Literacy:
The Foundation of CS4L – “food for thought”

Liège, Belgium,
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Charles Cardinal, NCCP Learning Facilitator, CS4L Leadership Team,
Balyi I, Higgs C, Jurbala P, Way R, CS4L Leadership Team

Generic LTAD
7 stages proposal
Physical Literacy as foundation of participation and excellence

Active for Life

Learn to Train

Physical Literacy U 12

FUNdamentals

Train to Train

Train to Compete

Train to Win

Active start

What is PL?
The motivation, confidence, physical competence, knowledge and understanding to value and take responsibility for maintaining purposeful physical pursuits/activities throughout the life course.

M. Whitehead July 2013

Individuals who are physically literate move with competence and confidence in a wide variety of physical activities in multiple environments that benefit the healthy development of the whole person.

PHE Canada, 2010
Physical literacy is the ability to demonstrate physical proficiencies in multiple environments.

Dean Kriellaars, 2006

Physical literacy is crucial to the acquisition, by every child, youth, and adult of essential life skills which is an indispensable means for active participation in the societies and economies of the twenty first century.

Adapted from UNESCO
## Literacy Models

<table>
<thead>
<tr>
<th>Literacy</th>
<th>Numeracy</th>
<th>Music</th>
<th>Physical Literacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>• ABC</td>
<td>• 123</td>
<td>• Do-re-mi</td>
<td>• <strong>Fundamental movements</strong></td>
</tr>
<tr>
<td>• Words</td>
<td>• Fractions</td>
<td>• Scale</td>
<td>• <strong>Motor abilities</strong></td>
</tr>
<tr>
<td>• Sentence</td>
<td>• Equations</td>
<td>• Score</td>
<td>• <strong>SS skills</strong></td>
</tr>
</tbody>
</table>

**WHY PL?**

![Physical Literacy Image]
What percentage of people are active enough?
Meeting minimum age guidelines. Accelerometer data.

<table>
<thead>
<tr>
<th>Age</th>
<th>Males</th>
<th>X</th>
<th>Females</th>
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</thead>
<tbody>
<tr>
<td>6–11</td>
<td>48.9</td>
<td>41.8</td>
<td>34.7</td>
</tr>
<tr>
<td>12–15</td>
<td>11.9</td>
<td>7.65</td>
<td>3.4</td>
</tr>
<tr>
<td>16–19</td>
<td>10</td>
<td>7.7</td>
<td>5.4</td>
</tr>
<tr>
<td>20–59</td>
<td>3.8</td>
<td>3.5</td>
<td>3.2</td>
</tr>
<tr>
<td>60+</td>
<td>2.5</td>
<td>2.4</td>
<td>2.3</td>
</tr>
</tbody>
</table>

52% of people self-report they are active enough!
10.9X over-estimate!
Sedentarism

<table>
<thead>
<tr>
<th>Activity</th>
<th>1999</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV</td>
<td>3:04</td>
<td>3:05</td>
</tr>
<tr>
<td>Videos/DVD</td>
<td>59</td>
<td>1:11</td>
</tr>
<tr>
<td>Print</td>
<td>43</td>
<td>43</td>
</tr>
<tr>
<td>Audio</td>
<td>1:48</td>
<td>1:44</td>
</tr>
<tr>
<td>Computer</td>
<td>27</td>
<td>1:02</td>
</tr>
<tr>
<td>Video game</td>
<td>26</td>
<td>49</td>
</tr>
<tr>
<td>SUM</td>
<td><strong>7:29</strong></td>
<td><strong>8:33</strong></td>
</tr>
</tbody>
</table>

Total Screen Time

- 6:19 in 1999
- 6:21 in 2004

Kaiser Family Foundation US

Kids are Multi-taskers.

Unstructured play is EXTINCT! Gone the way of the dinosaur.

Playgrounds empty!

“Come home when the street lights come on!”
never to be heard again!

