total screen use in one day

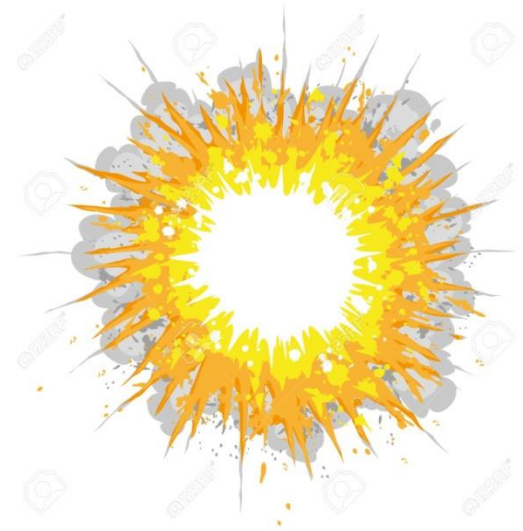
Canadian Pediatric Society agrees

- Sleep problems
- Obesity
- Attention and learning problems
- Advertising leading to unhealthy food and lifestyle choices

Now, an explosion of interest!

Recognition that many social challenges are rooted in the early years

- Poor health
- Mental illness and addictions
- Teen crime and pregnancy
- Poor school performance
- Successful work life
- Healthy relationships



How is Early Childhood Different from School Age?

Early Childhood

Most active period of brain development

Preschool children learn through their senses

- Need to touch, smell, taste, listen, do!

Need more unstructured than structured activity

Difficult to learn game rules – make their own which change constantly!

School Age

Period of brain restructuring during adolescence

80% of learning happens through the eyes

Can accept more structured activities but still need ample unstructured time


Able to learn and follow game rules (most of the time!)

Preschool Children Learn through Play

Require

- Caring nurturing **relationships**
- Predictable repetitive positive **experiences**
- Stimulating **environments** to explore

Play allows children to explore, repeat, build confidence, take control, expand their horizons



"Children need the
freedom and time to
play. Play is not a
luxury. Play is a
necessity."

Kay Redfield Jamison

Nothing if Not Intentional
Nateandrachael.com



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When Learning, young children are

Playing and playful

Seeking

Participating

Persisting

Caring



Our Journey: PPLRT at MRU



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How We Started...

In 2007, Child Studies students conducted a survey to determine levels of physical activity in Calgary child care centres

Over 75% of children aged 2 to 5 experienced less than 30 minutes of physical activity during a ten hour day!



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Why Might This Be?

In 2007, there were no physical activity guidelines for children under five

- ParticipACTION Guidelines covered the “entire lifespan” from 5 to 95!
- Assumption that preschool children were naturally active

Physical activity not included in early childhood educator programs anywhere across Canada



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How to Respond?

Three approaches

- Resources
- Education
- Policy



First Steps



Hop Skip and Jump

- Created by ELCC students
- Tested and revised by ECEs

Addressed barriers of limited space, time, equipment, and preparation

Then... Education

Many workshops and presentations!

ECEs thought the activities were fun but...

Why?

What benefits?

Weren't physically active themselves

Weather and space were huge barriers

Policy – Perfect Storm 2011-2012

CSEP published preschool guidelines of **180 minutes** per day

Alberta revised Accreditation Standards

We recommended **15 minutes** of active play **for every hour** in care

Result

All child care, out of school care, family day home, and preschool programs who wish to be accredited must show evidence of meeting PA and SB guidelines!



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Dilemma!

Provided resources

Taught workshops and
made conference
presentations

Impacted policy

How had we done?

Repeated questionnaire in
2014

ECEs were now much
more active than in 2007

ECEs strongly agreed that
children should be active

Encouraged children to be
active and joined in play

Saw few barriers to PA/PL

But....!

Between 17% and 31% of children achieved 180 min of PA

Average amount of activity – 30 – 60 minutes



Switch Focus

Adult capacity building

Need to support ECEs to:

- become motivated, confident, and competent
- to provide stimulating physically literate environments and activities
- Indoors and out!



