



PLAY

Physical Literacy Assessment for Youth



CS4L
PHYSICAL
LITERACY

coach

TABLE OF CONTENTS

What is Physical Literacy?	4
What is PLAY?	5
What is PLAY <i>coach</i> ?	6
PLAY <i>coach</i> Workbook	7
Physical Literacy Visual Analog Scale (VAS)	8
Cognitive Domain: Confidence, Motivation and Comprehension	9
Framework	9
Question 1. Confidence to participate in sport and physical activity	9
Question 2. Motivation to participate in sport and physical activity	10
Question 3. Comprehension of movement terms	10
Scoring & Calls-to-action	11
Environment	12
Framework	12
Question 4. Able to participate in many environments (ground, water, air, snow and ice)	12
Question 5. Awareness of the environment and others	13
Scoring & Calls-to-action	14
Motor Competence	15
General Motor Competence	16
Framework	16
Question 6. Possesses a diverse movement skill set	16
Scoring & Calls-to-action	17
Question 7. Ability to select and sequence skills suitable to setting	18
Scoring & Calls-to-action	18
Balance (Motor Competence)	20
Framework	20
Question 8. Basic balance	20
Question 9. Collisions	21
Question 10. Stumble recovery	22
Scoring & Calls-to-action	23

Object Control	24
Framework	24
Question 11. Hands	24
Question 12. Feet	25
Question 13. Ability to use left and right sides equally	25
Scoring & Calls-to-action	26
Locomotor	27
Framework	27
Question 14. Start/Stop	27
Question 15. Running	28
Question 16. Agility	28
Scoring & Calls-to-action	29
Developing Physical Literacy Warm-up	30
Fitness	31
Framework	32
Question 17. Overall fitness level	32
Calls-to-action	32
PLAYcoach Physical Literacy Score	33
Key Ideas	34
PLAYcoach Form	35
PLAYcoach Score Sheet	36
PLAYcoach Tracking Sheet	37

What is Physical Literacy?

We know that today's children and youth are much less active than in the past. In the interests of their long-term health and wellness, we need to help them become more active and stay active.

The first step is to help them become physically literate.

Only seven percent of Canadian children get enough daily exercise.

The average child spends six hours a day in front of a screen.

People who are physically literate have the competence, confidence and motivation to enjoy a variety of sports and physical activities. As a result, they are more likely to stay active.

But what is physical literacy exactly?

Like reading and arithmetic, which develop a literary or numerical vocabulary, physical literacy develops a "**movement vocabulary**" of *fundamental movement skills* and *fundamental sport skills*.

These skills are the basis for moving with competence and confidence in every kind of activity environment (on the ground, both indoor and outdoor; in and on water; on snow and ice; in the air).

But physical literacy is not just about learning basic fundamental movement skills. Physical literacy is also about having the competence, confidence and motivation to apply your fundamental movement skills and fundamental sport skills in new situations.

To make this happen, you need more than just a wide range of movement skills. You need a proper learning environment, provided by a parent, coach or leader.

The environment should encourage free play, new activities, opportunities for working together, freedom to ask questions and a supportive socio-moral environment.

In schools, once children have begun to learn literacy and numeracy skills, they are tested and graded on their level of comprehension. Parents receive report cards so they can help improve their children's academic abilities.

Shouldn't we assess their physical abilities in the same way?

This is the purpose behind **PLAY**.

What is PLAY?

PLAY stands for Physical Literacy Assessment for Youth. It's a collection of workbooks, forms and score sheets, which comprise the tools designed to assess physical literacy in children and youth.



PLAY includes these tools:

PLAYfun

Used by a trained professional* to assess a child in 18 fundamental skills/tasks, such as running, throwing, kicking and balance.

PLAYbasic

A simplified version of **PLAYfun** that can be administered quickly by a trained professional in movement analysis to provide a snapshot of a child's level of physical literacy.

PLAYself

Used by children and youth to assess their own physical literacy.

PLAYparent

Used by parents of school-aged children to assess their child's level of physical literacy.

PLAYcoach

Used by coaches, physiotherapists, athletic therapists, exercise professionals and recreation professionals to record their perceptions of a child's level of physical literacy.

PLAYinventory

A form used to record and track a child's leisure-time activities throughout the year.

PLAYself, **PLAYparent** and **PLAYcoach** are not skill assessments; they are forms used to supplement the skill assessments, **PLAYbasic** and **PLAYfun**.

The **PLAY** tools were developed by Canadian Sport for Life (CS4L) with the expertise of Dr. Dean Kriellaars, of the University of Manitoba.

Use the **PLAY** tools to assess individuals aged seven and up and to track physical literacy over time.

*Trained professionals: coaches, physiotherapists, athletic therapists, exercise professionals and individuals trained in movement analysis.

What is PLAYcoach?

PLAYcoach is used by coaches, physiotherapists, athletic therapists, exercise professionals and recreation professionals to determine their perception of a child's level of physical literacy. It includes questions about the child's ability, confidence, participation and more.

Who can use PLAYcoach: PLAYcoach should be filled out by a person with a very good understanding of human movement and with formal movement analysis training. This assessment provides one perspective of a child's level of physical literacy, while the other PLAY tools each provide a different perspective. This information can help identify positive and negative factors that affect a person's ability to live a physically active lifestyle.

To learn about the other tools, visit:

play.physicalliteracy.ca

As a coach, physiotherapist, athletic therapist, exercise professional or recreation professionals: Once you have spent some time with the child (more than four weeks), use PLAYcoach in conjunction with the other PLAY tools to create a baseline assessment of the child's current level of physical literacy. Use the baseline to create goals and track improvement. You and the child should establish *realistic goals* (where the child wants to be) and a manageable process to reach them.

As a parent: Ask the coach of your child's sport program to fill out PLAYcoach if you're looking for some extra insight into your child's physical literacy. An NCCP-certified coach will typically be knowledgeable about how your child moves and reacts in different physical activity scenarios, as well as about your child's current level of physical literacy. Make sure that the coach has spent enough time with your child to provide an adequate assessment – typically after about one month of exposure.