“Walk to School” has been eradicated in ONE generation. 2000 steps a day gone.
Eat Well and Exercise Regularly

**Food**
31.5% of children OW/OB
65% of adults OW/OB

**Activity**
58-90% under kids guideline
about 94% under adult guidelines

Physical Literacy
One GATEWAY to ACTIVE PARTICIPATION
Moving forward, a corner stone to active participation could be _ _ _

*Fundamental movement skills (FMSs)*

**FMSs 3 streams**

<table>
<thead>
<tr>
<th>MOTOR ABILITIES</th>
<th>MVT SKILLS</th>
<th>SKILLS / OBJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agility</td>
<td>Running</td>
<td>Passing</td>
</tr>
<tr>
<td>Balance</td>
<td>Jumping</td>
<td>Catching</td>
</tr>
<tr>
<td>Coordination</td>
<td>Swimming</td>
<td>Dribbling</td>
</tr>
<tr>
<td>Speed</td>
<td>Sliding / Skating</td>
<td>Striking</td>
</tr>
<tr>
<td>Rhythm</td>
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<td></td>
</tr>
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</table>

CIAPSE2014, Liège, Belgium
The uncontested core:

- Body control, walk, run, jump, catch, throw, kick, strike.

But many, many, others

- Hurdle
- Bat
- Hop
- Skip
- Gallop
- Roll
- Hang
- Scoop
- Backward walk
- Backward roll
- Skate
- Boot
- Barrel roll
- Sideways
- Canter
- Turn
- Twist
- Hang
- Frog jump
- Change direction
And environments

- Ground - court, field,
- Water -
- Ice/snow -
- Air -

FMSs & Environment

<table>
<thead>
<tr>
<th></th>
<th>Ground</th>
<th>Water</th>
<th>Ice/snow</th>
<th>Air</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locomotor</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Object</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Motor abilities</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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</tbody>
</table>
Which brings us to the big question.....

Do FMSs “just happen?” as part of normal development?

Not today, in Canada!
The learning sequence

<table>
<thead>
<tr>
<th>Instruction Ineffective</th>
<th>Instruction Effective</th>
<th>Instruction Most Effective</th>
<th>Instruction Critical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Too Immature for skill</td>
<td>Ready to Learn</td>
<td>Optimum Learning</td>
<td>Remedial</td>
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</table>

Birth 1 2 3 4 5 6 7 8 9 10 11 12

Developmental age?

What’s the evidence?

- As far back as 1987, Ulrich determined that children with better FMSs tended to be more active - and this has been confirmed by Saakslahti et al., 1999 and Okely, 2001

But - does

Good FMSs  ▶️ Being more active
What’s the evidence?

- Best study we could find is the SPANS document on Fundamental Movement Skills from New South Wales, Australia. (Booth, Okely et al., 1999)

- Looked at Running, Vertical jump, Side gallop, Leap, Kick, Overhand throw, and Catch in Years 4, 6, 8 and 10 in school (9.3, 11.3, 13.3 and 15.3 years of age)
FMSs: On the ground

Locomotor
- Running
- Jumping
- Swimming
- Sliding/skating

Motor abilities
- Agility
- Balance
- Coordination
- Rhythm

Object
- Sending
- Receiving
- Dribbling
- Striking

In water

In air

On ice/snow
PL: Who needs to be involved?

- Parents and guardians
- Pre-school and Day care Care Givers
- Communities Schools Clubs Programs

Two approaches

- What can parents and care-givers do to make sure children get all the Fundamental Movement skills, and
- What can organizations do to ensure that children who take part in their programs get Fundamental Movement Skills.
The Parental challenge...

- Where do you send your child/children to make sure that they are exposed to all the necessary fundamental movement skills?
A new way?

- Could organizations involved with U 12 develop and deliver programs in a new way?
- Working in silos VS Team work (cooperation between organizations = being complementary = being more proficient dealing with the same target group).