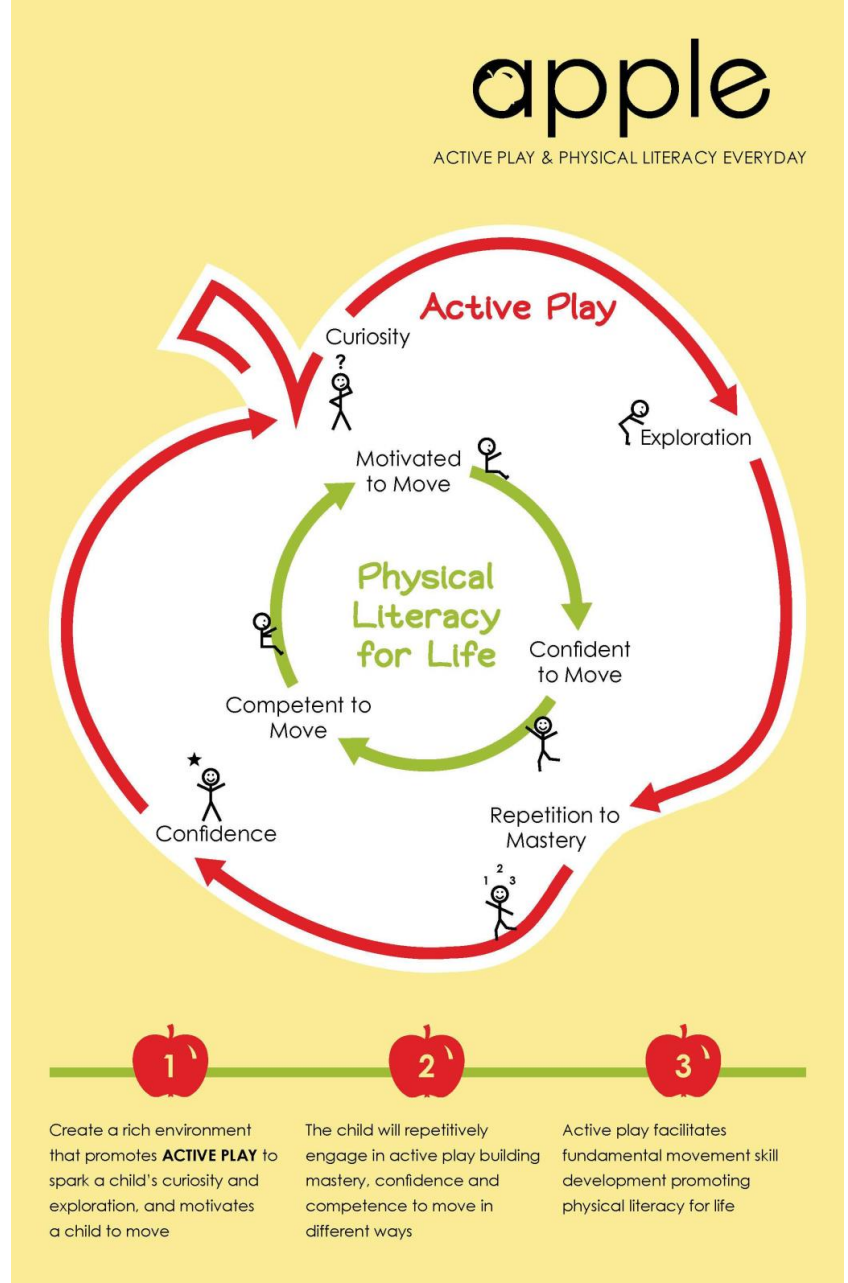
ECEs are not PE teachers

So... we **developed** and **are developing**:

- **APPLE Model**
- **Preschool FMS Chart**
- **Physical Literacy Observation Tool (PLOT)**
- **APPLE Seeds Program**
- **Active Energetic/Risky Play Protocol**

The APPLE Model

Active Play and Physical Literacy Everyday!