Physical Literacy Assessment for Youth

Directions

IMPORTANT:

- Each question refers to your perception of the child
- There are no right or wrong answers
- There is no need for measuring – simply give your best estimate for each question
- If you don't know, don't answer



1. Read through and answer each question with the help of the **PLAYcoach** Workbook
2. Use the **PLAYcoach** tool along with the other **PLAY** tools to obtain various perspectives of the child's level of physical literacy
3. Score your form with the help of the **PLAYcoach** Score Sheet located at the back of the workbook
4. **Take action:** Review the list of calls-to-action in your **PLAYcoach** Workbook or on our website at:
play.physicalliteracy.ca
5. Remember to use the **PLAYcoach** tool along with the other **PLAY** tools to see all perspectives of your child's level of physical literacy



PLAYcoach workbook

In this section, you'll learn how to use and score the PLAYcoach Tool, and how to match the child's score with the appropriate calls-to-action.

To simplify things, we've broken down **PLAYcoach** into five subsections:

1. Physical Literacy VAS
2. Cognitive Domain
3. Environment
4. Motor Competence
 - a. General Motor Competence
 - b. Balance
 - c. Object Control
 - d. Locomotor
5. Fitness

Important Note: The examples given in **PLAYcoach** come from many different scenarios and sports in order to provide some diversity. These examples are specific to each question, and do not represent a complete assessment. The tool must be filled out by one coach for one child (typically for one sport setting).

For each subsection, this workbook provides a framework to guide you in using the **PLAYcoach** Form.

This includes context for each question, examples on how to score each question and practical actions to address weak areas of physical literacy.

As you progress through the workbook, you will determine a score for each section. Match this score with the list of calls-to-action.

Each call-to-action suggests solutions to improve your child's level of physical literacy.

It's all about finding ways to engage the child and improve their level of physical literacy. We are dealing with the child's well-being, and they deserve our full support.

Before using the **PLAYcoach** Tool, read the following sections while reviewing a copy of the form.

Did you know - some **PLAY** Tools can be filled out online at play.physicalliteracy.ca

Physical Literacy VAS

"VAS" means Visual Analog Scale. In the first section of your *PLAYcoach* Form, you will use a VAS to score your child's overall level of physical literacy.

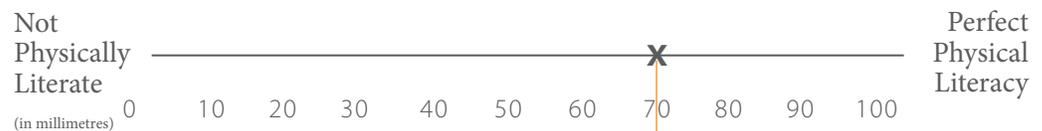
Physical literacy is defined as having the skills, confidence and motivation to enjoy a variety of sports and physical activities.

Based on the definition above, imagine a person who is perfectly physically literate in all fundamental movement skills (skipping, throwing, kicking, skating, swimming, etc.).

How does your perception of the child's physical literacy compare to someone with perfect physical literacy?

On your *PLAYcoach* Form, place a mark on the line between the two anchors, **Not Physically Literate** and **Perfect Physical Literacy**, as per the example below.

Physical Literacy VAS Score Example:



Score

This mark was placed at around 70 mm to indicate 70% perfect physical literacy.

Calls-to-Action

After scoring the *PLAYcoach* VAS, consider where you placed your mark in relation to perfect physical literacy. Use this information to help your child become more physically literate. Identify skills that need improvement and spend time with your child developing these skills through active play.

Once you have filled out the *PLAYcoach* Tool you will obtain the *PLAYcoach* Physical Literacy Score. Compare your results from this VAS to the *PLAYcoach* Physical Literacy Score. Even if both scores don't line up, their comparison is meaningful because one score may identify important calls-to-action that the other did not.

Visit these physical literacy links for more information:

- physicalliteracy.ca
- play.physicalliteracy.ca
- physicalliteracy.ca/PL-IP
- physicalliteracy.ca/Warm-up

Cognitive Domain: Confidence, Motivation and Comprehension

Children need to understand movement terms like skip, jump and hop. If they don't, they will be less likely to participate in activities that uses those terms. Positive encouragement, adequate motor skill abilities, and a safe and welcoming environment are also important factors that can increase a person's motivation to participate. The more a child participates, the more confident they become; conversely, if they don't participate, they will begin to lack confidence and self-esteem. The confidence gained through being physically literate can benefit a person throughout their life.



Framework

The Cognitive Domain Score is based on the following questions and their rating systems:

Rating System

Poor:

- Reluctance to participate in new activities
- Stays well within their comfort zone
- Avoids group situations
- May appear uncertain when speaking or performing an action

Excellent:

- Demonstrates a willingness to participate
- Willing to learn from participation, even if they may be unsuccessful
- May be seen helping others (showing others what to do or how to improve)

Assessment Example

Matt is the coach of a girls' rugby team. He's been coaching the team for a couple of months now, and has been asked by Rebecca's parents to fill out the PLAYcoach Form for their daughter.

At the beginning of the season, Matt remembers Rebecca being extremely shy. She would never volunteer for any of the drills. However, over the course of the season, as Rebecca got to know her teammates, she started to gain confidence and even volunteered to lead the team's warm-up.

Matt places a mark under "Good" because he understands that it takes time for some children to acclimatize to their surroundings and get comfortable around new people, and because Rebecca is only actively volunteering when she feels comfortable with the situation.

Q1

Confidence to
participate in sport
and physical activity

Cognitive Domain

Q2

Motivation to participate in sport and physical activity

Rating System

Poor:

- Sluggish attitude
- Doesn't appear happy when required to participate
- Routinely finds excuses to not participate

Excellent:

- Continuously trying to get better
- Always wants to participate, regardless of the activity
- Enthusiastic and optimistic about trying new things

Assessment Example:

Darrel is the coach of a diving team for kids. He's assessing a boy named Kyle and has noticed in the past month of training that Kyle is often the first one at practice, and always first to volunteer to try a new skill. Kyle is constantly trying to get better and will even do extra practices when he has free time. Darrel places a mark under "Excellent".

Q3

Comprehension of movement terms

Rating System

Poor:

- Doesn't understand simple movement terms like skip, lunge, hop, etc.

Excellent:

- Understands simple and complicated movement terms like cross-overs (grapevine), gallop, etc.
- Understands the difference between a hop and a jump, or between a zigzag and figure eight, etc.

Assessment Example

Leslie is the coach of a mountain biking team. She often does physical training with her pupils, and will typically incorporate endurance, balance and strength components into her routines. She is assessing a boy named Jared, who's been cycling with Leslie's team for about a month.

In one of her routines, Leslie asked Jared if he could do a plank on the grass for 20 seconds, and then sprint forward as quickly as possible. Jared got down into a push-up position and held it there for 20 seconds, and then jumped up and ran forward. Leslie corrected Jared's planking technique, since he ought to have been on his forearms to begin with.

