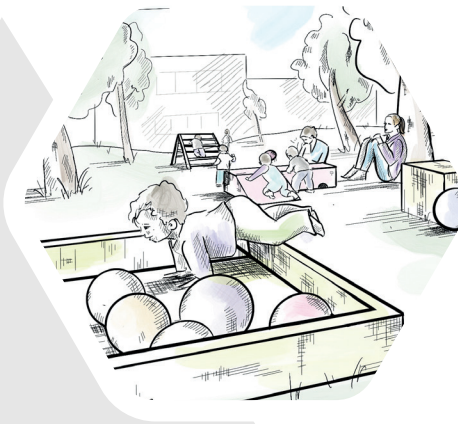


Outdoor space planning and optimal use of outdoor play areas in an ECE setting

Reference framework



Author : **Sylvie Melsbach**

Language revision : **Denis Poulet**

Illustrations : **Anaïs Kaya Awaza**

Graphic designer : **Kim Vézina**

*The illustrations in this guide are not intended to represent reality, but rather to aid in understanding the concept and, like any work of art, to inspire.

Member of the advisory committee :

Maude Gingras, BSc. Kin. - Physical Activity Advisor Kino-Quebec Team | Sports, Recreation, and Physical Activity Branch | Quebec Ministry of Education
maude.gingras@education.gouv.qc.ca

Annie Robitaille - Physical Activity Advisor Kino-Quebec Team | Sports, Recreation and Physical Activity Branch | Quebec Ministry of Education
annie.robitaille@education.gouv.qc.ca

Marie-Ève Dufour - Public Health Kinesiologist | Healthy Living Promotion Branch | Public Health Branch (DGSP) | Quebec Ministry of Health and Social Services
marie-eve.dufour@msss.gouv.qc.ca

Karine Dumais - Advisor | Planning and Strategy Branch | Families and Children Policy Branch – Families and Children
karine.dumais@mfa.gouv.qc.ca

Boris Stoichkov - Quality and Accessibility Standards Branch, Planning and Strategy | Families and Children Policy Branch
boris.stoichkov@mfa.gouv.qc.ca

Marie-Josée Boivin - Executive Director, Joie de Vivre Daycare Center
marie-josée.boivin@cpejoiedevivre.com

Gaétanne Lessard - Executive Director, Bobino Daycare Center
gaetane.lessard@cpebobino.com

Michèle Leboeuf - Partnership Advisor and Project Coordinator: Alex - Nature-Based Education | AQCPÉ
mleboeuf@aqcpe.com

Sylvie Neault - Partnership Advisor and Project Coordinator: Alex - Nature-Based Education | AQCPÉ

Julie Santerre - Quebec Office for Persons with Disabilities (OPHQ)
julie.santerre@ophq.gouv.qc.ca

Catherine Brulotte - Ministry of Family and Children
catherine.brulotte@mfa.gouv.qc.ca

This guide was developed with financial support from :

The Lawson Foundation

The Ministry of Family Affairs

© Regroupement des centres de la petite enfance de la Montérégie
1854 Marie Blvd., Saint-Hubert (Quebec) J4T 2A9
Mailing address : 1851 Prince Street, Saint-Hubert (Quebec) J4T 0A5
Phone : 450 672-8826
www.rcpem.com

Legal deposit, Bibliothèque et Archives nationales du Québec, 2026.

ISBN 978-2-923909-06-6

Any reproduction of this document, in whole or in part, by any means whatsoever, without the written permission of the publisher, is strictly prohibited and constitutes a violation of copyright law.

The background features a light gray field with diagonal stripes in a slightly darker shade of gray. Scattered across this are various hexagonal shapes. Some are solid colors: a blue one on the left, an orange one at the bottom right, and a large orange one at the top left. Others are outlines in orange, blue, or white. The text is centered in the upper half of the page.

Outdoor space planning and optimal use of outdoor play areas in an ECE setting

Reference framework

TABLE OF CONTENTS

FOREWORD	9
INTRODUCTION	11
Who is this document intended for	12
A six-chapter document	12
CHAPTER 1 - WHY CREATE OR REDESIGN AN OUTDOOR PLAY AREA	13
Environmental perspective	13
Perspective on well-being and health	13
Global development perspective	13
Perspective on the need for a diverse, organised and well-maintained environment	14
Perspective on free play	15
A - The right to play	15
B - The right environment for free play	16
1 - Develop motor skills	16
2 - Develop the ability to take initiative and make decisions	16
3 - Experiment new things	16
C - Socialise and, above all, have fun	17
D - Play to learn, learn to play, learn while playing	17
CHAPTER 2 - THE OUTDOOR SPACE OF THE CHILDCARE SERVICE - AN ORGANISED ENVIRONMENT	19
CHAPTER 3 - DESIGNING PLAY AREAS BY ZONE	21
The transition zone	21
Essential qualities	21
Key considerations	22
Special role of educator in this play zone	22
The quiet play and meeting zone	22
Essential qualities	23
Key considerations	23
Varied features	23
Anthropometric chart for a child-scales environment	23
Furniture and practical structures	24
The physical play zone	27
Provide a natural environment	27

Key considerations.....	27
Various features.....	28
Suggest playground equipment	29
Key considerations.....	29
Various features.....	29
Sans and water zone	33
Sand and water	33
Essential qualities	33
The sand play area	34
Applicability and comfort.....	36
Water play.....	37
Benefits.....	38
Layout	38
Special role of educational staff in this zone.....	39
Garden zone and natural environment	39
Educational benefits	39
Layout	40
Vegetable and flower gardens.....	40
Too often forgotten, the orchards.....	42
Trees and shrubs for play	43
Creation and construction zone.....	44
Loose parts materials.....	44
Symbolic and dramatic play zone	47
Layout	47
There's also an area for eating and sleeping outdoors.....	47
The zone-based approach in outdoor play areas for infants and toddlers.....	49
Location of the playground for toddler and preschoolers.....	49
The areas in the play space reserved for the youngest children	50
In summary - Is the space too small or too large ?.....	55
CHAPTER - MUST-HAVE FOR THE PLAYSPACE	57
Storage.....	57
Thermal comfort.....	58
Shelter structures	59
The paths	61
The traffic network	61

CHAPTER 5 - PLANNING, DESIGN, LAYOUT, AND MAINTENANCE OF OUTDOOR PLAY AREAS	67
Planning : A collective effort for the benefit of all	67
Children's experiences	68
Take the time to review and plan the play area	68
Getting started	69
Steps to prepare for the work.....	69
CHAPTER 6 - THE USE OF THE DAYCARE CENTER PLAYGROUND FROM AN EDUCATIONAL PERSPECTIVE.....	75
Examples of observation questions following the design or redesign of the playground	75
Enjoying the outdoors in every season.....	75
On the importance of playing outdoors.....	75
On the learning environment	76
On learning experiences and situations	76
On children's use of the outdoor environment	77
Planning	77
Educational action	77
Reflection and feedback	77
CONCLUSION	79
APPENDICES	81
APPENDIX 1	82
Inventory of playground equipment at the educational daycare center and nearby parks - overview of available facilities.....	82
APPENDIX 2.....	85
Challenges presented by the components of playground equipment	85
APPENDIX 3.....	89
List of plants for care centers.....	89
APPENDIX 4.....	100
Companion planting.....	100
APPENDIX 5.....	107
Choice of path surfacing materials	107
APPENDIX 6.....	109
Assessment tool for measuring the quality of the outdoor environment in a daycare center	109
APPENDIX 7	125
Score sheets for the assessment tool to measure the quality of the outdoor environment in a childcare center	125

APPENDIX 8..... 129

Process for guiding the implementation committee in setting planning priorities 129

APPENDIX 9..... 133

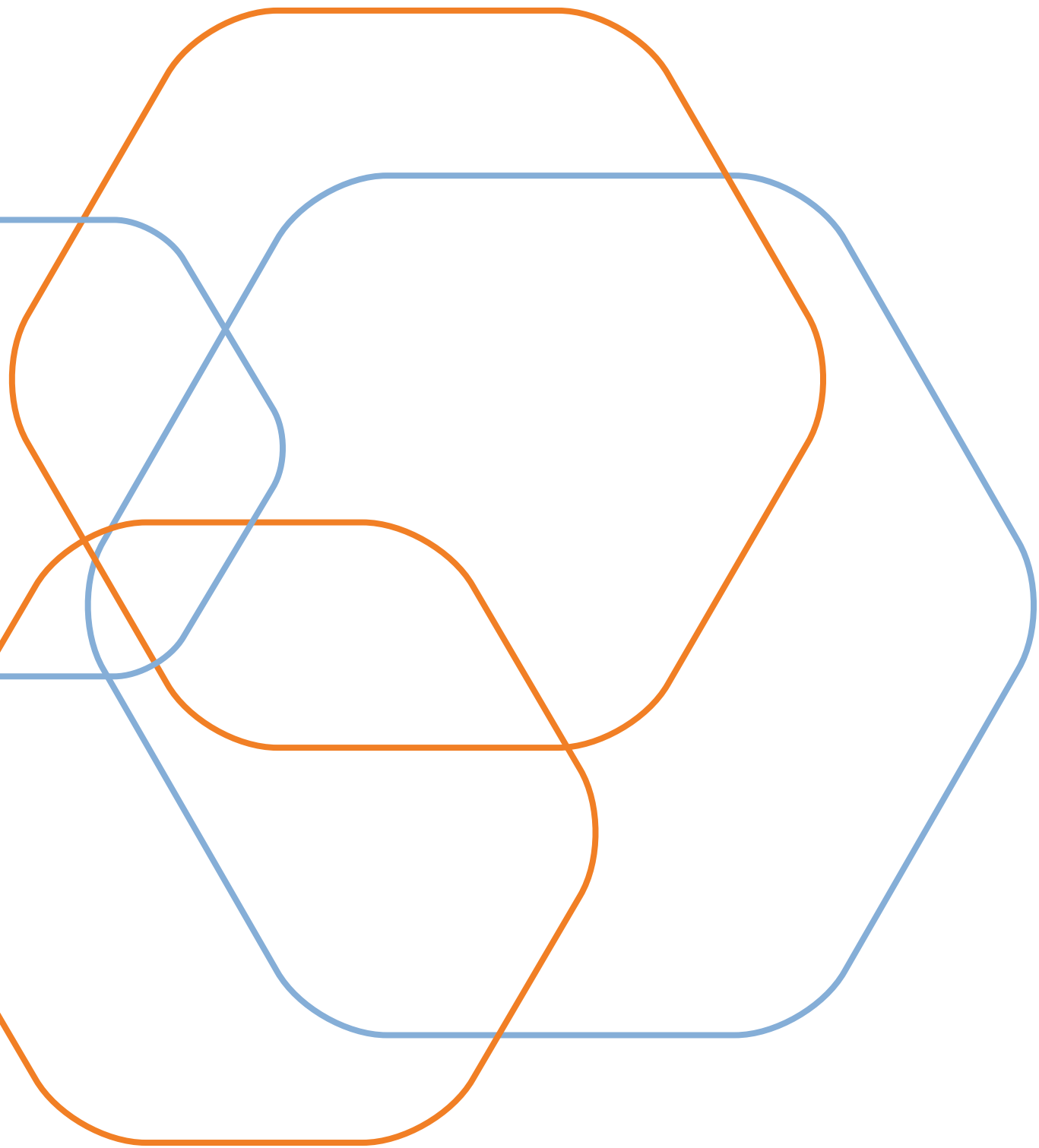
Development of a plan to improve the outdoor environment..... 133

