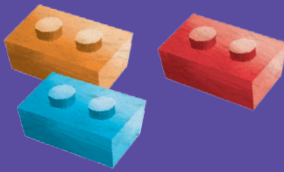


It's playtime!

**The outdoors
as the perfect playground**





It's playtime!

Title of original document: *À nous de jouer! L'extérieur, un terrain de jeu complet*

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“Now more than ever, it is important for human beings, particularly children, to become reacquainted with their natural environment so that it can once again be a place where life is good and delightful discoveries are possible, a space in which children can invent games spontaneously, cultivate their sense of wonder, enjoy themselves and be in contact with the beauties of nature. Children, go play outside!”¹

In fact, several authors have stated that the population, and young people in particular, are suffering increasingly from nature deficit,² this contemporary ailment caused by a lack of contact with the elements of nature.

Outdoor activities do not necessarily require travelling to the wilderness. They can also take place in the yard, a playground, a park or a small nearby wood.

This document on the importance of outdoor play for child development is an initiative of the Table sur le mode de vie physiquement actif (TMVPA). It is intended for people working in education and early childcare services, as well as in municipal or community services and other associations. **It is a tool they can use to reflect on the role they can play in offering children opportunities and an environment conducive to outdoor play.**

1 François Cardinal, *Perdus sans la nature – Pourquoi les jeunes ne jouent plus dehors et comment y remédier* (Montréal: Les Éditions Québec Amérique, 2010), 201. [Translation]

2 Richard Louv, *Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder* (Chapel Hill, NC: Algonquin Books of Chapel Hill, 2008), 36.





Table of contents

Let's get moving outside!	6
Why play outside?	8
Fear of risk—an impediment to child development.....	11
A full-sized playground	15
In all seasons.....	18
Now it's your turn to play!	20
Additional reading.....	22



Let's get moving outside!

- Walking and balancing along a log on the ground
- Tossing pebbles into a stream
- Climbing onto a big rock
- Walking in soft sand
- Rolling or sliding down a hill
- Kicking a hard block of snow
- Drawing or writing in the earth with a stick
- Running or romping around
- Jumping in puddles
- Trying to catch falling leaves
- Crawling around to observe insects
- Etc.

These are just some of the possibilities offered by outdoor play.

On average, children are twice as active when they're outside.³

Contact with nature and outdoor play contribute to young people's engagement in physical activities.^{4,5,6} Children interact with their environment intuitively, playing and seeking to overcome challenges; in this space where they can move freely, children can discover and experiment with activities that lead them to expend more energy, while developing their motor skills. Since there are usually fewer constraints on children's gross motor movement outdoors than in indoor spaces, they have a greater range of exploration.⁷ For example, when children have access to a large play space, they modify their behaviour, running around and engaging in more gross motor activities.⁸

3 Roger L. Mackett and James Paskins, "Children's Physical Activity: The Contribution of Playing and Walking," *Children & Society* 22, no. 5 (2008): 345-357.

4 Isabel Ferreira et al., "Environmental correlates of physical activity in youth – A review and update," *Obesity Reviews* 8, no. 2 (2007): 129-54.

5 Ingunn Fjortoft and Jostein Sageie, "The Natural Environment as a Playground for Children: Landscape Description and Analyses of a Natural Playscape," *Landscape and Urban Planning* 48, no. 1 (2000): 83-97.

6 James F. Sallis et al., "A review of correlates of physical activity of children and adolescents," *Medicine & Science in Sports & Exercise* 32, no. 5 (2000): 963-975.

7 Hillary L. Burdette and Robert C. Whitaker, "Resurrecting Free Play in Young Children: Looking Beyond Fitness and Fatness to Attention, Affiliation, and Affect," *Archives of Pediatrics & Adolescent Medicine* 159, no. 1 (2005): 46-50.

8 Rajni Dhingra, Sarika Manhas and Anita Raina, "Play Pattern in Preschool Setting," *Journal of Human Ecology* 18, no. 1 (2005): 21-25.