On a separate occasion, Leslie asked Jared to do a skipping drill with high knees during a warm-up, and Jared needed a secondary explanation to make sure he knew what to do. Following the skipping drill, Leslie asked Jared to perform some lunges with rotation, and yet again Jared needed a secondary explanation.

Leslie knows that there is a major gap in Jared's knowledge of movement terminology, so she places a mark under "Poor".

Scoring & Calls-to-action

The following will help with scoring and interpreting what those scores mean, and determining the appropriate calls-to-action.

Use the following scale:

Poor = 0 Fair = 1 Good = 2 Very good = 3 Excellent = 4

Scoring Example

	Poor	Fair	Good	Very good	Excellent	Score
1. Confidence to participate			√			2
2. Motivation to participate					√	4
3. Comprehension of movement terms	√					0
					Total	6

What does the score mean and what can I do about it?

Score

Calls-to-action

8-12 If the child scored between 8 and 12, they have the necessary confidence, motivation and education to pursue physical activity.

- Emphasize fun and play as the child continues to develop physical literacy
- Encourage the child to be as active as possible
- Identify weaknesses and set goals to improve those weaknesses
- Reinforce progress, effort and learning

4-7 If the child scored between 4 and 7, they will most likely need encouragement to step outside of their comfort zone and pursue physical activity.

- Ensure that each child has the opportunity to participate in all activities
- Modify games and rules to maximize action for everyone
- Identify weaknesses and set goals to improve those weaknesses
- Reinforce progress, effort and learning

0-3 If the child scored between 0 and 3, they may lack the confidence, motivation and/or education to pursue physical activity.

- Create environments in which children want to participate
- Offer choices that fit within your coaching philosophy (e.g. "Would you rather start on offense or defense for this drill?")
- Identify weaknesses and set goals to improve those weaknesses
- Reinforce progress, effort and learning



Environment

Canada offers a wide range of opportunities for physical activity. Think of all the things you can do during the summer when the weather is warm, then think of all the options our winters provide as well. Canadian seasons give us the opportunity to be active indoors, outdoors, in and on water and on snow and ice. If you want your child to pursue an active lifestyle and have the chance to experience many activities, then they have to be versatile and able to participate in all of our Canadian seasons.

Framework

The Environment Score is based on the following questions and their rating systems:

Q4

Able to participate in many environments
(ground, water, air, snow and ice)

Rating System

Poor:

- Lacks the ability to participate in a specific environment (i.e. if the child can't swim, they receive "Poor" for question 4c)

Excellent:

- The ability to participate with confidence and competence in a specific environment

Note: If you don't know, don't answer. If you are unaware whether the person is able to participate in one of the four environments, simply leave that answer blank.

Assessment Example

Jessica is the coach of a girls' field hockey team. She is assessing Kelly, who has been playing on the team for a couple of months.

Kelly seems to be most comfortable in the gym, where the team has some of their practices. She is quick, agile, coordinated and well-balanced on the gym floor. When Kelly gets outside on the field, however, she doesn't seem as confident in her abilities to move. Kelly is still quite capable in an outdoor setting, but doesn't excel over her peers. Since Jessica has only had the chance to observe Kelly in an indoor and outdoor setting, she places a mark under "Excellent" for indoor, and under "Good" for outdoor.

Environment

Rating System

Poor:

- Very internally focused and not perceiving the environment (objects and others) around them
- Typically looking at the ground (head down)
- Prone to collisions and injury

Excellent:

- Constantly looking at surroundings and is very aware of who and what is around them
- Uses information from all senses to be aware of their environment (sight, sound, feel, etc.)
- Able to track movement of objects and others in relation to their movement

Assessment Example

Robin is the coach at a taekwondo club for kids. He is assessing one of the girls, Cynthia, who he has been training for the past month.

When Cynthia performs a skill or drill, she usually likes to find her own space far away from others. She will often hesitate to perform a skill or drill if she feels that someone is getting too close and might get in the way. Robin has also noticed that Cynthia is very careful when she partners up with someone else in the class.

Robin places a mark under "Excellent" because he knows that Cynthia is very observant and is always keeping a lookout for others on the mat.

If you coach an individual in a single sport, likely played in one specific environment, it will be difficult to gauge how adept that person is in other environments (i.e. if you're a soccer coach, how are you supposed to know how able the individual is on the ice or in water?). One way to get a sense of this is by communicating with the athletes.

Early on in the season you might ask the athlete or the team as a whole how active they are in other sports/environments, just to get an idea of the diversity of experience. CS4L has developed a tool that will help you gather this information. The tool is called the **PLAYinventory**. It's a checklist-style questionnaire for children to identify which activities they have regularly participated in during their leisure time (outside of school/work) in the past year.

While **PLAYinventory** is a supplementary piece to the **PLAY** tools, we highly recommend that coaches find the time to use it at the beginning of their season. We know that coaches often limit themselves to the child's participation in only one sport; however it's important that the coach is aware of all other activities that the child participates in. Take this as an opportunity to learn about the child.

For more information, visit:

physicalliteracy.ca/PLAY/Inventory

Q5 Awareness of the environment and others

Environment

Use the following scale:

Poor = 0 Fair = 1 Good = 2 Very good = 3 Excellent = 4

Scoring Example

	Poor	Fair	Good	Very good	Excellent	Score
4a. Able to participate in the gym					√	4
4b. Able to participate outdoors			√			2
4c. Able to participate in and on water				√		3
4d. Able to participate on snow and ice				√		3
4e. Able to participate in the air			√			2
5. Awareness of the environment and others					√	4
					Total	18

What does the score mean and what can I do about it?

Score

Calls-to-action

15–24 If the child scored between 15 and 24, they have been exposed to and feel comfortable in most environments.

- Challenge the child by creating difficult tasks in every environment at your disposal
- Encourage the child to be active in as many environments as possible

7–14 If the child scored between 7 and 14, they could still benefit from being exposed to different environments, but they most likely have a strong enough foundation to carry them into different opportunities.

- Talk to the child's parents about the importance of being physically active in all environments
- Encourage the child to be active in as many environments as possible

0–6 If the child scored between 0 and 6, they still need lots of work in most environments and may also need to improve their awareness around others.