APPENDIX 10..... 135

Example of planning and organization 135

BIOGRAPY 139

REFERENCES 142



FOREWORD

Fifty-four years ago, my mother recognised the importance of outdoor spaces for children. During my first twelve months, she would put me in a pushchair on the balcony to sleep. Later, she marked out an area where her three children could have all kinds of experiences. It was there that we created hundreds of memories, imagining our own world.

Today, I find it inconceivable that some children see playing outside as a chore. If children are not regularly exposed to the outdoors, their health suffers. If an outdoor play area is well designed to meet the needs of young children and allow them to take on developmentally appropriate challenges, they won't want to go inside — quite the contrary. Provided they have the right clothes, there's no such thing as bad weather, only bad clothing. All these factors combined will have a hugely positive impact on their overall development, well-being and fulfilment.

At CPE Joie de vivre, we are privileged to have a huge playground for the Les p'tits bouts d'entrain facility. This was the ideal place to apply the principles set out in this reference framework.

The first stage began in 2016 with the redevelopment of the outdoor playground for children aged three to five, and in 2020 we redesigned the yard for infants and toddlers. As part of both projects, we benefited from various workshops offered by the RCPEM. These allowed us to educate and train staff members on the importance of quality outdoor design, ensuring their involvement in the projects' implementation. These workshops made us realise that, by incorporating varied play areas, rest areas and natural elements, we could encourage children to explore, play and learn in a rich, inspiring environment. The redesign of the children's environment enables them to spend as much time as possible outdoors, regardless of the season.

The framework will guide educators, managers and designers in creating stimulating and safe outdoor spaces that emphasise the importance of nature, creativity and social interaction. The fact that the RCPEM workshops are integrated into the framework means that anyone can engage with it independently.

A child's early years are crucial, as it is during this period that the foundations for learning, socialisation and discovery are formed. With this framework, we can help create spaces where children feel safe, happy and motivated to discover the world around them. It doesn't have to be perfect; you just need to observe the children to understand what isn't working in your layout, and then you can improve it.

In 2016, at the start of our project, the facility had 64 children. Since then, we have created 10 new spaces, bringing the total to 74 children. It is wonderful to know that ten more children can now enjoy our outdoor space !



Marie-Josée Boivin

Executive Director, Joie de Vivre Daycare Center

INTRODUCTION

All childcare services (SGÉEs) in Quebec have a threefold mission: to ensure the well-being, health and safety of young children; to provide an environment that supports their development and prevents difficulties from arising; and to promote their social inclusion¹.

To fulfil this mission, ECECs can provide outdoor spaces adapted to the needs of the children in their care and implement their own educational programmes, considering the specific characteristics of their environment. They can therefore plan diverse and enriching experiences tailored to their playground environments.

With financial support from the Ministère de la Famille (MF), the Regroupement des centres de la petite enfance de la Montérégie proposes this reference framework to stimulate the interest of educational teams in developing well-structured playgrounds and outdoor play areas that offer children multiple opportunities to explore and use all their senses.

Young children need opportunities to discover the pleasure of satisfying their natural curiosity, and to develop their abilities in a relaxed way that truly cultivates a lifelong love of learning. The quality of the outdoor space and the available equipment help children to realise their own ideas, engage in personally meaningful activities, develop skills, master tasks and experience the full satisfaction of accomplishing something.

In 2017, the Ministère de la Famille (MF) produced a reference framework entitled [Gazelle et Potiron](#)², intended for all those working in childcare education services. The guide aimed to promote the overall development of children under five through healthy eating, active play and motor development.

This reference framework explores guidelines 11 and 12 from [Gazelle et Potiron](#), which are aimed at supporting the creation of environments that encourage healthy lifestyles in Quebec's educational childcare services:

- Play outside every day, as often as possible;
- Create a stimulating, functional, and safe environment, both indoors and outdoors.

Its aim is therefore to contribute to the collective effort to achieve the objectives of policies related to education, family life, health and healthy lifestyles. It is presented as a supplementary resource alongside [Gazelle et Potiron](#), as well as Meeting Early Childhood Needs Québec's Educational Program for Childcare Services: [Accueillir la petite enfance, programme éducatif des services de garde éducatifs du Québec](#).

The [Politique de la réussite éducative](#), launched in 2017, marked the beginning of a new approach in Quebec. This approach focused on issues and guidelines applicable to educational childcare services, general education for young people and adults, and vocational training. "For 20 years, the policy states, the educational childcare services network has been one of the pillars of Quebec's family policy³. This network has quickly built a reputation that is the envy of Canada and the world thanks to its positive impact on children's overall development and work-life balance.

The experiences and learning opportunities available to children in these settings form the foundation for all areas of their development."

It emphasises the importance of young children having access to outdoor spaces that encourage daily practice of gross motor skills, which health professionals refer to as active play. This is an essential element of their overall development and beneficial to their health.

In the 2017-2021 action plan for [Politique gouvernementale de prévention en santé](#), Quebec's Ministry of Health and Social Services committed to addressing a range of factors with a view to improving the health and quality of life of Quebec's population and reducing social inequalities in health. It called for the improvement of the quality of educational childcare services to be supported, with the aim of equipping them to create environments conducive to children's physical, motor, social, emotional, cognitive and language development.

All these policies are aimed at giving all young Quebecers access to better-designed outdoor play areas and educational materials adapted to their needs, and at ensuring that early childhood education staff have access to tools and training to support their outdoor activities.

This reference framework invites reflection on the design of the outdoor environment of childcare services, to view it not simply as a place for fun and recreation, but as an environment that allows children to be active, supports the quality of their experiences there, and enriches their learning.

¹ Accueillir la petite enfance : programme éducatif pour les services de garde du Québec, p. 2.

² [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, p. 65 à 70.

³ Politique de la réussite éducative : le plaisir d'apprendre, la chance de réussir, Gouvernement du Québec, ministère de l'Éducation et de l'Enseignement supérieur, 2017, p. 11.

WHO IS THIS DOCUMENT INTENDED FOR

This reference framework is primarily intended for individuals working with children attending educational childcare services. It will also be of interest to educational institutions, enabling them to better prepare students for their future careers as early childhood professionals.

It will be even more useful when adapted to each specific situation, depending on the culture of the environment and the region. This document was designed to inspire and be consulted. It should lead to an approach to improve the current offering, but as the saying goes, "Rome wasn't built in a day". Only with perseverance will we be able, over time and in small steps, to achieve the ideal outdoor playground we desire.

The content of this guide is not so much a goal to be achieved in its entirety as a set of ideas and inspiring references for both service providers and training environments. It can greatly facilitate the design of outdoor courses or play areas that allow for the implementation of various educational programs well suited to the environment.

Finally, it should be noted that any project to develop or redesign a playground or outdoor play area benefits from mobilizing various resources that are called upon to work in coordination. Such a project can involve administrators (daycare management, owner, board members, parent committee), educational staff, parents, and professionals (architect, landscape architect, landscaper, contractor).

A SIX-CHAPTER DOCUMENT

The first chapter examines current trends in ecology, health, well-being, and overall child development that call for a review of strategies for planning, designing, developing, and maintaining outdoor play areas in daycare centers. It emphasizes the importance of outdoor play in ensuring the overall development of children in a community setting. It focuses on the true meaning of the word "play", which goes far beyond simply keeping children busy: playing freely allows children to develop their intelligence, imagination, creativity, organizational skills, sense of collaboration, sense of mutual aid, sense of compromise, sense of empathy, and ability to make choices.

Chapter two presents the range of possibilities available to a daycare center for effectively organizing an outdoor environment and providing children with materials that enable them to learn in ways that meet their diverse developmental needs.

Chapter three identifies the essentials that make life enjoyable in a play space, considering storage and thermal comfort needs. It discusses paths, which, according to the [Nature Play and Learning Places](#)⁴, "are the blood vessels of a space, circulating the flow of human energy".

Chapter four focuses on the process that leads a team to think about designing a comfortable and welcoming outdoor space that is a pleasant place to be. It refers to appendices and practical reference tools that can facilitate the start of this process of creating or redesigning an outdoor play space and becoming its master builder, enabling children to enjoy a variety of sensory experiences in comfort and safety throughout the seasons.