According to one study, concretely, each additional hour spent outside is associated with 26.5 extra minutes of moderate- to vigorous-intensity physical activity per week in girls, and 21 extra minutes in boys.⁹ Thus, **the more time a child spends outside, the more he or she is physically active.**^{10,11,12}

Aspects of the natural environment can also have a significant influence on children's level of physical activity.¹³ The greener the neighbourhood, the more children play outside.

It's your move!

- Do the children play outside every day, several times a day?
- What obstacles prevent the children from actively playing outside longer and more often? Are there obstacles that restrict their movements?
- Do the outdoor set-up and nearby natural spaces give the children opportunities to enjoy a broad range of active play experiences?



9 Verity Cleland, David Crawford, Louise A. Baur et al., "A prospective examination of children's time spent outdoors, objectively measured physical activity and overweight," *International Journal of Obesity* 32, no. 11 (2008): 1685.

10 Ferreira et al., "Environmental correlates," 129-54.

11 Fjortoft and Sageie, "Natural Environment as a Playground," 83-97.

12 Sallis et al., "Review of correlates," 963-975.

13 Diane S. Grigsby-Toussaint, Sang-Hyun Chi and Barbara H. Fiese, "Where they live, how they play: Neighborhood greenness and outdoor physical activity among preschoolers," *International Journal of Health Geographics* 10, no. 1 (2011): 66.

Why play outside?

“The best playroom is covered by the sky and the tree tops.”¹⁴

It is outdoors that free play—initiated by the child, without any adult-defined rules or procedures¹⁵—and gross motor activity in young children are most likely to occur.¹⁶ When playing outdoors, a child is more likely to encounter opportunities for decision-making and problem-solving because outdoor spaces are often more varied (weather conditions, topography, types of ground, etc.) and less structured than indoor spaces, presenting the child with different cognitive challenges than those of the indoor environment.¹⁷

Allowing children to play outdoors means letting them develop greater creativity and a cooperative attitude in their way of playing and acting in general. This rich and less restrictive environment allows children to explore learning opportunities that are different from those provided by indoor play.¹⁸ Outdoor games are stimulating activities for children and for their motor skill development.¹⁹ Among other things, they help children gradually improve their muscular control, posture, sense of balance, locomotor movement and coordination.²⁰



14 Les Clubs 4-H du Québec, *Répertoire famille: Jouer dehors avec les enfants et la nature*, 2014, 1. [Translation]

15 Table sur le mode de vie physiquement actif, *À nous de jouer: Jeu actif et jeu libre pour le développement de l'enfant* (Québec: Gouvernement du Québec, 2017), 10.

16 Burdette and Whitaker, “Resurrecting Free Play,” 46-50.

17 Ministère de la Famille, *Gazelle et potiron – Cadre de référence pour créer des environnements favorables à la saine alimentation, au jeu actif et au développement moteur en services de garde éducatifs à l'enfance*, (Québec: Gouvernement du Québec, 2017), 65.

18 Ibid.

19 Burdette and Whitaker, “Resurrecting Free Play,” 48.

20 Table sur le mode de vie physiquement actif, *À nous de jouer*, 4.

The benefits of free and active play, such as improvements in children's mental health, emotional well-being and mood (minimizing anxiety, depression, aggression, and sleep problems) increase when this play takes place outdoors.²¹

In addition to the known benefits of physical activity on well-being as well as on physical and mental health, a daily dose of the outdoors:

- has a positive effect on mood and can have a positive and direct impact on well-being by decreasing fatigue and increasing energy and happiness^{22,23}
- lowers stress levels in children²⁴
- is associated with a decrease in the production of stress hormones, decreased anxiety and improvements in the immune system²⁵
- strengthens the immune system's resistance to disease²⁶
- has been linked to better health in children²⁷
- is associated with a decrease in the risks and symptoms linked to myopia in children²⁸
- reduces the symptoms of depression and attention deficit disorder in some cases²⁹
- leads to greater student engagement and enthusiasm in all areas of study³⁰

21 Burdette and Whitaker, "Resurrecting Free Play," 46-50.

22 Diana E. Bowler, Lisette M. Buyung-Ali, Teri M. Knight et al., "A systematic review of evidence for the added benefits to health of exposure to natural environments," *BioMed Central Public Health* 10, no. 1 (2010): 456.