- Talk to the child's parents about the importance of being physically active in all environments
- Give the child casual reminders to keep their head up and look around as much as possible
- Do some activities that encourage and teach awareness in the environments to which you have access

Motor Competence

Children need a wide variety of movement skills that they can perform in different settings (outdoors, indoors, in and on water, on snow and ice and even in the air). They also need a certain level of motor competence to participate in almost any activity or game. A child with highly developed movement skills and greater competence will be more likely to participate in physical activities.

Motor Competence is divided into four subsections:

- a. General Motor Competence
- b. Balance
- c. Object Control
- d. Locomotor





a. General Motor Competence

Children need a wide variety of movement skills that they can perform in different settings. They also need a certain level of motor competence to participate in most activities. A child with highly-developed movement skills and greater competence will be more likely to participate in physical activities.

To learn more about fundamental movement skills, visit:

canadiansportforlife.ca/physical-literacy/more-about-fundamental-skills

Framework

The General Motor Competence Score is based on two questions and their rating systems (to be scored independently):

Q6

Possesses a diverse movement skill set

Rating System

Poor:

- Can only perform a few movement skills at a competent level
- Is limited to skills associated with only one part of the body

Excellent:

- Able to perform all (or most) fundamental movement skills
- Able to demonstrate a variety of locomotor, upper- and lower-body, and balance skills

Assessment Example

Aaron is the coach of a middle-school girls' basketball team. He is assessing Suzanne's physical literacy with regards to the diversity of her movement skill set.

Suzanne is one of Aaron's best players, but he also knows that her height plays a big role in her effectiveness on the court, since Suzanne is usually one of the tallest girls out there. Aaron realizes that her skill on the court doesn't necessarily translate to good fundamental movement skills. He has noticed that Suzanne can't dribble very well, and her cutting and acceleration is fairly weak.

Suzanne does have a good lay-up though, since she can take powerful strides and jump well. Suzanne also passes and shoots with decent speed and accuracy.

Aaron decides to put a mark under "Good" because Suzanne certainly needs improvement in some areas, but she has a good grasp of some movement skills.

Motor Competence

Use the following scale: Poor = 0 Fair = 1 Good = 2 Very good = 3 Excellent = 4

Scoring Example

	Poor	Fair	Good	Very good	Excellent	Score
6. Possesses a diverse movement skill set			√			2
					Total	2

What does the score mean and what can I do about it?

Score

Calls-to-action

2-4

A score between 2 and 4 indicates that the child has a reasonable set of movement skills that they can use to maintain a physically active lifestyle.

- Identify areas that may still need improvement
- Challenge the child where they need improvement
- Advise and educate parents on where the child needs improvement and how parents can help
- Track the progress and development of weaker movement skills

0-1

A score between 0 and 1 indicates that the child may have difficulty executing fundamental movement skills. That being said, a child who does not possess a diverse movement skill set may still perform a limited number of skills very well. This is an important distinction to make when identifying gaps in the child's development.

- If the child lacks a diverse set of movement skills, it's important to introduce them to new activities (as soon as possible!)
- Make the activities fun – change the setting to accommodate as many kids as possible
- Remember that repetition-based learning works
- Develop the ABCs: agility, balance, coordination and speed

General Motor Com

Q7

Ability to select and sequence skills suitable to setting

Rating System

Poor:

- Unable to modify skills suitable to the setting
- Sequencing does not flow smoothly (interrupted movement)

Excellent:

- Almost always selects proper skills suitable to the setting (e.g. jumps in the air to "head" a soccer ball)
- Sequencing is smooth and refined

Assessment Example

Sophie is the coach of a girls' ringette team. Sophie is assessing one of the girls on the team, Melissa, who has been having trouble skating and shooting at the same time. Without a stick in her hands, Melissa is a fairly competent skater; when she can stand still and take her time with a shot, she can put some nice speed on the ring. However, when it comes to sequencing these skills together, Melissa often loses control of the ring or forgets to skate as she goes in for the shot or pass. Melissa will often have to stop, and be standing still, in order to make a decent pass or shot.

This inability to control the ring after sequencing a movement skill leads Sophie to place a mark under "Poor".

What does the score mean and what can I do about it?

Score

Calls-to-action

2-4 A score between 2 and 4 indicates that the child can select appropriate skills and sequence skills properly for a number of different settings.

- Identify any weaknesses in the child's ability to select or sequence skills
- Set goals to improve those weaknesses and track progress of each goal
- Challenge the child to sequence skills that they don't often perform

0-1 A score between 0 and 1 indicates that the child may not be selecting appropriate skills, or sequencing proper skills suitable to their setting.

- Ensure that the child has acquired most of the fundamental movement skills (this will give them more skills to choose from when sequencing)
- Give the child examples of how to sequence skills properly (and under which circumstances) specific to your sport
- Offer the child pointers that will help to remind them of the proper sequences for each skill

petence

If the child lacks general competencies and the ability to select and sequence skills suitable to their setting, it's important to get them back to the basics. Work on developing their fundamental movement skills in a structured and deliberate fashion.

See the Developing Physical Literacy resource to help you along the way:
canadiansportforlife.ca/resources/developing-physical-literacy



Examples of sequencing skills together:

Simple (above): A proficient throw requires a sequence of movements to maximize distance or speed. These movements include stepping forward with foot opposite the throwing arm, differentiated trunk rotation, lag of the upper arm behind upper trunk rotation, proper release and follow through, etc.

Complex (right): A Team Handball throw may require the player to run, jump and then throw the ball while in mid-air – all in one sequence of actions.



b. Balance

Many injuries are related to a lack of physical literacy – especially the lack of motor competence in balance when handling collisions and falls. The more physically literate the child, the more likely they are to avoid collisions and falls. If contact cannot be avoided, the physically literate child is more likely to absorb the impact in a more fluid manner that lessens the chance of injury. As such, it's important to address this fundamental ability.

Framework

The Balance Score is based on the following questions and their rating systems:

Q8

Basic balance



Rating System

Poor:

- Has difficulty retaining and regaining balance when doing static and dynamic activities
- Falls or stumbles very often
- Is fearful of unstable surfaces (narrow or slippery) or collisions

Excellent:

- Can maintain balance with ease when doing static and dynamic activities
- Rarely falls over, except in very demanding circumstances
- Can balance on many different parts of the body (feet, hands, etc.) and surfaces

Assessment Example

Denise is the coach of a group of cross-country skiers. She is aware of the importance of being physically literate, so she decides to assess the kids in her group.

While assessing one of the boys, Jacob, Denise realizes that Jacob has some difficulty maintaining balance on his skis. Jacob doesn't have too much trouble maintaining his balance while stationary and listening to instruction, but once he starts to move, he often wobbles and falls over.