Active Play

Active play is how children of all ages (including adults!) learn

Cycle of active play:

- Curiosity
- Exploration
- Repetition to mastery
- Confidence



Active Play: Curiosity and Exploration



And Then...

Repetition to Confidence



Fundamental Movement Skills

Developmental perspective

More complex skills build on simple skills

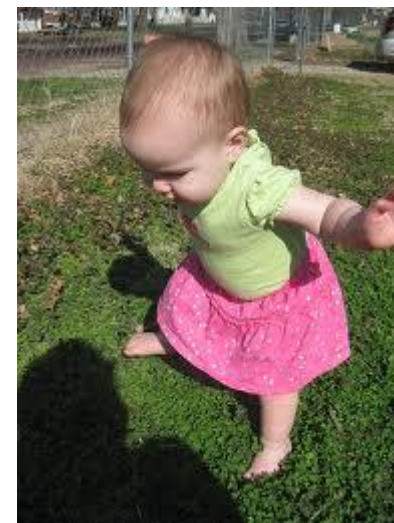
- Most children crawl before they walk

Three categories:

- Stability
- Locomotor
- Manipulative



Stability Skills



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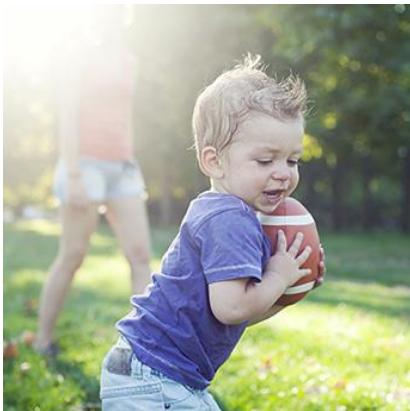
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Locomotor Skills