23 Eva M. Selhub and Alan C. Logan, *Your Brain on Nature: The Science of Nature's Influence on Your Health, Happiness and Vitality* (Ontario: John Wiley & Sons, 2012), 116-126.

24 Nancy M. Wells and Gary W. Evans, "Nearby Nature: A Buffer of Life Stress among Rural Children," *Environment and Behavior* 35, no. 3 (2003): 311-330.

25 Selhub and Logan, *Your Brain on Nature*, 83.

26 Ministère de la Famille, *Gazelle et potiron*, 66.

27 Janice F. Bell, Jeffrey S. Wilson and Gilbert C. Liu, "Neighborhood Greenness and 2-Year Changes in Body Mass Index of Children and Youth," *American Journal of Preventive Medicine* 35, no. 6 (2008): 547-553.

28 Kathryn A. Rose, Ian G. Morgan, Jenny Ip et al., "Outdoor activity reduces the prevalence of Myopia in children," *Ophthalmology* 115, no. 8 (2008): 1279-1285.

29 Andrea F. Taylor and Frances E. Kuo, "Children With Attention Deficits Concentrate Better After Walk in the Park," *Journal of Attention Disorders* 12, no. 5 (2009): 402-409.

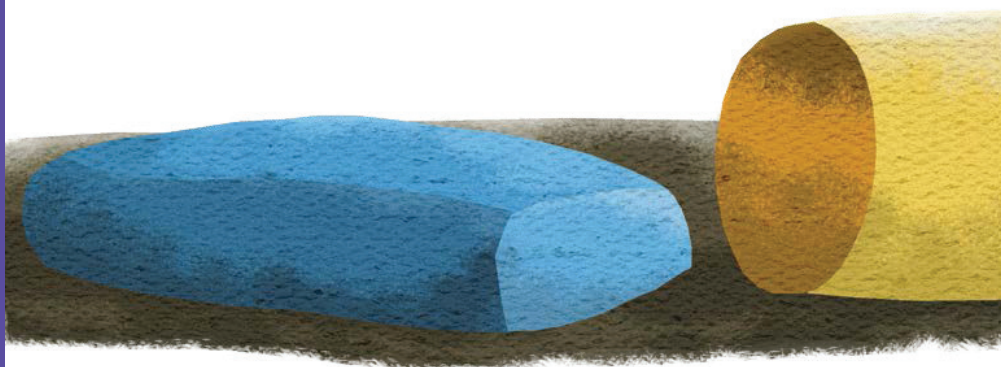
30 Rodney H. Matsuoka, "Student performance and high school landscapes: Examining the links," *Landscape and Urban Planning* 97, no. 4 (2010): 273-282.

Furthermore, the quality of outdoor air is often superior than the quality of indoor air.³¹

These results show that **it is important to expose children to nature from an early age.**³² The benefits extend far beyond the individual to all aspects of society.³³ Those who are familiar with nature work harder to preserve it.

It's your move!

- Do the administrators and staff working in your organization know about the many benefits of outdoor play?
- Are the staff in your organization equipped and well supported to encourage outdoor play on a daily basis?
- Has your organization made parents aware of the benefits of outdoor play and the fact that it prioritizes this approach to foster the children's development?
- Has your organization reviewed its policies and procedures so as to encourage outdoor play on a daily basis?



31 Payam Dadvan, Loar Rivas, Xavier Basagana et al., "The association between greenness and traffic-related air pollution at schools," *Science of the Total Environment* 523 (2015): 59-63.

32 L. Ruokolainen et al., "Green areas around homes reduce atopic sensitization in children," *Allergy* 70, no. 2 (2015): 195-202.