Denise places a mark under "Fair" because she knows that most kids have difficulty maintaining balance on the snow, but Jacob definitely needs some improvement in this area.

Static balance is holding a position and not moving. Example: standing on one foot and holding the other knee up ("stork stand").
Dynamic balance is maintaining equilibrium while in motion. Example: walking on hands in a hand-stand position.



Motor Competence

Rating System

Poor:

- Collides often with objects or people when they could be avoided
- Doesn't efficiently absorb the impact of a collision
- Unable to adjust their own movements to account for the movement of other people and objects

Excellent:

- Collides rarely with objects or people
- Absorbs impact of a collision very efficiently
- Able to adjust movement trajectory in accordance with the movement of other people or objects

Q9 Collisions

Assessment Example

Nathaniel is the coach of a boys' fencing team. He is assessing a boy named Charles, who has been on the team for a few months now. Charles is learning how to keep his distance from his opponent, and then strike with a quick lunge at his mark. This is posing him some problems though, since he will sometimes over-lunge, or not time it properly and end up colliding with his opponent.

Charles is usually very good about not hurting either himself or his opponent if he bumps into them, but he is also fairly aggressive with his lunging, which results in more collisions than Nathaniel would like to see.

For these reasons, Nathaniel places a mark under "Good", and will coach Charles about safety when lunging.

Motor Competence

Q10

Stumble recovery

Rating System

Poor:

- Unable to recover quickly after stumbling (which often leads to an uncontrolled fall)
- Doesn't fall properly, resulting in increased risk of injury

Excellent:

- Consistently able to recover after stumbling
- Ability to fall properly if no recovery is made after stumbling

Assessment Example

Yvonne is the coach of a group of figure skaters. She is assessing one of the girls on the team, Amy, who has been skating with the group for more than a year.

Yvonne has seen Amy stumble and fall countless times during training, but Amy rarely hurts herself since she is very good at absorbing the impact of the fall. For the most part, Yvonne knows that recovering after stumbling on the ice is difficult, but Amy does a good job to either maintain balance or fall appropriately and not injure herself.

For these reasons, Yvonne puts a mark under "Very good".



Balance

Use the following scale: Poor = 0 Fair = 1 Good = 2 Very good = 3 Excellent = 4

Scoring Example

	Poor	Fair	Good	Very good	Excellent	Score
8. Basic balance		√				1
9. Collisions			√			2
10. Stumble recovery				√		3
					Total	6

What does the score mean and what can I do about it?

Score

Calls-to-action

8–12

A score between 8 and 12 represents very good balance skills and a lesser risk of injury during dynamic movements.

- Work on balance in various environments – just because a child has mastered balance in the gym does not mean they have mastered balance in an outdoor/snow/ice/water/air environment
- Reinforce the importance of balance for reducing risk of injuries

4–7

A score between 4 and 7 should reveal certain gaps in balance that need to be addressed.

- Identify where the child is lacking in terms of balance
- Set specific goals to improve the child's balance
- Educate the child about balance and how to improve it: lower centre of gravity, keep a wide stance, bend at the knees, weight on the balls of their feet, etc.

0–3

A score between 0 and 3 represents the immediate need to improve the child's balance. Whether the child lacks in basic balance, collisions or stumble recovery, it's important to work on all three (in the safest manner possible).

- Incorporate balancing skills into some of your activities
- Incorporate balancing activities into your warm-up: one legged stands, standing on your toes/heels, etc.
- Educate the child about balance and how to improve it: lower centre of gravity, keep a wide stance, bend at the knees, weight on the balls of your feet, etc.



c. Object Control

Object control and manipulation is an essential skill for *many* sports and activities.

Some examples of object control:

- Swinging an object (bat, golf club, hammer, etc.)
- Controlling a soccer ball (with head, trunk, legs and/or feet)
- Throwing a Frisbee (speed of arm, coordination with wrist and release, etc.)

Object control is necessary for other tasks such as: painting, writing, juggling, shuffling a deck of cards, etc.

For a complete list of object control skills used during physical activity, see: canadiansportforlife.ca/ten-key-factors/more-about-fundamentals

Framework

The Object Control Score is based on the following questions and their rating systems:

Q11 Hands

Rating System

Poor:

- Lacks ability to manipulate and control objects with hands
- Can't send or receive objects in a consistent manner
- Often fumbles what they are holding
- Doesn't use appropriate grip when holding an object

Excellent:

- Able to send and receive objects
- Able to maintain control of objects while moving
- Able to control objects to child's desire using their hands

(Look up "Contact Juggling" online for some great examples of upper-body object control)

Assessment Example

Jerome is a coach of a group of young golfers. He is assessing one of the girls in his group, Michelle, who only just started to golf about one month ago. Jerome has seen Michelle's control with several different clubs: irons, wedges and putter. Her control with the irons and wedges is fairly weak and uncoordinated, but she is still able to connect with the ball.

Jerome is most impressed with her control with the putter – Michelle has a smooth, gentle stroke, and even though she misses as much as the other kids, her control with the putter is consistent.

For these reasons, Jerome places a mark under "Good".

Motor Competence

Rating System

Poor:

- Lacks ability to manipulate and control object with feet
- Control with feet is often clunky and uncoordinated
- Can't send or receive objects in a consistent manner

Excellent:

- Able to control objects with feet to child's desire
- Able to send and receive objects
- Able to maintain control of objects while moving

Assessment Example

Tyler is the coach of a girls' soccer team. He is assessing Jenny, who's been on his team for a couple of months.

Jenny is pretty comfortable with the ball at her feet. She tends to lose control if she runs too fast, but she settles passes well with both the top and instep of her feet.

Tyler sees that Jenny's skill with her feet is pretty good, but he also knows that with more practice her skill will improve. He places a mark under "Good".

Q12
Feet

Rating System

Poor:

- Less dominant side of the body is significantly less coordinated and less developed than the dominant side
- The child's movements from right to left are very asymmetrical

Excellent:

- Less dominant side of the body is just as capable as the dominant side for all object control skills and activities
- The child shows very good symmetry, right to left, during movements

Assessment Example

Fenton is the coach of a boys' boxing team. He is assessing Paul, who's been with the team for just over three months.

Fenton knows the importance of a strong and quick right and left arm. Fenton also realizes that Paul hasn't gone through puberty yet, so his strength shouldn't be the focus of training. He's been helping Paul to develop his speed and coordination with his less dominant arm, and Paul has been making some noticeable improvement.