Chapter five offers advice, tools, and exercises to support a team in its process of reflection, improvement, and optimization of a daycare center's outdoor play space.

Chapter six focuses on educational activities applied outdoors. It also addresses the planning and implementation of educational activities based on observations in the playground, as well as the necessary evaluation and adjustments.

⁴ Moore, R. *Nature Play & Learning Places*. Creating and managing places where children engage with nature. Raleigh, NC: Natural, 2014.

1

WHY CREATE OR REDESIGN AN OUTDOOR PLAY AREA

ENVIRONMENTAL PERSPECTIVE

Environmental considerations have become important factors in the design, layout, and maintenance of play areas. Making these spaces more natural has become essential to provide the sensory stimulation necessary for the proper development of children's rapidly maturing neural circuits.

Here, "naturalization" refers to the development of a space with the aim of making it as similar as possible to a natural, vegetated environment. More specifically, a naturalized play area is "a protected place in an outdoor environment where children of all ages and abilities can play and learn with and by manipulating various natural elements, materials, organisms, and habitats that allow them to engage in sensory, gross motor, and fine motor experiences⁵".

It is widely recognized that today's children suffer from a lack of access to the natural world. Richard Louv, an expert in children's rights and founding president of the [Children & Nature Network](#), believes that playing in a natural environment is essential for a child's physical and emotional health. "[Children need nature for the proper development of their senses, and therefore for learning and creativity](#)", he writes. This need is evident in two ways: by observing the transformation of young people's senses when they lose their connection with nature, or by witnessing the sensory magic that occurs in young people, even teenagers, when exposed to the smallest experiences in the natural environment⁶.

According to Robin Moore, professor at the University of North Carolina and director of a research and design program for early childhood environments, "[children live through their senses. Sensory experiences connect the child's outer world to their inner, hidden, emotional world. Since the natural environment is the primary source of sensory stimulation, the freedom to explore and play with the outdoor environment through their senses, in their own space and at their own pace, is essential to the healthy development of an inner life](#)⁷".

PERSPECTIVE ON WELL-BEING AND HEALTH

Playing in outdoor play areas appears to offer specific advantages. For one thing, children tend to be more physically active outdoors. The outdoors is a setting that satisfies the natural need for movement in any healthy child.

Outside, children can feel the wind, sun and cold on their skin, breathe in fresh air and move around freely in large spaces. They can gaze into the distance and distinguish the many sounds of urban wildlife in an environment that speaks to them and allows them to be themselves — that is, to act based on who they are — to exercise and take the risks necessary for optimal development. In the long term, the benefits of free outdoor play are numerous, including reduced blood pressure and body fat, a lower heart rate, and improved bone and muscle health, strength and physical endurance.

The document [À nous de jouer – L'extérieur, un terrain de jeu complet](#)⁸ indicates, among other things, that daily outdoor play positively affects mood and can directly impact children's well-being and health.

GLOBAL DEVELOPMENT PERSPECTIVE

Having access to an outdoor play area that is well suited to the needs of those who will use it daily, whether they are children or adults, will significantly impact the quality of their experience there. The benefits of freedom of movement outdoors are even more pronounced in young children.

Compared to children who play indoors, children who play outdoors develop more broadly.

⁵ Moore, R. Nature Play & Learning Places. Creating and managing places where children engage with nature. Raleigh, NC: Natural, 2014, p. 21.

⁶ Louv, Richard, Une enfance en liberté, Protégeons nos enfants du syndrome de manque de nature, Éditions Leduc Pratique, 2020, p. 69.

⁷ Cité dans Louv Richard, Une enfance en liberté, Protégeons nos enfants du syndrome de manque de nature, Éditions Leduc Pratique, 2020, p. 82.

⁸ Table sur le mode vie physiquement actif, À nous de jouer – L'extérieur, un terrain de jeu complet.

They perform a wide range of large movements, such as running, climbing, sliding, jumping and crawling⁹. They tend to be more creative and regulate their emotions effectively. They also engage in imaginative play more often and are more eager to collaborate with friends to achieve a common goal. They invent their own rules and begin to learn and solve problems independently. They start to learn how to solve problems independently, without needing constant reassurance from adults.¹⁰

After spending hours outdoors every day, children develop greater resilience, endurance and independence. They are generally calmer and more confident than their peers who have stayed indoors.

PERSPECTIVE ON THE NEED FOR A DIVERSE, ORGANISED AND WELL-MAINTAINED ENVIRONMENT

Accueillir la petite enfance¹¹ (Québec's Educational Program for Childcare Services) emphasises that the quality of facilities and equipment is one dimension of educational quality in an ECE programme. Similarly, outdoors, the space and equipment must be organised to enable children to learn in each developmental domain and promote their autonomy. **By limiting prohibitions, we encourage their initiative and enable them to take calculated risks, which are essential to their learning.**

The design of outdoor play areas should stimulate children's curiosity and encourage them to engage in a wide variety of experiences.

The quality and diversity of a place influence play behaviour. Depending on the characteristics and type of available space, children engage in activities requiring high, medium or low mobility¹². Experiences such as reaching the top of a small hill, walking through bushes, exploring all areas of the playground and drawing or painting on the pavement promote children's global development.

Many education and play space design specialists distinguish between active (or motor) play and passive play (quieter activities), but it is important to remember that a child's brain is active even when they are quiet, observing, listening, sitting, walking around, or even, one might say, sleeping. Their brain is constantly processing information.

The Child Activity Rating Scale (CARS)¹³ found that children's natural activity tends to be sporadic and change frequently, with few high-energy activities performed over long periods, usually punctuated by less intense activities.

If we want to truly meet children's need for movement, this phenomenon must be considered.

Innovative play spaces should incorporate a variety of elements that allow children to move from high-mobility activities to medium- or low-mobility activities as they wish.

The Chinese writer Shen Fu (born 1763) described one of his favourite childhood pastimes, illustrating how experiences spent outdoors in childhood can leave a lasting impression on the memory : "When I was a child, I could distinguish even the smallest objects, and for all those I found, my greatest pleasure was to immerse myself in the meticulous contemplation of every detail of their shape and composition. In our garden, at the foot of a terrace overgrown with wild grass and weeds, there was a low earth wall in the hollow of which I used to hide; in this observatory, I found myself at ground level, and by concentrating my attention, the weeds under my eyes eventually transformed into a forest where insects and ants appeared like wild animals on the prowl... The smallest molehill seemed like a mountain, and the hollows in the ground became the valleys of a universe through which I undertook great imaginary journeys. Ah ! How happy I was then!"¹⁴

Children are sensitive to beauty and order. An organised and well-maintained environment encourages behaviours that promote conservation and respect for the environment. Spaces designed for children and maintained by the adults who live there are important educational environments for these young citizens.

In this context, art cannot be limited to a few isolated sculptures. Almost any element of a play area can be designed with an aesthetic perspective in mind: a wind chime in a tree, a small, tidy shoe cabinet, building materials enclosed by a small wooden fence, etc. Play spaces should allow children to be in contact with an environment that allows them to experience pleasure and beauty through all their senses. Here we see active children, playing alone or with others, imagining their own world, climbing, building, drawing, gardening, discovering. They are fascinated by natural materials such as sand and water and are fond of plants and insects. You hear shouts of joy, laughter, birds singing, sometimes cries and conversations between children, or between children and adults who really talk and listen to each other. You can smell the fresh air, the sometimes-damp ground, the warmth of the soil, the scent of vegetation. You feel a sense of freedom or happiness, your skin is sometimes cold, sometimes warm, and you feel pleasantly tired.

⁹ Dans 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.

¹⁰ Hanscom, Angela J. et Louv, Richard, *How Unrestricted Outdoor Play Makes for Strong, Confident, and Capable Children*, 2016.

¹¹ *Accueillir la petite enfance* : programme éducatif pour les services de garde du Québec.

¹²⁻¹³ Échelle d'évaluation de l'activité chez l'enfant (Children's Activity Rating Scale (CARS) élaborée par Jackie Puhl.

¹⁴ Fu Shen, *Récits d'une vie fugitive: mémoires d'un lettré pauvre*, Gallimard, 1977

PERSPECTIVE ON FREE PLAY

Play is the lifestyle and preferred learning vehicle during childhood. Through play, children learn to interpret their environment and interact with the world around them. All play is flexible and variable depending on mood, time of day, or season of the year. Playing is fun, interesting, active, and allows children to relax while expending energy. But play is much more than just fun for children; it is a way for them to understand their environment, interact with it, and learn many socio-emotional, motor, cognitive, and language skills.

Free play is a central and determining factor in health, emotional well-being, and cognitive development, just like eating and sleeping. The ability of a childcare service to provide an environment conducive to the optimal development of each child depends, in a way, on recognizing the importance of free play and on being able to provide a setting that allows for it daily.



THE RIGHT TO PLAY

Article 31 of the [Convention relative aux droits de l'enfant](#) recognizes the right to rest, leisure, play, and recreational activities appropriate to the child's age, as well as free participation in cultural and artistic life. This specific right, recognized in 1989, entails the right to grow up and play healthily in environments that stimulate the mind and body. "[Children learn through play](#)" is one of the fundamental principles of "Welcoming Early Childhood: Educational Programme for Quebec Childcare Services". Play is how children learn and develop.

Children should have access to places where they can pick up, carry, or gather various elements from the environment, where they can roll, climb, knock things down, or dig, and do so freely. Play has always been the basis of good practice in early childhood education. Although no distinction is generally made between play and other experiences that enable children to learn new things, children's free play in a rich environment is still considered a very important part of good practice in early childhood education (Stonehouse, 2001).