33 Canadian Parks Council, *Connecting Canadians with Nature: An Investment in the Well-Being of Our Citizens* (Ottawa: Parks Canada, 2014), 9.

Fear of risk – an impediment to child development

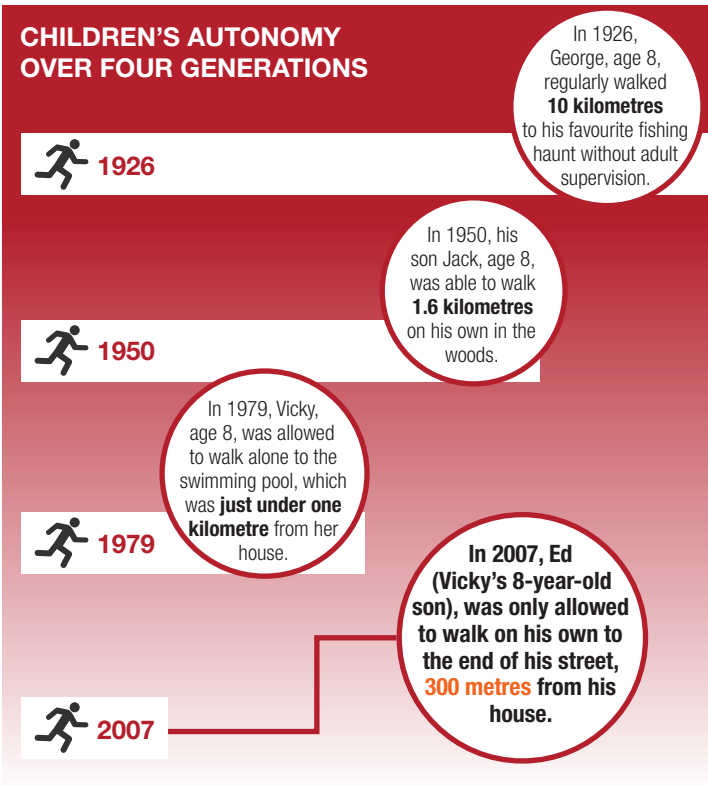
In a survey, 70% of mothers with children aged 3 to 12 reported having played outside every day when they were young, but only 31% said their children do the same today.³⁴

Every one of us was once eight years old, but our reality at that age was different depending on our generation. Figure 1 on the next page is a good illustration of the change in roaming habits over four generations. What is the reason for such a big difference in freedom from one generation to the next? What have we lost?



³⁴ Rhonda Clements, "An Investigation of the Status of Outdoor Play," *Contemporary Issues in Early Childhood* 5, no. 1 (2004): 68-80.

Figure 1
Roaming habits of four generations of eight-year-old children from the Thomas family in Sheffield, England³⁵



³⁵ Isabelle Maher, "Les enfants ont-ils perdu le droit de se déplacer librement?" *Journal de Montréal*, January 20, 2014, <http://www.journaldemontreal.com/2014/01/20/les-enfants-ont-ils-perdu-le-droit-de-se-deplacer-librement>.

It is more beneficial to children's health to increase the opportunities for outdoor free play than to limit them.^{36,37}

While no one wants children to hurt themselves, letting children explore this risk zone, in a way appropriate for their age, is **safer and better for their development** because many aspects of child development are affected, primarily in the area of socioemotional development. By taking risks adapted to their level of development, children build their self-confidence, which influences their self-esteem. They also learn how to appropriately ask for help in any situation, contrary to children who are always sheltered from risk, who will have a lesser capacity to detect and manage risks in the various areas of their lives as they get older.³⁸ **In short, the desire to limit outdoor play, to strictly supervise children or to always escort them to places, in order to reduce the risk of injury or abduction, constitutes an impediment to children's development, autonomy and social skills.**³⁹

Moreover, as adults, we often associate risk-taking in outdoor play with some of our fondest childhood memories. Children have less and less access to such moments of pleasure, which are, in fact, learning opportunities.