Manipulative Skills



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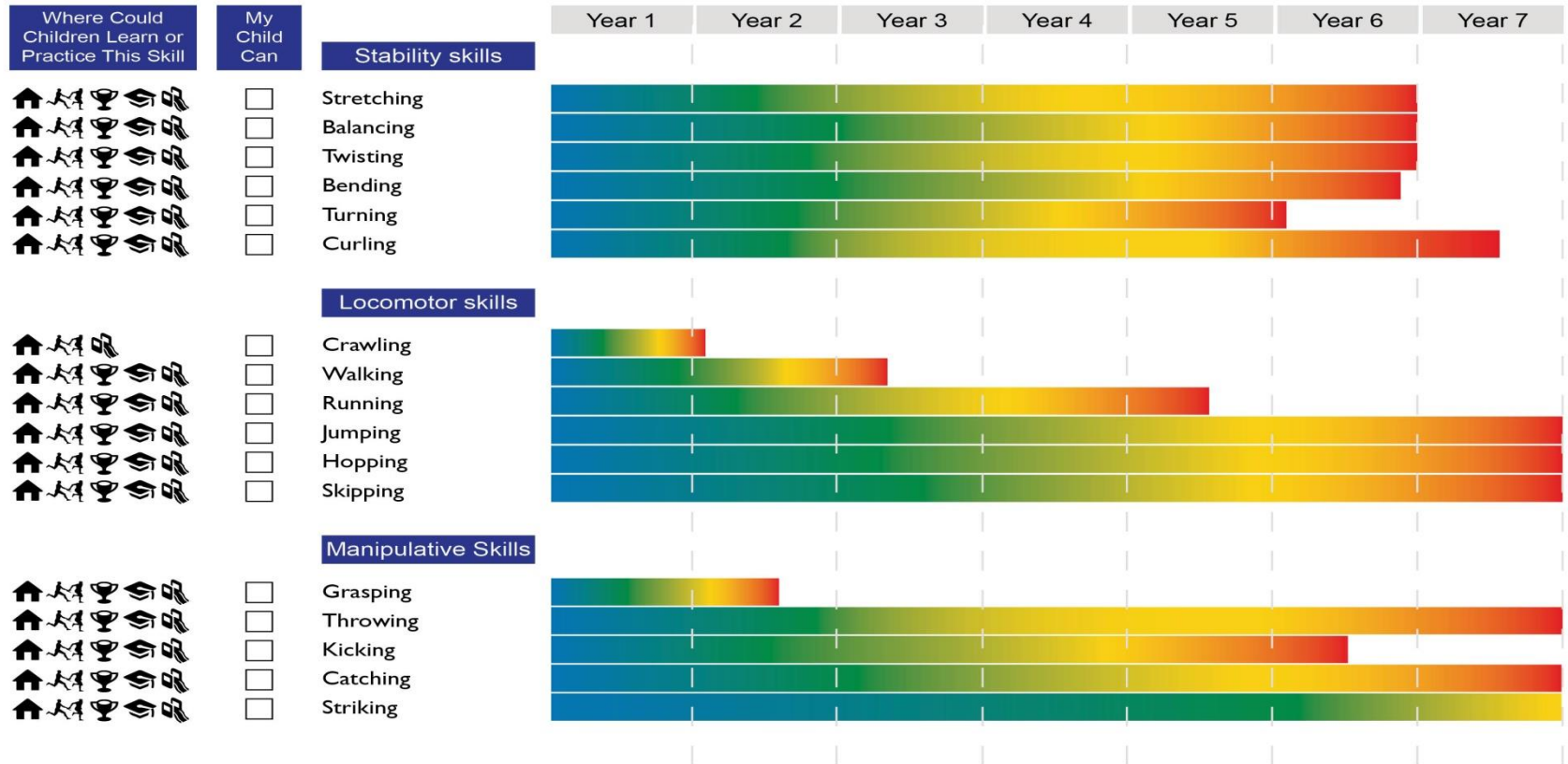
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Preschool Fundamental Movement Skills (FMS)



In the home
 Community Recreation
 Structured Play
 School
 Preschool

Body not mature enough
 Normal onset
 Best time to teach or practice
 Intervention program if skill not learned

Preschool Physical Literacy Observation Tool (PLOT)

ECEs, parents, and others

To observe developmental levels of individual children

Supports mindful planning of activities, environments, and opportunities to enhance preschool physical literacy



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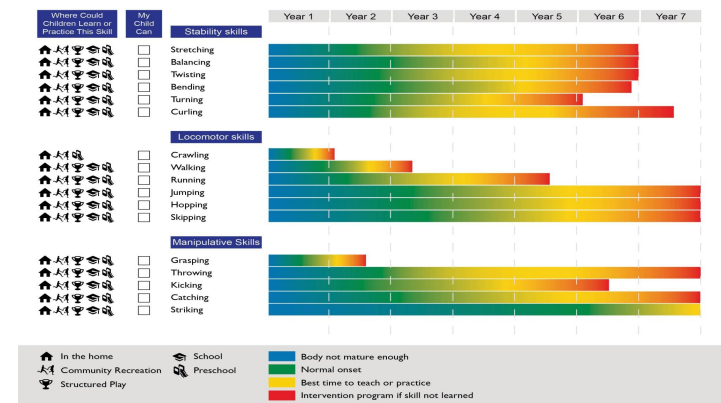
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Format of the PLOT

Based on Preschool FMS chart

Colour coded by age levels

- Infant – beginning mobility to 2 years
- Toddler – ages 2 and 3
- Preschool – ages 4 and 5



Using the PLOT

Play-based setting or naturally occurring situations

- Children engaged in active play and exploration

Use “observable moments” when
the child is naturally playing,
exploring, dressing,
and so on



