

PLAY

Physical Literacy Assessment for Youth



CS4L
PHYSICAL
LITERACY

basic

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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.

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**.

CS4L PHYSICAL LITERACY

Only seven percent of Canadian children get enough daily exercise.

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

A young girl with brown hair, wearing a light purple polo shirt and a white tennis skirt, is captured in the middle of a tennis swing on a court. She is holding a tennis racket with a yellow and black frame. A bright orange and yellow tennis ball is suspended in the air just above her racket. The background is a blurred green tennis court with a white net in the foreground.

CS4L PHYSICAL LITERACY

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

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 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.

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

What is PLAYbasic?

PLAYbasic provides an assessment of key movement skills performed by the child. The tool itself is made up of five tasks that cover the child's physical abilities. Each ability is graded on a four-point rubric with the following categories: Initial, Emerging, Competent and Proficient.

Who can use PLAYbasic: Since **PLAYbasic** involves the assessment of specific skills, the evaluator must have some education in movement and motion analysis. This could include NCCP-certified coaches, exercise professionals, physiotherapists or other sport practitioners. These individuals must have the knowledge to accurately assess the child's technique, and must be able to identify gaps and weaknesses in the child's development when assessing each task.

For a coach, physiotherapist, athletic therapist, exercise professional or recreation professional: Use **PLAYbasic** in conjunction with the other **PLAY** tools to create a baseline assessment of the child's current level of physical literacy. Use the baseline assessment to create goals and track improvement. You and the child should mutually establish *realistic goals* (where the child wants to be) and a manageable process to reach them.

For a parent: **PLAYbasic** provides an assessment of your child's skills and abilities. By having a trained professional assess your child using **PLAYbasic**, you will gain insight into your child's strengths, weaknesses and physical development.

Learn about the other **PLAY** tools at: play.physicalliteracy.ca

Physical Literacy Assessment for Youth

Directions

CONFIDENCE:

On the right hand side of the tool, you'll see a column labelled "Confidence". In this column, indicate whether the child had low confidence when performing each task.



1. Ask the child to perform each of the tasks listed in the first column of the **PLAYbasic** Form.
2. Observe the child performing the skill and rate each skill based on the four categories provided (Initial, Emerging, Competent and Proficient).
3. Score the assessment using the **PLAYbasic** Score Sheet located at the bottom of the form.
4. **Take action** : View a list of calls-to-action in your **PLAYbasic** Workbook or on our website at: play.physicalliteracy.ca
5. Remember to use the **PLAYbasic** Tool along with the other **PLAY** tools to see all perspectives of the child's level of physical literacy.



PLAYbasic workbook

In this section, you'll learn how to use and score the **PLAYbasic** Tool, and how to match your score with the appropriate call-to-action.

To simplify things, we've broken down **PLAYbasic** into four subsections:

1. Locomotor
2. Throwing
3. Kicking
4. Balance

For each subsection, the workbook provides a framework to use the **PLAYbasic** Form.

The framework will provide:

- Equipment needed
- Instructions (how to administer)
- Definitions of Initial, Emerging, Competent and Proficient
- Examples of how a hypothetical assessor may have answered each question. Refer to these examples if you are looking for additional insight

As you progress through this workbook, you will receive a score specific to each section. Match this score with the appropriate calls-to-action to determine helpful solutions to improve the 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 nothing less.

Please get out your **PLAYbasic** Form and follow along for the upcoming sections.

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

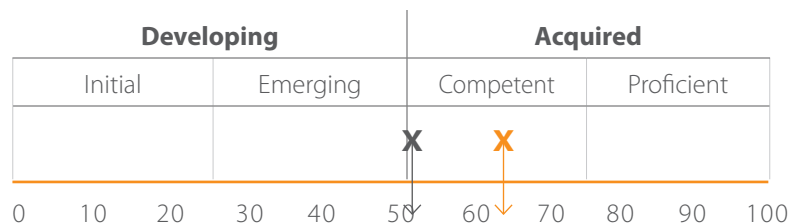
Important

Important: Each question uses a 100mm scale so that the assessor may place a mark anywhere along the scale within each box. This allows the assessor to be more specific when defining the child's ability for each task.