Keep in mind that **a danger is something the child does not see, whereas a risk is a challenge the child is aware of and chooses to face or not.**⁴⁰

36 Mariana Brussoni, Rebecca Gibbons et al., "What is the Relationship between Risky Outdoor Play and Health in Children? A Systematic Review," *International Journal of Environmental Research and Public Health* 12, no. 6 (2015): 6423-6454.

37 Daniel Aggio, Benjamin Gardner, Justin Roberts et al., "Correlates of children's independent outdoor play: Cross-sectional analyses from the Millennium Cohort Study," *Preventive Medicine Reports* 8, (2017): 10-14.

38 Louv, *Last Child in the Woods*, 46.

39 Brussoni, Gibbons et al., "Risky Outdoor Play and Health," 6423-6454.

40 Ibid.

An outdoor play environment should contain elements of challenge that promote child development, such as the following:⁴¹

- Climbing on or jumping from surfaces, keeping one's balance, hanging or swinging
- Pedalling, sliding, rolling or running very fast
- Sculpting, sawing, tying
- Playing near rocks, a pond or a lake
- Wrestling or roughhousing with an object, other children or parents
- Exploring, playing in an unfamiliar environment, hiding

In short, “access to active play in nature and outdoors—with its risks—is essential for healthy child development.”⁴²

It's your move!

- Given that there's no such thing as zero risk, do I accept risk-taking as part of outdoor play? Am I comfortable with this aspect in my role as an adult? How do I assess and manage risks?
- Are the parents informed of the position taken by my organization on outdoor play and risk-taking, as well as the positive effects on children and their development?
- Could the safety rules and regulations be reviewed to give children more freedom when playing outdoors?

41 Ellen Beate and Hansen Sandseter, “Categorising risky play—How can we identify risk-taking in children's play?” *European Early Childhood Education Research Journal* 15, no. 2 (2007): 237-252.

42 ParticipACTION, *The Biggest Risk is Keeping Kids Indoors. The ParticipACTION Report Card on Physical Activity for Children and Youth* (Toronto: 2015), 8.

A full-sized playground

“Playing at a variety of sites gives children the opportunity for diverse motor and sensory experiences, according to the season, through the presence of different types of equipment (splash pad, swings, skating rink, hill of snow, etc.), objects or settings (woods, rocks, sand, trees, lawn, elevated ground).”⁴³

Natural landscapes in the outdoors typically provide:⁴⁴

- rich, diverse, multisensory experiences
- opportunities for noisy, boisterous, vigorous, physically active play
- opportunities for physical challenge and risk-taking
- rough, uneven surfaces, with opportunities for the development of physical strength, balance, and coordination
- natural elements and loose parts that children can combine, manipulate and adapt for their own purposes



43 Ministère de la Famille, *Gazelle et potiron*, op.cit., 65. [Translation]

44 Jane Hewes, *Let the Children Play: Nature's Answer to Early Learning* (Montréal: Early Childhood Learning Knowledge Centre, 2006), 6.

In many countries where natural playgrounds have been created, researchers have observed that they arouse children's curiosity and that the proximity to nature stimulates children more than traditional urban play structures.⁴⁵ We do in fact see a link between fixed playground equipment and a lower level of physical activity in children.⁴⁶ Natural environments, that is, environments with less fixed equipment, increase the level of physical activity in children, which has a positive impact on their development.

For example, a natural playground might include:^{47,48}

- accessible water: streams, ponds, swamps, fountains
- uneven topography
- natural elements that children can play with: leaves, insects, worms, cattails, twigs, shells, earth, etc.
- gardens or edible landscape materials
- sand, rocks, boulders
- trees, shrubs, grassy areas, flowers, plants, herbs
- hiding places, tunnels, felled logs and places to dig holes
- small animals (insects, amphibians, birds, small mammals)
- pathways and gathering spaces
- place for adults to observe children playing
- storage for child-sized equipment (shovels, buckets, etc.)