American psychologist David Elkind¹⁵ wrote: "[Decades of research have shown that play is essential for physical, intellectual, and socio-emotional development at all ages. This is especially true for the purest form of play: child-initiated, imaginative, and unstructured; children engage in their own games and even invent their own rules.](#)"¹⁶

However, according to Elkind, play can only be described as free if it is:

- Voluntary, allowing the child to join or leave the game whenever they want;
- Spontaneous, allowing for independent activity that can be transformed by the child;
- Different from any other experience because it involves elements of "pretend";
- Engaging, since the child is personally involved in the activity;
- Fun, enjoyable, and appreciated by the child.

¹⁵ David Elkind est un spécialiste de la psychologie du développement. Ses travaux de recherche portent sur la perception et le développement cognitif et social, où il s'est appuyé sur les recherches et la théorie de Jean Piaget.

¹⁶ Elkin, David, *The Power of Play*, Capo Press, Cambridge 2007.



THE RIGHT ENVIRONMENT FOR FREE PLAY

Children need to play in safe and stimulating environments where they can practice skills appropriate to their level of development. All types of play are essential to healthy development. Spontaneous free play in the daycare center's outdoor area will greatly help maximize opportunities for social and recreational interaction, which will serve as a foundation for children to lead rich and balanced lives.

Of course, play can incorporate a variety of elements. The more play zones a space offers, the greater the variety of possibilities and the more valuable the play experience. Children's attention will be held for longer, giving them more opportunity to develop their own play strategies. A well-designed, well-equipped free play space should provide children with a variety of options for:

1 - DEVELOP MOTOR SKILLS

Physical play that improves motor skill development and motor control supports the development of large muscles, visual-motor coordination, locomotion, and balance. The environment should encourage children to use their bodies, become stronger, more agile, and more physically confident. It should also offer them the opportunity to test their limits and abilities. There should always be new challenges for all children to take on, regardless of their abilities, and opportunities to improve their skills. Adults should take a back seat, content to exercise discreet vigilance as children who are not always skilled embark on this new motor adventure.

2 - DEVELOPING THE ABILITY TO TAKE INITIATIVE AND MAKE DECISIONS

Any outdoor environment in which a child lives daily should allow them to make decisions and choose their own activities. All children should have control over part or all the environment in which they grow up. This is particularly important for children with disabilities, as playing freely can be a major challenge for them since they are often more dependent on adults. Adults should provide them with opportunities for free play in an environment that promotes independence, offering them accessible materials that allow them to make choices and decisions. For all children, the experiences provided by the environment should not be "dead ends": children should be able to continue an activity, finish it, or start a new one.

Free play also involves developing the ability of educator staff to provide children with interesting and appropriate materials for each child's level in all areas of development, so that they can make choices in an attractive and varied environment. To support all children, educator staff must organize outdoor play zones and prepare materials according to each child's needs and development. Good observation periods are necessary to meet this challenge, as it is not easy to provide children with experiences that match their interests while leaving as much room as possible for their own initiatives.

3 - EXPERIMENT NEW THINGS

Children need to interact with their environment to understand the nature of the world. The outdoor environment must allow children to explore the properties of objects, the relationships between them, as well as space and their bodies. The outdoor play area must offer a range of play experiences that would be difficult to achieve indoors.

Equipment and motor skills materials should offer a variety of perspectives and observation points: high up and deep down, stationary or dynamic. A space without ceilings or walls no longer limits children's movements.

Pretend play is essential for children to express what they have seen, heard, and felt. Providing paths for riding in loops, little houses to live in, carts to pull their treasures, or any other resources that encourage imaginative and cooperative play will encourage children to engage in pretend play on their own initiative.

The variety of natural elements in the layout will also be important in awakening children's curiosity and understanding of the cycle of life and the world around them.



SOCIALISE AND, ABOVE ALL, HAVE FUN

Children need opportunities to develop their self-confidence and social skills. The outdoor space should be designed to encourage positive social interactions between children and educational staff, regardless of their age and abilities. Protected areas should be available to allow small groups to retreat for quiet social interaction and to contain the movements of younger children, while open spaces will be the setting for the first group games of older children.



PLAY TO LEARN, LEARN TO PLAY, LEARN WHILE PLAYING

We have come to view childhood as a period that must be "productive". Our minds, contaminated by this vision, have distorted the true value of free outdoor play. We often consider indoor play to be educational and outdoor play to be recreational. However, indoor and outdoor environments are complementary and can offer a wide range of learning opportunities for optimal child development.

Of course, children do not make this distinction, nor should they. They are naturally active from birth. Their initial interests focus first on parts of their bodies (sucking their fingers, looking at their hands, etc.), then on their immediate environment. They will quickly take the initiative to approach the objects around them if they are free to move and able to reach them.

Children learn quickly when given the opportunity to experiment and explore new ways of moving around. This is why it is important for childcare centres to provide outdoor spaces where children can move freely, adopt the postures that suit them and make appropriate choices based on their stage of development. However, childcare centres must ensure that all educational staff entrusted with children are attentive to their spontaneous interests and initiatives and able to respect their ability to do what they want and can do on their own. The adult responsible for a group of children must learn to allow them a degree of initiative and to invite them to participate without insisting, giving them the freedom to say no. It is on this basis that the mind and abilities develop, and a sense of efficacy is built, leading to becoming a creative and responsible adult.

When designing an outdoor play area, administrators should consider providing conditions that allow children to develop their physical, intellectual, social and language skills in a safe and playful environment, according to their maturity and stage of development. This will greatly facilitate the educator's task.

The educator staff's role

	"Supporting play requires sustained observation to enrich it by providing the child with new
	elements, play objects, materials, questions or vocabulary that enable them to learn.
	Supporting play therefore requires discreet assistance from imaginative adults who understand
	the stages and multiple facets of early childhood development and who act based on
	educational intentions. This support focuses both on the child's active role in their own
	development and on the adult's role as mediator". ¹⁷

¹⁷ Accueillir la petite enfance : programme éducatif pour les services de garde du Québec, p. 88.

2

THE OUTDOOR SPACE OF THE CHILDCARE SERVICE - AN ORGANISED ENVIRONMENT



Steen B. Esbensen is the author of *Playgrounds for Young Children*, produced by the Canada Mortgage and Housing Corporation (latest edition, 1997) and *The Early Childhood Playground : An Outdoor Classroom*, published by High/Scope Press in 1987. In addition to teaching and directing the Department of Educational Sciences at UQH, Steen B. Esbensen has also published various papers on play environments and collaborated with several landscape architects and urban planners to design play spaces. It is impossible to talk about preschool education programmes or playground safety without mentioning his major contribution, which has made him an international authority in the field of early childhood. The *Projet Espaces*¹⁸ drew inspiration from his work to adapt it to the reality of parks, and the Department of Education also used the concept of zones in the guide *Aménager la cour, un travail d'équipe* !¹⁹

The concept of zoning is an excellent way to add real play value to a childcare centre's outdoor play area. It is a practical, concrete approach that meets the wide range of children's overall developmental needs. Dividing the space into zones also indirectly encourages free play thanks to the layout of the space itself and contributes to the enjoyment that adults and children can derive from being in this environment. This chapter presents an ideal to strive for and aims to stimulate your thinking. You will find ideas that can be adapted to your context and the children in your care.

This model is inspired by the one developed by Danish Steen B. Esbensen, a specialist in education through play, first known as a professor at the University of Quebec in Hull, then as director of its Department of Education Sciences.

Today, outdoor play areas are mainly seen as places where children can engage in physical activity and get some fresh air. This is a good idea, but a childcare centre playground should offer more than just outdoor play. It should be a living environment that provides children with experiences that increase their knowledge, encourage their contact with nature, and allow them to explore various play and learning situations designed to improve their health, well-being, and overall development. This concept necessarily involves a layout designed for various types of play grouped into specific areas that interlock in a coherent whole, where the zones may overlap slightly.

Bates (1996) conducted a study on children in a play space by systematically observing them over a period of three months. He found that children's behaviour changed as the number of children increased and the available space decreased. An increase in the number of children leads to more aggressive behaviour. Hutt (1972) came to the same conclusions when studying children aged three to eight playing in groups of different sizes. The larger the group, the more hostile the behaviour towards people and equipment. It is therefore necessary not only to ensure that space is available, but also that the area is large enough²⁰.

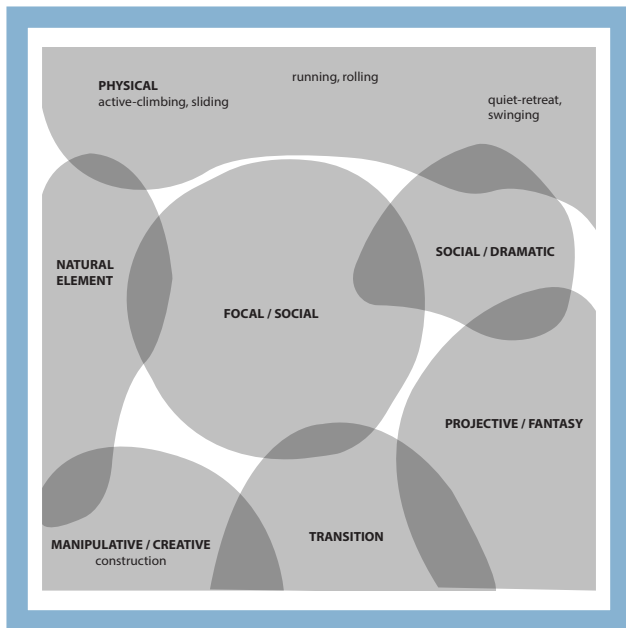
This need is even more important given that the size of the available space for development is assessed from the outset of the participatory process of designing the childcare centre playground (see Chapter 4). [Get Outside and Play](#) recommend a minimum size of 7 square metres per child to allow for the creation of a play area offering all play zones and accommodating between 60 and 90 children. In its publication, [Well Beings: A Guide to Health in Child Care](#), suggests that 6 square metres per child is best practice for outdoor space²¹.