Paul's left (non-dominant) arm is much quicker and much more coordinated than when he first started. Fenton places a mark under "Very good" because he knows that there is still room for a little improvement.

Q13
Ability to use left
and right sides
equally

Object Control

Use the following scale: Poor = 0 Fair = 1 Good = 2 Very good = 3 Excellent = 4

Scoring Example

	Poor	Fair	Good	Very good	Excellent	Score
11. Hands			√			2
12. Feet			√			2
13. Ability to use left and right sides equally during activity				√		3
Total						7

What does the score mean and what can I do about it?

Score

Calls-to-action

8–12 A score between 8 and 12 represents very good object control with both hands and feet, and on both sides of the body.

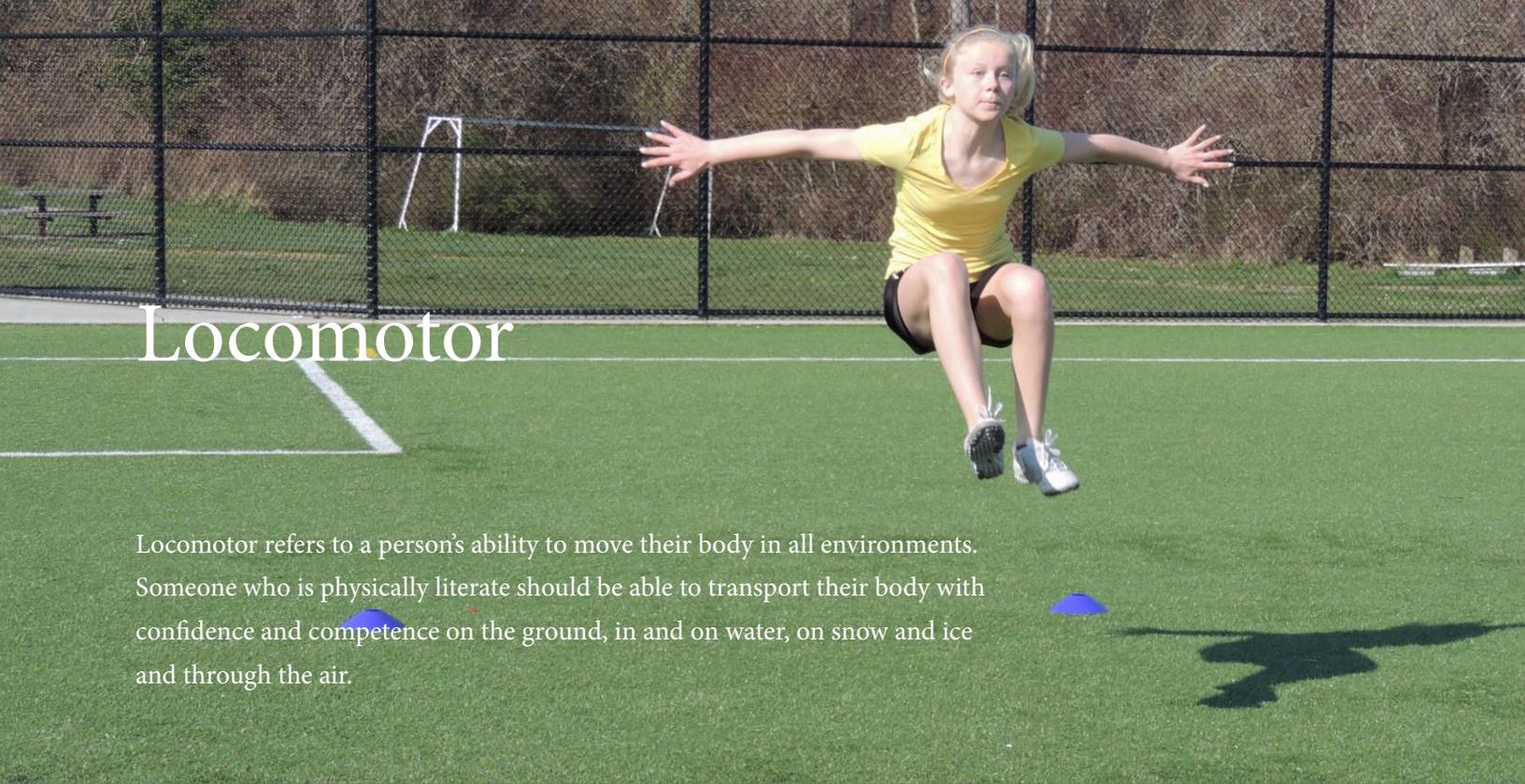
- Identify any areas where the child may need improvement
- Create specific goals to improve these areas
- Continue to challenge the child to use both hands and feet on both sides of their body in all activities

4–7 A score between 4 and 7 indicates competence with both hands and feet, and on both sides of the body, but there is still room for improvement in most of these components.

- Identify where the child needs improvement
- Make sure that your activities allow for the development of both hands and feet (especially at younger ages), and on both sides of the body
- If your sport's focus is either the upper, lower, left or right side of the body, try to incorporate the missing components into your warm-up or non-sport-specific activities

0–3 A score between 0 and 3 indicates the need to improve the child's general object control abilities.

- Start by ensuring that the child has learned most fundamental movement skills and fundamental sport skills related to object control
- Have the child start by learning these skills on both sides of their body to determine their dominant side (the side they feel the most comfortable with)
- Improve the dominant side first to help the child get accustomed to each skill/activity, and then focus on developing the non-dominant side
- Incorporate object control into as many activities as possible
- Create certain restrictions like: "Clean up balls by kicking with your feet, or throwing them into the basket", or "left foot/hand only for this drill"



Locomotor

Locomotor refers to a person's ability to move their body in all environments. Someone who is physically literate should be able to transport their body with confidence and competence on the ground, in and on water, on snow and ice and through the air.

Framework

The Locomotor Score is based on the following questions and their rating systems:

Rating System

Poor:

- The child's limbs are not coordinated to produce purposeful movement
- Movements appear heavy and slow
- Limited ability to speed up and slow down during movement
- While speeding up or slowing down, the child often slips, stumbles or stutter-steps
- The child's limbs are uncontrolled as the child accelerates or slows down

Excellent:

- Accelerations and decelerations are quick, efficient and strong
- Able to control starts and stops to a target (pylon, line, etc.)
- The child shows good form and tight technique as they pick up speed or slow down
- Movements appear light and quick
- Child can start and stop in all directions of movement (forward, backward and sideways)

Assessment Example

Henry is the coach of a middle-school girls' badminton team. He is assessing Desiree, who's been on the team for two months.