45 Victoria Carr and Eleanor Luken, "Playscapes: a pedagogical paradigm for play and learning," *International Journal of Play* 3, no. 1 (2014): 69-83.

46 Marsha Dowda, William H. Brown, Kerry L. McIver et al., "Policies and Characteristics of the Preschool Environment and Physical Activity of Young Children," *Pediatrics* 123, no. 2 (2009): e261-e266.

47 Carr and Luken, "Playscapes," 69-83.

48 Projet Espaces, *Neutralisation des espaces de jeu, Fiches – Savoir*, Alliance québécoise du loisir public, 2015, http://www.projetespaces.ca/fiches_details.asp?id=93.

Although, ideally, children should be in contact with the wilderness, the benefits of outdoor play can also be felt in urban settings in nearby environments: an outdoor yard, a municipal park, a ball park, an interpretation centre, an orchard or a botanical garden, for example.⁴⁹ This continuum is illustrated in Figure 2 below.

Figure 2
Outdoor continuum⁵⁰



It's your move!

- Do the children have the opportunity to explore and play outside in different areas?
- Does the landscaping include natural elements?
- Is the area set up in a way that promotes active and safe travel to and from parks, green spaces and outdoor sites?
- Are any outdoor educational trips planned?
- Have agreements been established with partners to facilitate access to different sites?

49 Danielle F. Shanahan, Robert Bush, Kevin J. Gaston et al., "Health Benefits from Nature Experiences Depend on Dose," *Scientific Reports* 6 (2016): 28551.

50 Ministère de l'Éducation et de l'Enseignement supérieur, *Quebecers on the Move—Outdoors! Brief on Outdoor Activity*, Direction du sport, du loisir et de l'activité physique (Québec: Gouvernement du Québec, 2017): 45.

In all seasons

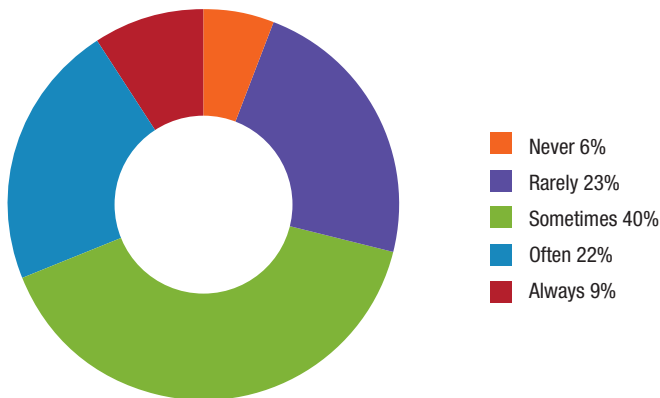
“With its climatic diversity and numerous natural sites, Quebec offers many great opportunities for engaging in outdoor and wilderness activities.”⁵¹

Cold, hot or bad weather should not be reasons to prevent children from playing outside.⁵² It is important, of course, to adapt activities and clothing to weather conditions and to stay vigilant for symptoms related to the cold or heat.

Rain

Although only 7.8% of parents gave the lack of suitable waterproof clothing as a reason for keeping their child indoors, it is rare to find children who are encouraged to take advantage of play opportunities in the rain,⁵³ as illustrated in Figure 3 below.

Figure 3
Frequency at which children play outside when it rains



⁵¹ Table sur le mode de vie physiquement actif, *Pour une vision québécoise d'un mode de vie physiquement actif* (Québec: Gouvernement du Québec, 2016), 11. [Translation]

⁵² Ministère de la Famille, *Gazelle et potiron*, 66.

⁵³ Guylaine Chabot et al., *Les préoccupations parentales concernant le jeu actif des enfants de 3 à 12 ans à l'extérieur* (Université du Québec en Outaouais and Kino-Québec, 2017), 14.

Winter

In Québec, we make the most of **the diversity offered by our climate** and enjoy a variety of winter sports, such as skating and skiing. Among other things, these activities provide excellent opportunities for developing balance, coordination and speed.