¹⁸ Lancé en 2013 et géré par l'Alliance québécoise du loisir public, le projet Espaces vise à produire des outils et des formations pour faciliter la planification, la conception, l'aménagement, l'entretien et l'animation des parcs publics dans une perspective d'accessibilité, de plaisir et de liberté de pratique. Voir [Guide des parcs et autres espaces publics](#).

¹⁹ *Aménager la cour, un travail d'équipe!*, Gouvernement du Québec/Kino-Québec, 2019, 70 p.

²⁰ Bilton, Helen, *Outdoor learning in the early years, management and innovation*, 2010

²¹ Grenier D, Leduc D, eds. *Well Beings: A Guide to Health in Child Care*. 3rd ed. Ottawa, ON: Canadian Paediatric Society; 2015.



The Early Childhood Playground: An Outdoor Classroom p.13 - Play zone definition in «ideal» playground

There is increasing talk these days about "balanced safety". "Balanced safety refers to attitudes and practices aimed at preserving the health and well-being of children, while allowing for acceptable risk-taking. This balance refers to the equilibrium between a preventive approach and the promotion of acceptable risk-taking, as well as the sharing of responsibility between adults and children, because it is desirable for children".²²

As current childcare services are designed to offer smaller spaces, choices will have to be made by merging certain areas, which will then have multiple functions, or by identifying opportunities offered by the neighbouring community.

By drawing inspiration from the zone-based design framework proposed by Esbensen and adapting it to our circumstances, we can ensure that we offer a variety of experiences and play materials to make the playground a place where children can enjoy themselves every day, whatever the season. All children will be able to explore this environment for themselves and play freely thanks to the diversity it offers.

However, allowing children to play freely in play areas can be intimidating for many educators. Adult fear is often the biggest obstacle to children's freedom of movement in space and can take many forms. Adults who accompany children daily may fear for their safety and worry about insect bites and scrapes. However, we know that a bruise or scrape is often a much better learning experience than an adult repeating "Be careful!" every two minutes. Overprotective behaviour can sometimes do more harm than good.

A well-balanced level of safety will allow children to be offered challenges that are appropriate for their development, without compromising safety. According to [Play for All Guidelines](#)²³, "without taking risks, children cannot learn to fully exploit their potential. The difference between "danger" and "challenge" must be understood when creating a play space. Indeed, play consists of exploring and optimising the potential of any environment. Children will therefore test its use according to their abilities."

Educational staff must be aware of the potential dangers and take all necessary measures to ensure the safety of the entire outdoor area. This allows children to experience their own adventures and grow, free from many constraints.

The zone-based approach to playground design must consider the characteristics of the site, its topography and safety considerations.

For the optimal global development of children, seven zones are distinguished :

- The transition zone ;
- The quiet play and meeting zone ;
- The physical play zone ;
- The sand and water zone ;
- The garden and natural environment zone ;
- The creative and construction zone ;
- The symbolic and dramatic play zone.

In the next chapter, we will focus on the significance of this zoning concept for outdoor play spaces for babies and toddlers.

²² L'éducation par la nature en service de garde éducatif à l'enfance, cadre de référence, projet Alex, Association québécoise des CPE (AQCPÉ), 2020

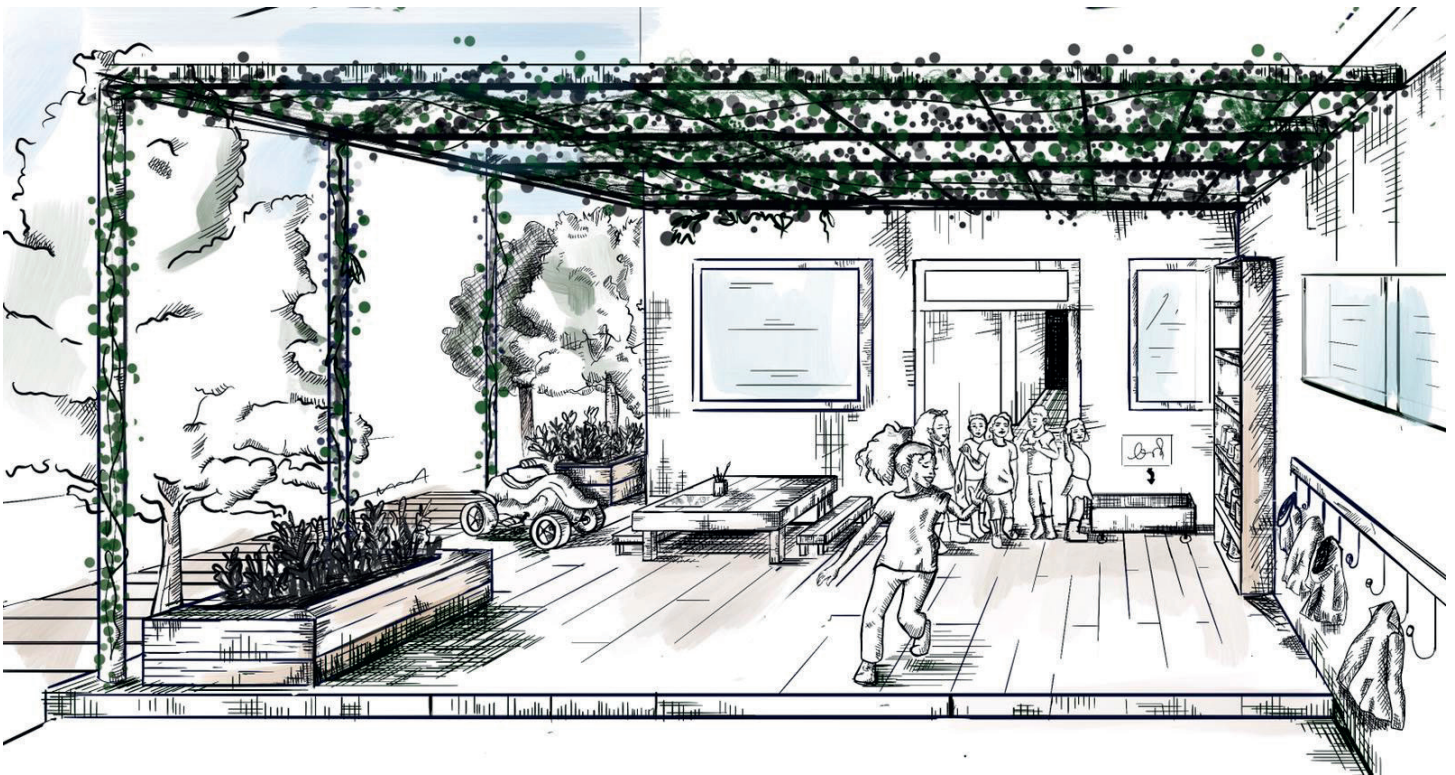
²³ Moore, Robin C. et coll., Play for all Guidelines, Planning, Design and Management of Outdoor Play Settings for All Children, Berkeley, 1987.

3

DESIGNING PLAY AREAS BY ZONE

THE TRANSITION ZONE

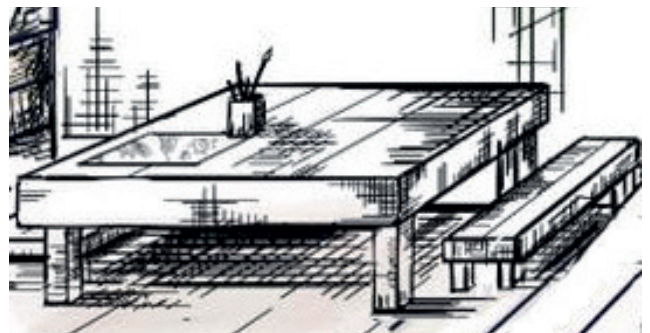
The way indoor and outdoor spaces interconnect directly affects how easily the childcare center's program can be implemented and encourages adults to use the playground daily. When playrooms open to the outdoors, children and adults feel closely connected to the outdoor play and learning environment. The transition zone is a space that allows children leaving the building to explore the outdoor play space to take a break before venturing out. This area is particularly important for younger children, who need to feel the comforting presence of an adult before exploring this world that seems so big to them.



ESSENTIAL QUALITIES

For some children, an open space is appropriate, while others need access to more concrete activities, such as painting, playing with water, or using small toys.

The transition zone encourages quieter activities that allow children to move from indoors to outdoors and vice versa at their own pace. Adults should be able to remain there as needed to be close to the children, ensuring a smooth transition.



KEY CONSIDERATIONS

The transition zone can take the form of a balcony, patio, terrace, or outdoor platform. Depending on the available space, you can install planting beds, raised planters, or mobile containers. Visible boundaries are essential to indicate that this space is an integral part of the building. The transition zone may include a parking space for wheeled toys that opens onto a primary pathway. If a guardrail is installed, it should be relatively open and unobtrusive to allow sunlight to enter the building and provide an inside view.

To improve comfort and safety, the transition zone can be covered or permanently roofed, or covered with climbing plants (such as vines), creating an attractive, semi-covered pergola. Nearby deciduous trees can improve comfort in summer while allowing the sun to warm the area in winter. Children can use it as a place to get dressed or undressed before going from indoors to outdoors or vice versa.



SPECIAL ROLE OF EDUCATOR IN THIS PLAY ZONE

In this area, the interaction between educator and children, especially the youngest ones, aims to provide them with the emotional support they need to adapt and feel comfortable during the transition to the outdoors. Older children can find science-related activities here, such as observing the weather or examining plants picked in the yard.

THE QUIET PLAY AND MEETING ZONE



The quiet play and meeting zone encourages children to meet and work in small groups. It allows for certain activities from the childcare centre's program to be carried out, such as reading, arts and crafts, or science activities. It is a place where children can sit and talk with friends or with the educator staff. Shaded in summer and open to the sun in winter, this area can be equipped with tables and garden benches. It is a comfortable place where children can simply observe the entire playground, calm down, and rest.