1. What organizations could/should work together to make more meaningful introductory FMS programs?
2. What would the program look like?
3. How could you make it happen?
Possible organizations

- NSO/PSOs
- Community Recreation
- Schools/Educational stream
- Multi-sport service organizations
- Gov’t agencies
- Others?

Ensure that FMSs are taught in all programs

- WHO is responsible
  - Teach FMSs as part of sport specific programs
  - Use FMSs in warm-ups/cool down
  - Ensure coaches understand how to move children towards mastery of FMSs
Good programs out there

www.bced.gov.bc.ca/literacy/early_learning/resources_links.htm

Healthy Opportunities for Pre-schoolers (HOP)

Or Google: Early childhood HOP BC
Excellent resource from New Zealand

www.sparc.org.nz

Seven books in the series

Schools, Educational stream

- Equip classroom teachers with the skill and knowledge to confidently teach FMSs.
- New South Wales (Australia) “Get Skilled-Get active” program and in-service is an excellent model.
Developing Physical Literacy

• A document for parents of children 0-12 years of age.

www.cs4l.ca

Coaching Association of Canada

NCCP: **Fundamental Movement Skills** DVD and Workshops for Coaches, Parents, School Teachers and Recreational Leaders.

**DVD CONTENT:**

Throwing; Catching; Jumping; Striking; Running; Kicking and ABC’s agility, balance, coordination

www.coach.ca
PL and Sport specific skills

- The part we have done, and continue to do, best
- Introduction to sport specific skills - our bread and butter.

Must add motor abilities (ABC’s)

PL and Sport: example targeting the coach
- Need to master generic movement skills and motor abilities before specific techniques
- Need to incorporate motor abilities when teaching basic sport specific skills
What as your sport federation done?

Do U 12 compete? What does their competition structure & format look like? Does it reflect the LTAD principles for the age/stage level?
Why do we need competition review and re-structuring?
"Food for thought"
Why do we need competition review and re-structuring?

- Who designed your system and structure of competition?
- Is adult competition format being imposed on youth?
- The system of competition makes and breaks athletes!
- Are all games meaningful competition?
- The competition schedule should enhance athlete preparation and performance.

<table>
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<td>- Mini – Maxi model of competition</td>
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<td>- Developmental athletes: U12; U16/17</td>
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<tr>
<td>- University/Senior athletes</td>
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<tr>
<td>- Maxi – what is the maximum number of competitions which will not inhibit performance?</td>
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<td>- Developmental athletes: U12; U16/17</td>
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Why Competition Review?

• Sport forms itself based on competition
• Coaches coach to competition
• Parents assess success based on competition
• Administrators structure support around competition
• Others _ _ _

Developing Talent

“In a democratic society the only way to make change is to modify the competition structure to change behaviour”

Orjan Madsen Norwegian physiologist

If you don’t do it, it does NOT matter what else you are doing!!
Common barriers to competition structure change

- Formal Systems and structures make it difficult to act
- Leaders and decision makers within the competition ecosystem discourage actions aimed at implementing the new vision
- Many within the competition ecosystem understand the new competition vision and want to make it a reality but they are boxed in
- A lack of needed skills undermines action
- Personnel and information systems make it difficult to act

Adapted from Kotter, 1996

9 steps competition review process

1. Why
2. Reality check
3. Values & objectives
4. Principles
5. Issues / Road blocks (priorities)
6. Solutions & Recommendations
7. Strategy to move forward
8. Implementation
9. Evaluation & measuring
Competition Review Process: 2 day WS

Getting Started Module A

Establishing your Working Group Module C

Communicating Strategically Module B

Analyzing the Competition System & Proposing Alternatives Module D

Implementing Change Module E

Monitoring Your Performance Module F

Leading Competition System Change

Meaningful changes to competition systems will be difficult to accomplish without a respected and credible group of individuals to lead and sustain progress.
<i>"If you keep on doing what you've always done, you will get what you've always gotten"</i>

<i>"We have evolved when we have changed things. Every person has this power"</i>

Charles