“Whatever the season, playing outside enriches children with a thousand experiences by putting them in contact with a wide diversity of natural elements—sand, earth, snow, wind, rocks, trees, etc.”⁵⁴

It's your move!

- Does the rain, cold or heat prevent me from letting the children play outside? Are my justifications reasonable?
- Does the outside set-up allow the children to be active regardless of the season?
- Does my organization have measures to ensure that children have appropriate clothing for the weather?
- Are the children and the accompanying adults properly dressed to take part in active play in all seasons?
- Are extra clothes available to the children if needed?
- Has my organization the means required to dry wet clothing and deal with soiled clothing?

54 Francine Ferland, *On joue dehors! Fiches d'activités*, Équipe Naître et grandir, 2011, http://naitreetgrandir.com/fr/etape/1_3_ans/fiches-activites/bg-naître-grandir-enfant-activite-jouer-dehors. [Translation]

Now it's *your turn to play!*

Here are some ideas for encouraging outdoor play:

- Show your interest in, and enthusiasm for, outdoor activities.
- Plan and communicate effectively to reduce the number of times children have to get dressed and undressed in any given day.
- Greet children outside in the morning.
- Be outside for departure time at the end of the day.
- Set up a storage space for equipment near the doors, inside or outside.
- Plan outdoor field trips for the different seasons.
- Plan longer outdoor periods (e.g. 45 minutes outside after lunch rather than 15 minutes before lunch and 15 minutes after) to give the children time to organize their games among themselves.
- Think strategically about where the snow will be pushed or dumped in the winter, and use it.
- Take the children to a municipal park or for a walk.
- Adapt activities so that they can be carried out outdoors (e.g. turn lunchtime into a fun picnic).
- Introduce children to outdoor play areas and nearby natural spaces.
- Put boxes of games and toys where everyone can reach them so as to encourage outdoor activities.

To make outdoor play the norm in your organization, it's important to aim for the long term. To this end, implementing integrated actions, policies or other structural measures will help ensure stability, consistency and continuity for the coming years, regardless of staff turnover; these measures will support and guide the work of all staff members and the organization. In this way, these practices will become part of its mission, values and reality.⁵⁵ **Because everyone has a role to play in outdoor play!**

55 Association québécoise des centres de la petite enfance, *Un milieu éducatif favorable au jeu libre et actif, pour le développement global des enfants: Guide d'élaboration ou de révision de mesures structurantes* (Québec: Gouvernement du Québec, 2017), 13.



Additional reading

Association québécoise des centres de la petite enfance. *Un milieu éducatif favorable au jeu libre et actif, pour le développement global des enfants: Guide d'élaboration ou de révision de mesures structurantes*. Québec: Gouvernement du Québec, 2017.

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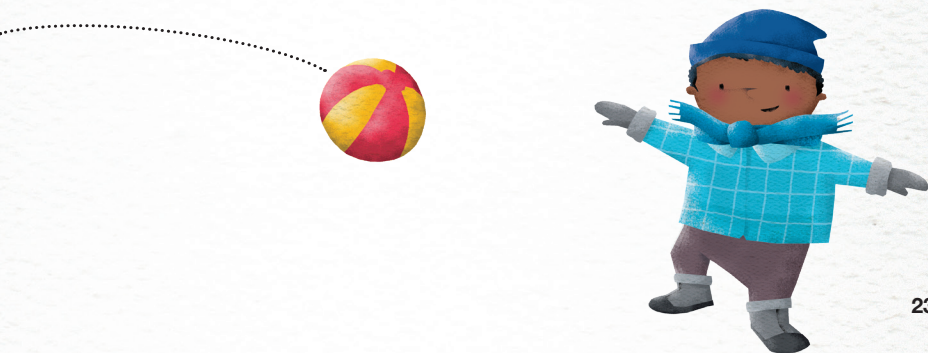
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It's playtime!