During practice, Henry spends a lot of his time teaching appropriate footwork to his players, since the ability to move around the court at top speed is a very important aspect of badminton. Henry has noticed that Desiree is one of the quickest players on the team. Her ability to run to the front of the net, turn around, and then run to the back of the court is very proficient.

Henry places a mark under "Excellent" because he feels that Desiree could apply her speed in other activities and still be very successful.

Q14
Start/Stop

Motor Competence

Q15

Running

Running is the foundation of physical preparation for many sports and is a competency that should be as proficient as possible. An individual's running skill can mature and continue to improve well into adulthood.

Rating System

Poor:

- Inefficient and uncoordinated movements of upper and lower limbs
- Limited upper body motion
- Lots of tension in neck, shoulders, arms and legs
- Stride is too long or too short
- Cadence/rhythm is off

Excellent:

- Arms and legs are coordinated and well controlled
- Stride is proper width and length
- Muscles are relaxed, but ready to be used as needed
- Cadence/rhythm is proper and maintained

Assessment Example

Stephanie is the coach of a girls' softball team. She is assessing Iris, who's been with the team for just over a month.

Iris has fairly good running technique, even though her acceleration and top speed isn't as fast as most of her teammates'. Stephanie knows the importance of good acceleration in softball, but she also recognizes that Iris's technique is very efficient and controlled.

Stephanie places a mark under "Good" because she knows that Iris has a solid foundation and that her speed will improve with a bit of training.

Q16

Agility

Rating System

Poor:

- Unable to transfer momentum efficiently and quickly when changing direction
- Tremendous loss of speed and power when changing direction
- Places body in awkward positions when changing direction
- Uses multiple steps to change direction

Excellent:

- Ability to change direction (seemingly effortlessly) with minimal loss of speed
- Uses minimal steps to adjust direction
- Limbs are well-placed when changing directions

Assessment Example

Iza is the coach of a swimming team for children. She is assessing one of the boys, Julian, who's been swimming on the team for three months.

Iza knows that Julian is one of the fastest swimmers on the team. She attributes some of his speed to his coordination and agility when he gets to the end of the lane and performs a flip turn. Julian hardly loses any speed when he turns, and he is able to transfer his momentum very efficiently and quickly during each turn.

For these reasons, Iza places a mark under "Excellent"; however, she makes a note that this agility only applies in the water – Iza doesn't know how agile Julian is outside of the water.

Locomotor

Use the following scale: Poor = 0 Fair = 1 Good = 2 Very good = 3 Excellent = 4

Scoring Example

	Poor	Fair	Good	Very good	Excellent	Score
14. Start/Stop					√	4
15. Running			√			2
16. Agility					√	4
					Total	10

What does the score mean and what can I do about it?

Score	Calls-to-action
<p>8–12 A score between 8 and 12 represents the ability to move the body competently and efficiently from one place to another.</p>	<ul style="list-style-type: none"> • Continue to develop running technique for maximum efficiency and speed • Create challenging tasks that will further develop agility • Set up drills that require sprints and quick movements in different directions all in a tight space • Improve on the speed and control of acceleration and deceleration in your environment
<p>4–7 A score between 4 and 7 indicates that there is still room for improvement in one or more locomotor skills.</p>	<ul style="list-style-type: none"> • Identify which locomotor skills need improvement • Incorporate locomotor skills into non-specific sport skills • Educate the child about the benefits of excellent locomotor skills
<p>0–3 A score between 0 and 3 represents the need for improvement in all locomotor skills.</p>	<ul style="list-style-type: none"> • Start with the basics of proper running technique to encourage and motivate the child to move • Incorporate locomotor skills into as many activities as possible • Educate the child about the need for fundamental locomotor skills in all environments – not just the one in which you coach

For a complete list of locomotor skills, visit:

canadiansportforlife.ca/ten-key-factors/more-about-fundamentals

Warm-up

Canadian Sport for Life has developed an easy-to-use warm-up for children. The warm-up incorporates several dynamic movements in order to improve a child's physical literacy while they prepare their body for activity.

The "Developing Physical Literacy Warm-up" is broken down into three age groups: 7–8, 9–10 and 11+, with different activities and guidelines for each category.

The warm-up should last between 15 and 20 minutes and is specifically designed to improve physical literacy, as well as reduce the child's risk of injury during activity.

See the Developing Physical Literacy Warm-up to find ways of improving agility and running competencies: physicalliteracy.ca/move-prep



Fitness

Being physically literate is not the same as being physically active. You can be fit without possessing physical literacy, and conversely, you can be physically literate and choose not to be active.

For this reason, the final question of **PLAYcoach**, which measures overall fitness, is not included in the **PLAYcoach** Physical Literacy Score. However, this is not to say that fitness is unimportant; it is simply distinct from physical literacy. Understanding both fitness and physical literacy is important for the healthy development of all children.

The Fitness Score, when used in conjunction with the **PLAY** tools, is a simple way to determine if the child's abilities, or lack thereof, are preventing them from being physically active. This may identify the child's need to be more physically active in order to develop their fitness components.

Health-related fitness components include:
cardiovascular fitness

(a healthy heart and system of delivering blood); **strength** (maximal force) and **endurance** (high repetition of contractions); **flexibility**

(range of motion in joints); and **body composition**

(bones, muscles, fat, etc.).

For some individuals (children and adults alike), these fitness components (or lack thereof) create barriers for participation in physical activity.



Fitness

Framework

The Fitness Score is based on the following question and its rating system:

Q17 Overall fitness level

Rating System

Poor:

- Lacks in all fitness components
- Severely impaired by a lack in fitness components (i.e. unable to participate in most physical activities)

Excellent:

- Well developed in *all* fitness components

Score	Calls-to-action
<p>Excellent or Very good</p> <p>The child has adequately developed all (or most) fitness components.</p>	<ul style="list-style-type: none">• Continue to motivate and encourage the child to be physically active• Communicate to the parents that it's beneficial for all children to participate in a variety of activities• Continue to introduce new activities in your own environment as well; challenge the child's weakest fitness component(s)
<p>Good, Fair or Poor</p> <p>The child is noticeably lacking in more than one fitness component.</p>	<ul style="list-style-type: none">• Determine which fitness components need to be addressed• Make specific recommendations to the child and their parents to improve those fitness components• Be sure to involve the child in activities that will benefit their weaker fitness components as much as possible
	<p>Here are some resources that may benefit the child's overall fitness:</p> <ul style="list-style-type: none">• Canadian Society for Exercise Physiology Physical Activity Guidelines• Active Healthy Kids Canada resource (Long Form Report Card)• Active for Life website: activeforlife.ca• Fitness tests provided by a reputable organization that help track improvement <p>All of this information can be found at physicalliteracy.ca/PLAY/more-info</p>

PLAYcoach Physical Literacy Score

The *PLAYcoach* Physical Literacy Score is the overall measure of the coach's perception of the child's level of physical literacy.