Remember that the top score for proficient is the very best anyone could be at the skill, regardless of age.

Example: This assessor has placed a black mark on the left-most side of the "Competent" box to identify that Child A has only just acquired the skill. This score is worth 51/100.

An orange mark has been placed farther to the right side of the "Competent" box to indicate that Child B is more competent than Child A, who has just acquired the skill. This second score would be worth 63/100.



Locomotor

Children need a wide variety of movement skills that they can perform in a different settings (outdoors, indoors, in and on water, on snow and ice and in the air). 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.

The Locomotor section focuses on the child's ability to run. 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, but the sooner it's properly developed, the better!



Locomotor

Q1

Run there and back

“I want you to run a straight line to the pylon, stop, turn around and run back. I want you to run to the line, turn around and run back as best you can. Ready? Run now.”

Equipment

For this task, you'll need 2 pylons (5 metres apart)

Rating System

Developing

Initial: Presence of numerous major gaps during execution:

- Stumbles, slips or trips repeatedly
- Does not exhibit flow in transitions
- Movement is disjointed
- Oversteps lines
- Slow speed
- Running form missing key features

Emerging: Limited number of major gaps, but able to execute basic sequencing of the task:

- Arm movements and leg movements only synchronized in some phases, not all
- Sliding stop or shuffle-step stop
- Basic features of mature running form observed
- Rounded turnaround is evident

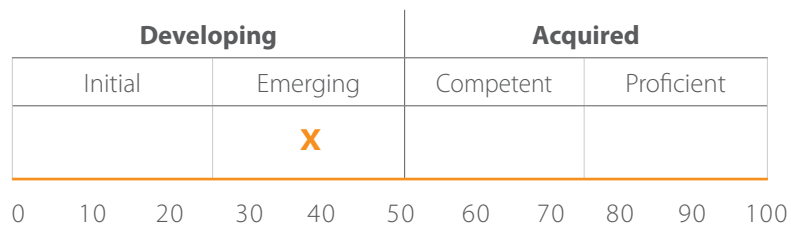
Acquired

Competent: Basic level of execution with minor sequencing errors:

- Motion is along a straight line there and back
- Good speed (jog to run)
- Pivoting turn that is not fluid or quick, but is successful
- Mature running form is evident

Proficient: Overall proficiency is depicted by the quality of the movement:

- Sprint speed
- Accelerates rapidly
- Decelerates in control to a momentary stop
- Pivots and changes direction in a continuous manner
- Arms and legs used purposefully for propulsion



Assessment Example

After running Josephine through the first task, Sylvain decides to see how she does at the second task: Run there and back. Sylvain sees that while Josephine still has some developing to do, her technique is stronger when she runs in a straight line for a longer distance.

As Josephine accelerates, she still tends to lean forward and flap her arms, but as she gets going she runs with a more upright posture and uses her arms more for propulsion than for flailing. However, Sylvain sees that as she approaches the pylon and begins to slow in preparation for turning, she comes to a stuttering stop and almost oversteps the line.

Sylvain recognizes that Josephine has some developmental areas that definitely need work and refinement, but he's also aware that she has some strengths in her technique as well. He places a mark near the halfway mark under "Emerging".



Q2 Hop

“I want you to hop from this pylon to the next. I want you to hop as best you can. Please hop from here to there. Ready? Hop now.”

Rating System

Developing

Initial: Presence of numerous major gaps during execution:

- Fails to maintain single leg support and touches down opposite foot
- Performs a jumping action
- Upper body and lower body in asynchrony

Emerging: Limited number of major gaps, but able to execute basic sequencing of the task:

- Inconsistent distances and low amplitude of displacement (horizontal or vertical)
- Balance control problems evident during progression
- Starting is stutter-like
- Stopping is sloppy and possibly over-hopping or premature ending

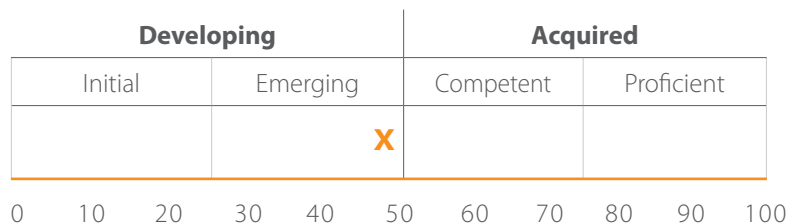
Acquired

Competent: Basic level of execution with minor sequencing errors:

- Able to hop on one leg from start to end with medium distance hops
- Evident aerial phase
- May not employ opposite leg to assist
- Distance may vary from hop to hop in mid-range
- Start and stop control may be limited

Proficient: Overall proficiency is depicted by the quality of the movement:

- Substantial hopping distance that is consistent in distance in mid-range
- Immediate transition to hopping and immediate hop to stationary position at end
- Continuity in motion
- Good horizontal and/or vertical speed
- Uses opposite lower limb and upper body in synchrony with the other lower limb



Locomotor

Assessment Example

Geri is a lifeguard at the community pool. She has agreed to run swimming lessons for seven-year-olds. Because she knows how important physical literacy is for swimming, she has requested that the kids show up early to each lesson so that she can assess her pupils' fundamental skills.

Today, she is leading them through *PLAYbasic's* "Hop" task. Jennifer takes her turn and Geri can see the gaps in her development as well as the potential in her technique. When Jennifer hops, her movement is fluid, but after taking a couple she begins to lose her balance. Sometimes she has to step down with her opposite leg to keep from falling.

Although her pacing is erratic as she moves between the cones, Jennifer does well to maintain a fairly consistent medium-range distance from hop to hop. She sets herself up to reach the cone each time without coming up short or landing beyond. For the most part, Jennifer displays synchrony between her upper and lower body, though when her balance falters, so too does her coordination. Geri places a mark under "Emerging" edging on the side of "Competent".





Throwing

Equipment

For this task, you'll need:

- A large wall (target area)
- A 3-metre line away from the wall
- A marker on the wall placed 1.5 metres above the ground
- A tennis ball (or similar)

Q3

Overhand throw

“I want you to overhand throw the ball at the wall and make it bounce back over the top of your head. I want you to throw the ball as best you can. Please try to throw the ball against the wall as best you can. Ready? Throw now.”

Note: sidearm throw is acceptable and can be assessed as competent or proficient

Rating System

Developing

Initial: Presence of numerous major gaps during execution:

- Throw fails to produce ball motion in the desired direction
- Insufficient distance/velocity
- Limb motion restricted to a single joint or upper limb
- No coordination with trunk or lower limbs
- No weight shift
- Trunk rotation absent

Emerging: Limited number of major gaps, but able to execute basic sequencing of the task:

- Ball is sent with poor speed or trajectory (at least one of the two is adequate)
- Basic sequencing of lower body to trunk to upper limb action is evident
- Weight transfer limited
- May appear disjointed in sequencing of limb motion
- Very limited follow-through

Acquired

Competent: Basic level of execution with minor sequencing errors:

- Trajectory and speed of ball is adequate
- Sequencing of lower body, trunk and upper body is present but limited
- Weight shift is minimal
- Follow-through present but limited
- Trunk rotation present but limited

Proficient: Overall proficiency is depicted by the quality of the movement:

- Velocity of ball is good
- Trajectory of ball is well controlled
- Upper and lower body sequencing is present
- Weight shift is pronounced from trailing leg to leading leg
- Follow-through is present and fluid
- Very evident trunk rotation

Throwing

Assessment Example

Liz just turned 10. She wants to play a whole bunch of sports this summer, which pleases her mom, Beth. Beth is a physiotherapist and knows how important it is to be physically literate. She decides to use the *PLAY* Tools with Liz to see if there are any gaps in her daughter's development of physical literacy. As Liz works through the overhand throw task in *PLAYbasic*, Beth sees a number of things that Liz does well, and a few that will need some work.

The first thing Beth notices is the consistency with which Liz throws the ball at the wall so that it bounces back above Liz's head. She manages to get enough trajectory and velocity on the ball almost every time, and her accuracy with where the ball lands is pretty steady as well. Liz also displays a smooth follow-through. Not only does she bring her hand well behind her head, she extends her arm through in a fluid motion.