Often, the unique features of this space are poorly defined in an unstructured yard. Generally, people neglect to add elements that give it character and make it functional : a shelter, benches or seats, large and mature trees nearby, artistic or cultural objects, etc.

ESSENTIAL QUALITIES

The main functions of the quiet play and meeting zone should be :

- to be a place that encourages interaction between groups ;
- to accommodate individual or small group projects ;
- to host assemblies, outdoor performances, music concerts, or even board meetings.

KEY CONSIDERATIONS

To determine the location, first observe the playground and the children playing there: where do they naturally gather, what activities do they engage in? Several areas may be suitable for children to gather in small groups, but the zone must be large enough to accommodate several children at once. If workshops are planned, all tools and materials should be within easy reach in storage units. Furniture of various sizes should be provided to accommodate children of different heights. The zone should be easily accessible, for example at the intersection of the main paths. It can be in a tucked-away spot, which offers more peace and quiet.

VARIED FEATURES

Provision should be made for natural or structural means of protection from the sun, wind, and rain, and tables and benches should be combined in a variety of ways to encourage creative use of the space. Furniture can be placed at different heights, but children should be able to sit on the ground, on benches, or on wooden logs. A platform can also be built on a slope: children can gather there or play with small objects on the different levels. A hill can also serve as an unusual gathering place where children feel comfortable, a place that lends itself to quiet activities and relaxation. Possibilities range from simple circles of logs or large rocks (located in a grove for added comfort) to elaborate pergola-type structures.

Tables and benches made from large cable reels salvaged from local industries can be installed in this area. They serve the same purpose as picnic tables but are smaller to accommodate children. Adult benches are generally 45 centimeters (18 inches) high, but children's benches are much smaller. They can be arranged in different ways depending on the purpose of the gathering.

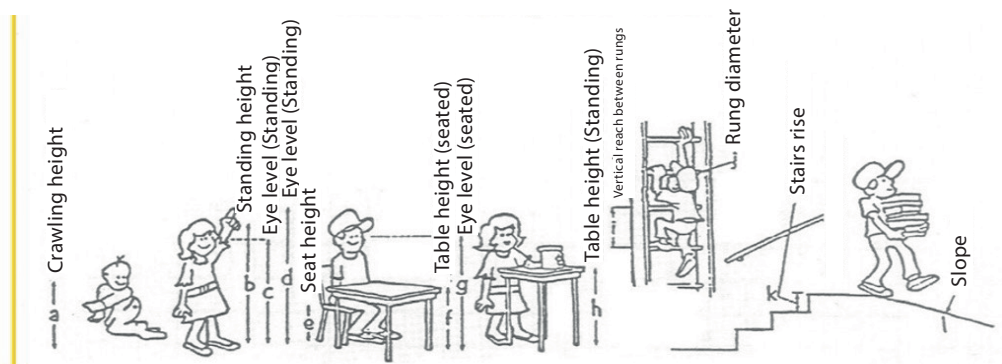


ANTHROPOMETRIC CHART FOR A CHILD-SCALED ENVIRONMENT

To help you design this area with elements adapted to the size of users, you can use this anthropometric diagram illustrating a child-sized environment.²⁴

²⁴ Source : Army Regulation 608-10 (p. 267), Personal Affairs : Child Development Services, Washington, 2017

CRITICAL DIMENSIONS OF THE CHILD



ANTHROPOMETRIC TABLE FOR A CHILD-FRIENDLY ENVIRONMENT

Children's dimensions	Infant	Toddlers	Pre-school age
a. Crawling height	13 ³ / ₄ inch - 34.9 cm	16 inch - 40.6 cm	19 ¹ / ₂ inch - 49.5 cm
b. Standing height	29 inch - 73.6 cm	33 ¹ / ₄ inch - 84.5 cm	41 inch - 104.1 cm
c. Eye level (Standing)	25 inch - 63.5 cm	30 ¹ / ₂ inch - 77.4 cm	36 ¹ / ₂ inch - 92.7 cm
d. Overhead reach	38 inch - 96.5 cm	44 ¹ / ₄ inch - 112.4 cm	49 ¹ / ₄ inch - 125.1 cm
e. Seat height	20 ¹ inch - 50.8 cm	7 ¹ / ₂ inch - 19 cm	10 inch - 25.4 cm
f. Table height (seated)	27 ¹ inch - 68.6 cm	14 inch - 35.5 cm	17 ¹ / ₂ inch - 44.4 cm
g. Eye level (seated)	33 inch - 83.82 cm	25 inch - 63.5 cm	29 ¹ / ₄ inch - 74.2 cm
h. Table height (Standing)	--	17 inch - 43.18 cm	20 inch - 50.8 cm
i. Vertical reach between rungs	--	11 ¹ / ₂ inch - 29.2 cm	16 ¹ / ₂ inch - 41.9 cm
j. Rung diameter	2 inch - 5.1 cm	1 ¹ / ₄ inch - 3.2 cm	1 ¹ / ₂ inch - 3.8 cm
k. Stair rise	1 à 3 inch - 2.5 à 7.6 cm	3 inch - 7.6 cm	4 inch - 10.16 cm
l. Slope	14°	14°	19°

¹ Infant feeding chair seat height

** No loose items in infant areas should be less than 1 ¹/₂ inch (4 cm) diameter.

FURNITURE AND PRACTICAL STRUCTURES

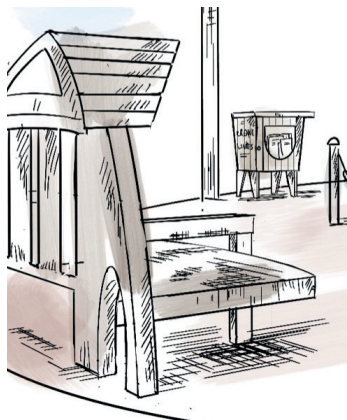
LOGS AND TIMBERS FOR SEATING

Children enjoy making their own benches from logs or various materials. Log sections (200 to 450 mm thick) can instantly create a gathering space or a quiet corner. You can obtain sections from your municipality or a tree-felling company before they are shredded. You can often find logs for free in the community. Logs do not have the same lifespan as a circle of rocks and will need to be replaced approximately every five years. Red cedar, oak, maple, and other hardwoods provide the most durable logs. Pine and other softwoods are less suitable because they rot quickly. Make sure the edges are smooth and free of sharp points.

Furniture can be quickly created using logs. However, making benches from logs requires certain skills and good tools.

In winter, logs and stumps can be used as furniture for building forts or snow castles.





STORYTELLER'S CHAIR

To create an artistic focal point in a schoolyard in England, a class built the "magical storyteller's chair" with the help of an artist. Every student who sits in it is suddenly transformed into a storyteller. The chair is made of large pieces of wood for the seat and arms and has a curved backrest and wooden roof to symbolize the schoolyard theme. Located near a "book nook", it can become an important asset for encouraging reading in an outdoor space.

BENCHES AROUND TREES

Benches can be arranged in a circle around trees to allow children to rest in the shade. This method also protects the roots from compaction. It is also possible to arrange benches in a pentagon around a tree, with wooden planks serving as seats, or to build a round table around a tree, with wooden blocks and logs as seats.



PAVILION

This small shelter in the shape of a kiosk (commonly referred to as a "gazebo") is mainly used as a place to relax and meet. Equipped with a roof, it provides protection from the elements in summer and is particularly useful in winter, providing a comfortable place to sit sheltered from the wind and snow.

ROCKS OR BOULDERS?

Large, smooth, solid stones can be used to create an instant gathering place. If you live in a rocky area, you will easily find large smooth stones. Otherwise, they can be expensive. Rocks are durable and have many uses: children can sit on them, climb on them, and use them as free building materials; they can be used to mark or delineate paths. In winter, stones can also be used to create a mound for sliding. However, you will need to make sure that there are no elements in the environment that would prevent this use. In any case, make sure that the stones do not have sharp edges.

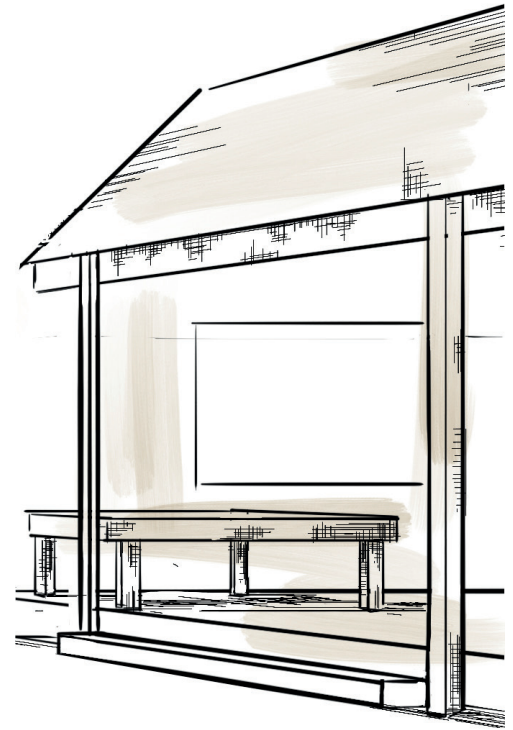


LOW PLATFORMS

Low platforms are one of the most versatile outdoor structures. Available in a variety of shapes and sizes, they provide a dry, warm surface above ground level, which is particularly useful in cold or wet weather. As a gathering place for children, they allow for a variety of social and imaginative activities. Large platforms can accommodate group activities led by educators. Designed like stages, they allow for expressive group activities, ranging from reading to performances.