Add up the totals from each subsection to obtain the subtotal.

Next, multiply the subtotal by 1.56 to obtain the *PLAYcoach* Physical Literacy Score.

(Example shown)

	Question	Score
Cognitive Domain	Q.1-3	6
Environment	Q.4-5	18
Motor Competence		
a. General Motor Competence	Q.6-7	2
b. Balance	Q.8-10	6
c. Object Control	Q.11-13	7
d. Locomotor	Q.14-16	10
Add up the section totals to obtain the Subtotal		49
Multiply the subtotal by 1.25 to obtain the <i>PLAYcoach</i> Physical Literacy Score.		61.25

The maximum score of 100 represents high physical literacy.

Not only does the score give you some general information on how physically literate your child is, it can also be used, in conjunction with the other *PLAY* tools, as a baseline measurement to be improved upon.

To keep track of this score, a tracking sheet has been provided at the back of the workbook.

Once you have completed the *PLAYcoach* Form, don't forget to compare the *PLAYcoach* Physical Literacy Score with the Physical Literacy VAS Score obtained at the beginning of the workbook.

Do they match up?

Is this what you had anticipated?

Key Ideas



Key ideas to keep in mind

- **Being physically literate means you're comfortable in all environments** (on the ground; in and on the water; on snow and ice; in the air).
- **By developing physical literacy, we are helping to ensure that the child has more opportunities to be active later in life.**
- **Recommend to parents that their child should have the opportunity to be physically active every day in their home and at school** (you can help by supplying equipment and using the Developing Physical Literacy Warm-up before every practice and game).
- **Activities should be "FUN first" – prioritize the child's enjoyment.**
- **Children love diversity in activities, and this is the foundation of physical literacy. Movement diversity with many repetitions yields confidence and the ability to participate.**

Participant's Name _____ Gender: M F Age: ____

I am a (check all that apply): coach* exercise professional therapist other

* I coach this athlete/participant in the following sport/activity: _____

If physical literacy is defined as the ability to proficiently execute a repertoire of movement tasks in multiple environments, then how would you rank this person's overall level of physical literacy? Place a tick anywhere along the line.

Not Physically Literate _____ Perfect Physical Literacy

Judge the ability of the participant based upon an ideal athlete being excellent.

	Poor	Fair	Good	Very good	Excellent
1. Confidence to participate in sport and physical activity					
2. Motivation to participate in sport and physical activity					
3. Comprehension of movement terms					
4a. Able to participate in the gym					
4b. Able to participate outdoors					
4c. Able to participate in and on the water					
4d. Able to participate on snow and ice					
4e. Able to participate in the air					
5. Awareness of the environment and others					
6. Possesses a diverse movement skill set					
7. Ability to select and sequence skills suitable to setting					
Movement Competence					
Balance					
8. Basic balance					
9. Collisions					
10. Stumble recovery					
Object Control					
11. Hands					
12. Feet					
13. Ability to use left and right sides equally					
Locomotor					
14. Start/Stop					
15. Running					
16. Agility					
17. Overall fitness level					

What physical activities and sports are you aware of that this person participates in?

Participant's Name _____

Use the following scale: Poor = 0 Fair = 1 Good = 2 Very good = 3 Excellent = 4

Add up the section totals to obtain the Subtotal

Next, multiply the subtotal by 1.25 to obtain the **PLAYcoach** Physical Literacy Score.

Cognitive Domain		Score
1. Confidence to participate in sport and physical activity		
2. Motivation to participate in sport and physical activity		
3. Comprehension of movement terms		
Total		
Environment		
4a. Able to participate in the gym		
4b. Able to participate outdoors		
4c. Able to participate in and on water		
4d. Able to participate on snow and ice		
4e. Able to participate in the air		
5. Awareness of the environment and others		
Total		
Motor Competence :		
General Motor Competence		
6. Possesses a diverse movement skill set		
7. Ability to select and sequence skills suitable to setting		
Total		
Balance		
8. Basic balance		
9. Collisions		
10. Stumble recovery		
Total		
Object Control		
11. Hands		
12. Feet		
13. Ability to use left and right sides equally		
Total		
Locomotor		
14. Start/Stop		
15. Running		
16. Agility		
Total		

PLAYcoach Physical Literacy Score	
Cognitive Domain	
Environment	
Motor Competence	General Motor Competence
	Balance
	Object Control
	Locomotor
Add up the section totals to obtain the Subtotal	
Subtotal	
Multiply the subtotal by 1.25 to obtain the PLAYcoach Physical Literacy Score.	
Total	



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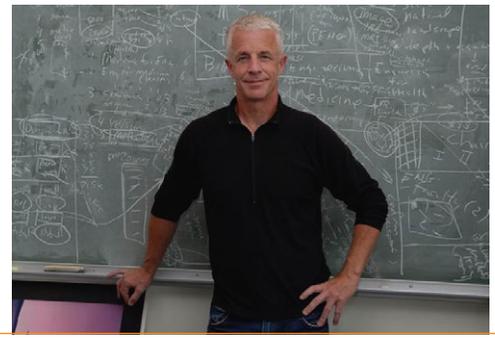
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CS4L Champion



Dean Kriellaars, BPE, MSc, PhD, CEP

Dr. Kriellaars is a faculty member of the School of Medical Rehabilitation, Department of Physical Therapy, at the University of Manitoba. He is a member of the Spinal Cord Research Centre and a scientist of the Manitoba Institute of Child Health.

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He is a CS4L Champion making a difference!

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References:

The information presented in this PLAY Workbook is based on the research done by Dr. Dean Kriellaars, and the content of several CS4L resources including *Canadian Sport for Life Resource Paper*; *Developing Physical Literacy*; *Physical Literacy Concept Paper*; *An Introduction to Physical Literacy*; and *Mental Fitness for Long-Term Athlete Development*. These CS4L resources can be found at canadiansportforlife.ca/resources/LTAD-resource-papers.



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