From there, Beth pays attention to Liz's trunk rotation and stance. When Liz begins the motion, she is too square to the wall, which cuts down on her trunk rotation. This lack of trunk rotation in turn diminishes the appropriate weight shift from trailing leg to front leg.

Beth sees that Liz's power, accuracy and arm movement are all well-developed areas of strength, but that Liz really needs to focus on her stance and trunk rotation. Once Liz has refined her technique in this regard, Beth believes her daughter's weight shift from trailing leg to front leg will develop more naturally as well, as she already has the tendency to shift weight when she throws. Because of this, Beth places a check in the "Competent" box close to "Emerging".

Developing					Acquired				
Initial		Emerging			Competent		Proficient		
					X				

0 10 20 30 40 50 60 70 80 90 100

Kicking



Q4 Kick ball

“I want you to kick the ball at the wall. You can kick the ball with one foot – whichever foot you like. I want you to kick the ball with one foot as best you can. Try to kick the ball above the marker on the wall. Please try to kick the ball as best you can above the marker. Ready? Kick now.”

Equipment

For this task, you'll need:

- A large wall (target area)
- 1 pylon (4 metres away from the wall)
- Soccer ball (or similar)
- Marker on wall placed 1 metre above the ground

Rating System

Developing

Initial: Presence of numerous major gaps during execution:

- Misses the ball due to a lack of coordination and timing
- No synchrony between upper and lower body
- Support leg and foot are poorly planted
- Whip-like kicking action with no follow-through
- No speed or ball control
- Kicks with toe

Emerging: Limited number of major gaps, but able to execute basic sequencing of the task:

- Speed of ball is slow
- Some evidence of directional control is present
- Foot contact reasonably solid

Acquired

Competent: Basic level of execution with minor sequencing errors:

- Ball is directed appropriately
- Speed of ball is good

Proficient: Overall proficiency is depicted by the quality of the movement:

- Ball is powerfully propelled in a controlled direction
- Upper body leads lower body
- Strong follow-through is present

Kicking

Assessment Example

Pierre coaches a U11 girls' soccer team. Based on the *PLAYfun* Tool, she decides to have them all kick a ball over a one-metre line on the wall as a way to gauge their kicking skill.

One of the girls, Vanessa, lacks coordination and often misses the ball. When she does kick the ball, she rarely gets reasonable contact. Pierre sees that a big part of the issue is due to the poor placement of Vanessa's support leg, and also because Vanessa lacks synchrony between her upper and lower body.

When Vanessa does connect with the ball, she is not able to get it above the one-metre mark on the wall, and though the rebound sometimes comes back in Vanessa's direction, it is not consistent. Pierre doesn't think Vanessa has played before, but she knows that with practice she'll get better. Pierre places a mark halfway under "Initial".

Developing		Acquired	
Initial	Emerging	Competent	Proficient
X			

0 10 20 30 40 50 60 70 80 90 100





Balance

Q5

Balance walk (toe-to-heel) backward

“I want you to walk backward 'toe-to-heel' from one pylon to the next while keeping your balance. Walk backward as quickly as you can while keeping your balance. Walk backward from here to there while keeping your balance. Ready? Walk now.”

Equipment

For this task, you'll need:

- 2 pylons placed 2 metres apart (or a 2-metre line on the floor)

Rating System

Developing

Initial: Presence of numerous major gaps during execution:

- Loses balance repeatedly
- Doesn't use arms to balance
- Poor or inconsistent placement of feet from step to step

Acquired

Competent: Basic level of execution with minor sequencing errors:

- Able to maintain balance through all steps
- Shows good foot placement, but may be slow
- Exhibits minor balance control problems through some of the steps
- Upper limb wavering may be evident

Emerging: Limited number of major gaps, but able to execute basic sequencing of the task:

- Able to demonstrate features of balance control
- Tentative stepping action
- Non-fluid
- Major balance control problems during stepping
- May lose balance once or twice in all steps

Proficient: Overall proficiency is depicted by the quality of the movement:

- Performs a “cat walk” along the line in a fluid continuous motion
- Very minor balance adjustments may be evident at ankles
- There may be slight upper limb wavering