The simplest platform can serve as an effective incentive for dramatic play. With a minimum width of 1.2 or 1.5 meters (4 or 5 feet), it can provide a useful activity space; at more than 4.5 meters (14 feet), it offers all kinds of activity possibilities. It blends in well with the environment, with one side against or in the corner of a fence. Several platforms can be distributed throughout the playground at strategic points to allow for small groups to gather simultaneously. The base of each platform should be no more than 1.50 meters (5 feet) above the ground so that it remains easily accessible to everyone. Whether square, rectangular, hexagonal, or octagonal, a wooden platform is easy to build to fit the specific dimensions of a location.

If the platform is backed by a fence on one or more sides, it increases the feeling of protection while keeping the area visible to adults. However, you must ensure that the height of the fence complies with regulatory requirements from the top of the fence. A vine-covered roof can transform the platform into a shaded and fragrant space. It is also possible to add a platform to one or more trees.



The role of educators

Due to the proximity between children and adults, the quiet play and meeting
area will be ideal for talking with them, listening to them, and helping them
implement their ideas. Through these interactions, educators will promote the
development of children's language and skills in establishing harmonious relationships
with their peers, reasoning, trial and error, experimentation, and creativity.

THE PHYSICAL PLAY ZONE



The zones presented in the previous sections did not primarily promote the development of gross motor skills, but it should be noted that children develop their fine and gross motor skills when they walk around and enjoy the entire play area. In uneven ground, the site may offer topographical variations that present motor challenges, such as mounds, slopes, rock piles, and large stones. These challenges can be multiplied by the addition of paved paths and rolling toys such as wheelbarrows, tricycles, or balance bikes (training bikes).

Taking on physical challenges allows children to develop their abilities, learn their limits, and appreciate their successes. Naturally, the physical play zone, as its name suggests, will focus on these types of challenges. It will allow children to make larger movements and will particularly stimulate the development of gross motor skills.

PROVIDE A NATURAL ENVIRONMENT

KEY CONSIDERATIONS

The natural environment is important. We place invaluable importance on nature-based education, but we will not dwell on this topic in this guide. Many documents already cover this subject, and several organizations offer training, support, and tools that facilitate learning with and in nature. Nature-based education generally refers to activities in natural or naturalized settings, but here we will focus on designing outdoor spaces for this same purpose, based on daily use. We thus emphasize the importance of bringing nature into children's daily lives, including in physical play zones, which are primarily dedicated to motor skills games.

VARIOUS FEATURES

Some natural elements encourage motor skill development, such as large stones and rocks. Stones should not be taller than 45 centimeters (18 inches). They should be rounded, without sharp edges, stable on the ground, and heavy enough that a preschooler cannot pick them up and move them around the site.

A stabilized mound can also be created in the physical play zone using plant material that will provide a root mat. Steps can be installed along the mound to create a traffic lane, which will allow the plant material to remain healthy. Small shrubs or evergreen ornamental grasses that do not have sharp or pointed leaves and that spread vigorously are suitable plants for preventing erosion in a mound.

Multipurpose grass playing surfaces are ideal for high-energy group games and activities that promote cooperation, team spirit, and overall motor development. These lawns are perfect for playing soccer, basketball, or other sports that require a soft surface. They must be surrounded by a fence to restrict these games to the space allocated to them. Educators can introduce children to all kinds of physical games based on their interests and current abilities; once they have fully understood the rules or how the games work, they can decide for themselves when and how to play them.

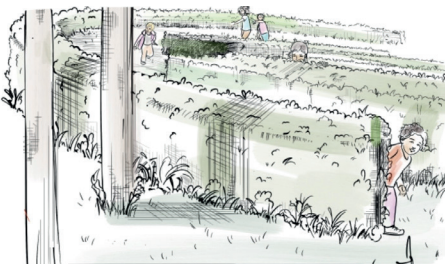


Play areas must be appropriate for the size of the children. For preschoolers, a space of 14 to 28 square meters (46 to 90 square feet) is required. This area should be identified as a green space for physical play. It is best to invest in high-quality grass and ensure that the subsoil allows for good drainage. It is recommended to consult a professional (e.g., a landscaper) when choosing seed mixtures, as there is a wide variety available: some are more resistant to trampling, drought, shade, and cold.

Maze-like arrangements of ornamental grasses can be used for games of tag and hide-and-seek. Moving in the wind, the grasses provide sensory stimulation all year round. Grass mazes offer several layout possibilities due to their flexible shape. The minimum recommended size for the maze area is 9 square meters (approximately 3 meters wide by 3 meters long) (100 square feet or 10 square feet x 10 square feet). Of course, they can be larger. The average height of the grasses should not exceed 1.20 meters (4 feet) so that they do not block the view.

You can create mazes with sunflowers, which are easy to grow. They just need water, sunlight, and a little care. The mazes can be made up of different varieties of sunflowers, allowing children to observe their growth and make comparisons. Once the flowers bloom, children can make floral arrangements that they can reproduce in drawings or paintings or let the flowers dry and hang on the stems.

Mazes can also be designed using shrubs that are easy to prune and will remain dense throughout their height. The spacing between plants or shrubs should be based on their mature size, so that children can easily move between them. The distance between mature heads can vary from 1.50 to 7.50 meters (5 to 25 feet) depending on the desired maze design. A maze made up of closely spaced shrubs works differently from a maze where the shrubs are more widely spaced. The center spacing of the shrubs (distance between the center of one shrub and the center of the next) is based on the width of the shrub at maturity or the width that can be achieved through pruning, and the desired width of the paths. Minimal center spacing will allow for wider paths that can accommodate more active games.



Carefully selected ornamental grasses and shrubs offer a fascinating annual growth cycle. These plants can provide sensory interest throughout the year if properly cared for. With the warming of spring, new green leaves emerge, and by late summer, the plants will have reached their mature size. In winter, dormant foliage provides natural mulch and protects plants from frost.

SUGGEST PLAYGROUND EQUIPMENT

It is unfortunate that less importance is being placed on playground equipment, i.e., "play structures that are anchored to the ground or have natural stability and are not intended to be moved"²⁵. These structures encourage "doing things together", the pleasure of adjusting one's movements to those of others, of doing things faster or slower, of reducing or amplifying them.

In a community, the outdoor playground²⁶ thus meets the need to move together, swing together, find balance together, or use one's strength to move while suspended in full suspension. Children need a space where stationary equipment will allow them to swing, hang, climb, jump down, and slide in different positions. The play area is thus defined as that part of the play space that includes play equipment, one or more play structures, and protective surfacing²⁷.

KEY CONSIDERATIONS

The outdoor play area should be located away from quiet zone and close to the symbolic and dramatic play zone, as the equipment can also be used for role-playing.

Playground equipment should be designed to allow children to grow with the challenges it offers. Children should be able to have complex experiences that they can undertake or refuse according to their abilities or desire to take on a new challenge.

The first step in determining playground equipment needs is to take an inventory of what is already available and what is offered by the municipal, school, or community environment to which the children's groups have access. (see Appendix 1) Next, analyze what the daycare center's yard has to offer and divide it into zones to determine how much space the playground itself occupies. An essential rule to always keep in mind is that area occupied by the playground equipment should not exceed one-third of the total yard area.

VARIOUS FEATURES

The literature review and professional opinions indicate that the play value of equipment is not solely dependent on its size, but also on the opportunities it provides for children to develop a range of motor skills that can make the equipment more exciting and stimulating.

It is often on playground equipment that children take on their greatest motor challenges. When children can take risks and even experience the sensation of falling, they learn over time to make the necessary motor adjustments, such as shifting their body weight to avoid falling.

Adults cannot teach children how to make these necessary adjustments. Children must learn these skills through real-life experiences (Ayres, 2000). They need to fall occasionally, make mistakes, and even get bumps and bruises to develop good balance, become more independent, and improve their motor skills. Limiting children's exposure to risk and constantly trying to prevent them from falling can hinder their physical development. Without the freedom to adapt to the motor and balance system, children may be clumsier and more likely to fall and injure themselves seriously²⁸.

Taking risks and facing challenges are important for healthy sensory and motor development. Certain components of play equipment will encourage movements that are important for children's optimal development.

²⁵ Ce sont des structures de jeu que l'on retrouve habituellement dans les aires de jeu des écoles, des parcs, des garderies, des institutions, des immeubles d'habitation, des lieux de villégiature et de loisirs privés, des restaurants et autres lieux publics. C'est à de telles structures que s'applique la norme CSA Z614:20 – Équipements d'aires de jeu et revêtements de protection.

²⁶ Aire de jeu extérieure : partie de l'espace de jeu extérieur dotée d'équipement de jeu destiné aux enfants. Chapitre S-4.1.1, r. 2 Règlement sur les services de garde éducatifs à l'enfance, article 29.

²⁷ Équipement d'aires de jeu et revêtements de protection, Association canadienne de normalisation, octobre 2020.

²⁸ Hanscom, Angela J. *Balanced and Barefoot: How Unrestricted Outdoor Play Makes for Strong, Confident, and Capable Children*, New Harbinger Publications, p. 113.

CLIMBING

Play structures should include various types of climbers with a variety of difficulty levels. These types should vary depending on the climbing mode. Variables include flexibility, inclination, number of users, and type of component used.

In general, all children want to climb to the top of play structures. The emotional benefits of climbing are obvious; children seem to feel a sense of accomplishment when climbing. The more they develop their abilities, the more they need to have the opportunity to experience their own adventures and put their abilities to the test by attempting to reach hard-to-reach spaces.

Children climb for many reasons, resulting from both innate and experiential factors. They climb for excitement, to overcome obstacles, to experiment with the force of gravity, to "pretend", to imitate their peers, to get closer to nature, to reach the highest level possible, to test their abilities, and to stimulate kinesthetic and vestibular perceptions.

The ability to climb follows a developmental progression that begins with exploration and continues through increasingly complex and refined stages. It is a kind of crawling (coordinated use of upper and lower limbs) that will move from horizontal to vertical, and from a complete and easy grip of components to gripping increasingly unstable and complex supports.