Sample of Scale

Part 1) Stability Skills

Stretching/Sitting/Balancing

	Often	Sometimes	Not Yet	Not Observable
When the child is on her tummy, does the child...				
1. Hold her head straight up, looking around while resting on her arms and elbows?	O	O	O	O
2. Straighten both arms and push her whole chest off the bed or floor?				
1. When this child is on her back, does she lift her legs high enough to see her feet?	O	O	O	O
With or without support of pillows, does the child...	O	O	O	O
1. Sit up straight on the floor for several minutes?	O	O	O	O
With or without support, while standing, does the child...				
1. Balance his own weight?	O	O	O	O
1. Bend down and pick up a toy from the floor and then return to a standing position?	O	O	O	O
While standing, does the child...	O	O	O	O
1. Bend forward to touch his knees or toes?	O	O	O	O
1. Stand on her tiptoes and stretch her hands up to sky, touching her hands together like a mountain?	O	O	O	O
1. With support, balance on one foot for about one second?	O	O	O	O
1. Without support, balance on one foot for about one second?	O	O	O	O
1. Using his arms to balance, while walking on a straight line?	O	O	O	O
While standing, does the child...	O	O	O	O
1. With one leg crossed over the other bend forward to touch her knees or toes?				
1. Bend to touch her toes and then stretch her hands up to the sky, in one motion?	O	O	O	O
1. Without support, balance on one foot briefly without putting her other foot down?	O	O	O	O
While on hands and knees, does the child...	O	O	O	O
1. Curve his back up to the sky and then bend it down towards the floor? (<i>Cat-cow stretch</i>)				
1. Raise one arm straight out in front of his body, without falling over?	O	O	O	O
1. Raise one leg straight out behind her body, without falling over?	O	O	O	O
Does the child walk...	O	O	O	O
1. On a circular line, alternating feet, only stepping off the line once or twice?				
1. On a beam (e.g. a street curb or playground curb, a small log) without falling off?	O	O	O	O
1. Forward on a straight line, heel-to-toe , without losing his balance and stepping off the line?	O	O	O	O
1. Backward on a straight line, toe-to-heel , without losing her balance and stepping off the line?	O	O	O	O
Comments:				

Psychometric Testing of PLOT

This will allow the tool to be used with full confidence

Currently completing the final tests of reliability, usefulness, and feasibility

Available for public use by late fall of this year

Also developing an assessment version for use with children with disabilities



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Two Early Childhood Tools

PLOT

- Observation during play
- Based on **developmental milestones** for ages 6 to 72 months
- Teaching and planning tool for ECEs

P-PLAY

- Completed on each child after observation period
- Developed for children from 18 months to kindergarten entry
- Uses a **holistic rubric** to indicate where a child is on their **physical literacy journey** which can be used for support and planning

Further Support for ECEs

APPLE Seeds Program

Follows ECE philosophy

— APPLE Model

Written for children from 18 months to five years of age

Designed to be flexible and adaptable

Not recipes but curiosity starters!



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APPLE Seeds

12 activities with three components

- Introductory activity
- Adult led activity
- Child directed unstructured play

In final stages of testing and revision



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Active/Outdoor/Nature Play

Parents seeking active outdoor opportunities

- Nature/forest/outdoor preschools
- Adventure playgrounds



In child care?

- Would like natural playgrounds with logs, rocks, trees, water, hills, tools
- Confusion about what centres are allowed to do

Active Energetic/Risky Play

Study with almost 1000 participants

Risky – challenging term

Personal comfort level

Collaborative protocol document - 2018



Current Documents on Active Play

ParticipACTION: Position Statement on Active Outdoor Play

- "Access to active play in nature and outdoors--with its risks--is essential for healthy child development."
- AB Health Services countered with their own internal document

Director of Licensing in BC: Standard of Practice

- Active Play (effective Sept 1, 2017)



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An Exciting Time in ECE!





Thank you!

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2017 **Learn to Play** Webinar Series



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Engagement

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JULY 18
Helping Change
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AUGUST 22
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