Balance

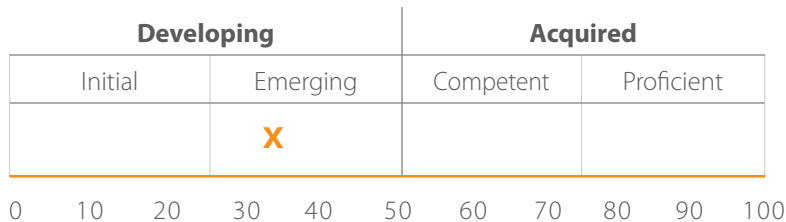
Assessment Example

Stacy, a former high-performance gymnast, owns a gymnasium where she runs various introductory gymnastics classes. She enjoys watching the young boys and girls who come to her classes and experience the various gymnastics skills while developing their physical literacy. Her current group is all seven- and eight-year-olds, and today she's assessing their balance by having them walk backward from toe-to-heel.

Rudy, an eight-year-old boy begins. He starts tentatively and with some balance issues, and he does not walk quickly. Stacy sees weaknesses in his technique.

As Rudy walks backward, he loses his balance often. Even when he slows right down, he struggles to get through the steps without wobbling. His actions lack fluidity and, although he gets his arms out to help him balance, more often than not they are flapping in the air to control his body. She does note, however, that Rudy places his feet in the right places each time, even if he loses his balance shortly thereafter.

Stacy places a mark under “Emerging”, slightly closer to the “Initial” side.



Score

Scoring

To score the *PLAYbasic* Tool, measure the distance between the beginning of the "Initial" box (left-most side of the box) and the assessors mark in one of the four categories. This distance will be a score out of 100 (i.e. 1 point per millimetre).

Do this for all 5 tasks to obtain the child's *PLAYbasic* Physical Literacy Score.

Calls-to-action

- Continue to routinely assess the child's skills using *PLAYbasic* or *PLAYfun* to ensure they are becoming physically literate.
- Use the *PLAYbasic* Tracking Sheet located at the end of the workbook to keep track of these scores for your reference in future assessments. This will allow you to see how much the child has improved, and also how quickly. Both of these indications will help identify problematic areas in need of improvement.

- Ensure that the child has many different opportunities to develop ALL fundamental skills. This could be in their home, at school, in organized sport, in community recreation and/or during leisure time.

For a list of quality sports and activities that will help the child develop their locomotor, object control and balance skills, visit:

play.physicalliteracy.ca

- Ensure that the child can be active in a fun and safe environment. This will allow them to advance in competency, which will in turn make them more confident. Without confidence, the likelihood of performing a task in front of people is dramatically reduced. This will limit the child's desire to participate in activities with a group, on a team and even with friends and family.
- Ensure that the child understands words that describe movement. What is a hop versus a jump? Visit our website for a glossary of movement terms.
- Gain additional insight into a child's physical literacy by using the other *PLAY* tools at your disposal. For more information visit:

play.physicalliteracy.ca

PLAY*basic*

Physical Literacy Assessment for Youth

PLAY*basic* is intended for children aged seven and up.

canadiansportforlife.ca
play.physicalliteracy.ca

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

Place a mark in the box that best represents the child's ability. Indicate if the child had low confidence, or needed a prompt, mimic, description, or demonstration for each task.

Task	Competence						Confidence			Comprehension			
	Developing		Acquired		Proficient	Confidence	Prompt	Mimic	Describe	Demo			
	Initial	Emerging	Competent	Proficient									
1. Run there and back													
2. Hop													
3. Overhand throw													
4. Kick ball													
5. Balance walk (toe-to-heel) backward													

You can score and track your assessment online at play.physicalliteracy.ca. There you'll be able to create groups and input PLAY*basic* scores for any number of children.

PLAYbasic Tracking Sheet

Name													
Date													
Assessment #	1	2	3	4	5	6	7	8	9	10	11	12	
Task													
Run													
Hop													
Throw													
Kick													
Balance													
Total													

Name													
Date													
Assessment #	1	2	3	4	5	6	7	8	9	10	11	12	
Task													
Run													
Hop													
Throw													
Kick													
Balance													
Total													



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.

We would like to give a special acknowledgement to Dr. Kriellaars for his outstanding work in the areas of physical literacy and health in Canada, and for his contribution to CS4L and the **PLAY** resources.

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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Canada





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