Going down is more difficult than climbing up, but children often try to climb to the highest level of the equipment, regardless of the designer's intention. Therefore, if there are more difficult methods of access, it is important to provide easier components for exit. A slide always offers all children a quick and easy exit, even if children do not always use it as intended. We must expect children to access the platform via the slide and tolerate this, even if it means discussing safety rules with them beforehand.

HANGING

Climbing helps children develop the ability to hang from a component of a play structure. By the age of three, most children develop the ability to grip and sufficient upper body strength to support their body weight (Frost & Kim, 2004)²⁹, sometimes as early as two years of age (Gabbard & Patterson, 1980). Children's ability to use any equipment that stimulates the upper body depends on their experience with that equipment, their overall physical fitness level, and their innate abilities (Gallahue, 1989).

The general objectives of any upper body equipment are to promote the development of proprioceptive and motor skills, as well as to strengthen the upper body and coordination. Proprioceptors are sensory organs located in muscles and tendons that need to be stimulated during early childhood to better fulfill their role as small transistors that relay information to the central nervous system about the position of active parts of the body in space. This new impulse to hang stimulates proprioceptive sensitivity, which allows us to always be aware of the position and movements of each part of our body.

Several experts have expressed concerns about the development of motor skills in the shoulder girdle and upper body of preschoolers and the use of upper body equipment. However, it is unclear whether these concerns stem from preschoolers' inherent lack of upper body strength or from their lack of opportunities to use and experiment with this type of equipment in a natural way when they feel the need to do so. Researchers observed that many preschoolers developed the physical skills and upper body strength necessary to master a horizontal ladder when they were regularly exposed to it.

One thing is certain: young children must be given opportunities to develop upper body strength while standing on solid ground before they use equipment that is fully suspended. Depriving children of experiences hinders learning, especially in the early years, and it is important to continue to provide additional opportunities to experiment with movements that are often absent from children's lives. Upper body equipment is an example of a structure that offers a type of experience that children do not often can have in their daily lives.

In addition, when upper body equipment is placed at a height appropriate for preschoolers and installed above sufficient shock-absorbing surfacing, the risk of injury is significantly reduced.

²⁹ Frost L. Joe et coll. The Development Benefits of Playgrounds, ACEI Editor, Olney, 2004.

ROCKING, ROTATING, SWINGING

The development of the skills needed to swing follows a general progression like that of skills with other types of playground equipment, such as climbers and upper body equipment. The swinging motion involves several physical skills. This movement is a real physical fitness exercise, developing skills such as the ability to pump with the legs, push with the upper body, let go with the hands to jump, and coordinate landing on balanced feet.

It is noticeable that, during early childhood, children naturally swing back and forth while lying flat on their stomachs on a swing, with their heads facing down. This gives them the feeling of imbalance that they enjoy experiencing, even though they do not yet know how to swing (pendulum-like movements of the body) by themselves while sitting up.

Familiar motor experiences such as changes in position in space, rocking, rotating, and swinging promote vestibular stimulation. [Children enjoy using a "sixth sense": the sense of balance.](#) The vestibular system, which includes the labyrinthine apparatus located in the inner ear, is strongly stimulated by this movement. The vestibule of the labyrinth provides information from the head about the movements of the entire body. It is in fact the specific sensory organ for balance and the proprioceptive receptor par excellence, enabling the different body segments to be in relation to each other to define the position of the body in relation to its surroundings. This ability needs to be stimulated during childhood to develop. It is this ability that will determine whether the body is vertical, static, or involved in a series of acceleration or deceleration movements.

There are swings that move in different ways, adapt to different skill levels, and can be used individually or by multiple children. This gives children access to a variety of options that allow them to take on challenges and move according to their abilities. Swings are valuable assets in playgrounds: they promote social, cognitive, and perceptual-motor development.

This type of equipment is very popular and allows children to move faster than they could on their own. The most popular equipment in playgrounds, after climbing structures, is equipment that gives children a sense of speed and movement.

Rocking, rotating, and swinging movements are important for the development of the vestibular and proprioceptive systems. These rhythmic movements can also have a calming effect on a child, helping them to relax.



PRACTICING BALANCE

At a very young age, children begin to face difficulties. They put themselves in situations that are dangerous for their age group. When they are allowed to act freely in an emotionally secure environment (without being pushed or encouraged to go beyond their capabilities), they only undertake tasks that are within their reach. They experience great pleasure in testing themselves against risk, in feeling fear, and in throwing their bodies off balance to regain stability.

Babies roll themselves onto their stomachs after being placed on the floor in a comfortable spot. From then on, they begin to pivot on themselves, which changes their perception of space and their view of objects. When they turn onto their side, they increase their support surface with one foot, which they place on the floor, or with one or both arms to maintain their balance. Through play, they naturally develop physical dexterity that allows them to link movements together, adapting them to changes in their balance and using different parts of their body for support. Later, this turning action will involve other movements.

When standing, around 18 months old, children spin around. They enjoy spinning like a top, they like to get dizzy, stop, and stabilize themselves again. There is a clear improvement in their perceptual-motor skills.

Children love all equipment that makes them spin, such as spinning bowls and benches, saucers, carousels, and turnstiles, in all kinds of positions: on their stomachs, upside down, sitting, standing, etc. By engaging in these activities, they are working on a skill that is essential to their daily lives: moving safely and efficiently.

Circular or pendular movements performed by the whole body, whether sitting, lying down, standing, or kneeling, involve weight transfer (forward-backward, side-to-side, up-down) and a search for balance. The coupling of visual, vestibular, and proprioceptive processes with motor processes is crucial in the development of postural control.

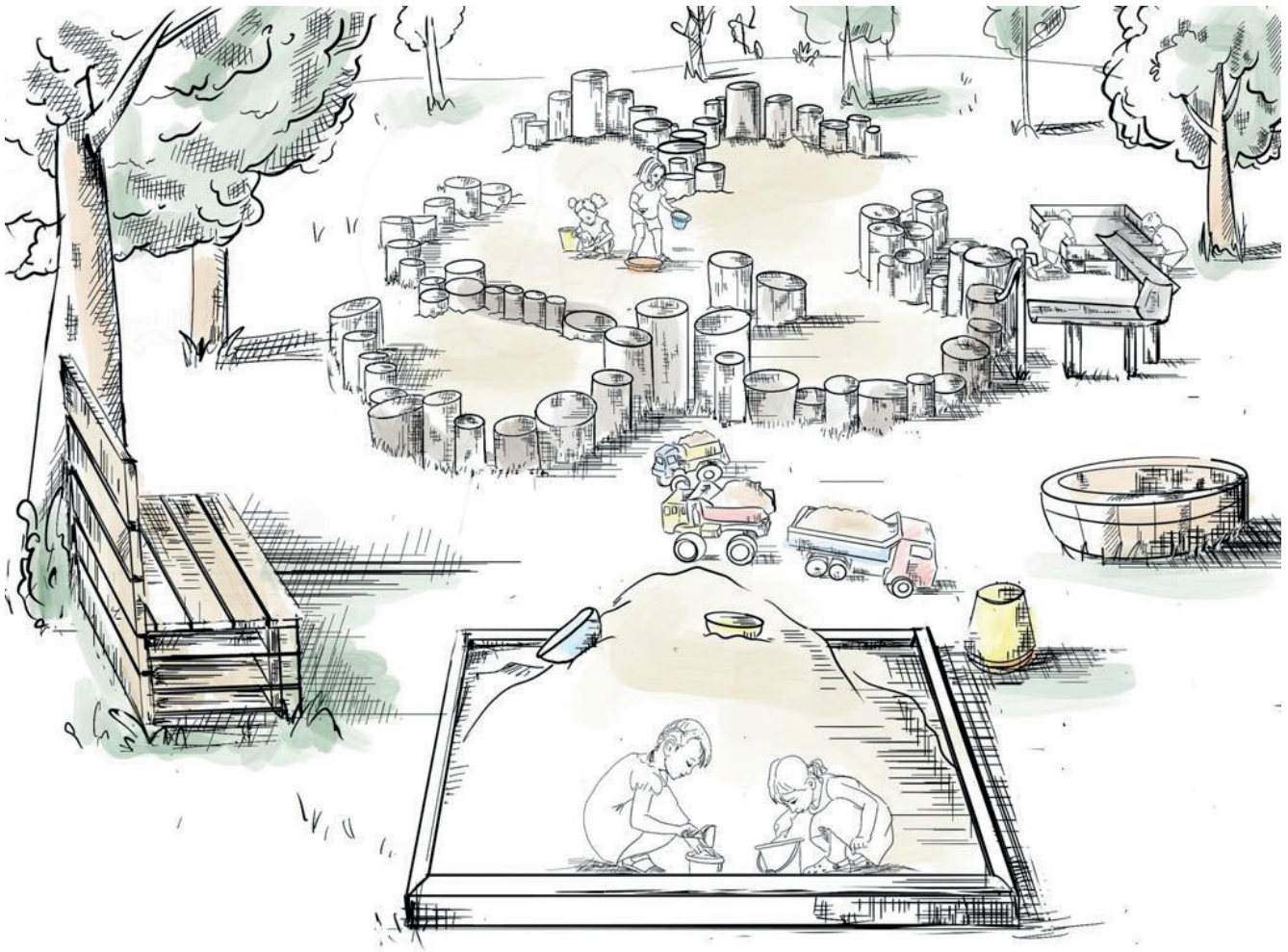
To maintain a stable posture, the body must not only detect the slightest imbalance but also produce motor activity to restore the initial balance. Such coordination is functional before the age of walking but improves in speed and precision with experience.

Defying gravity by tricking balance is always a concept that should be widely incorporated into the design of play areas. It is the very foundation of play that allows children to experiment with balance. These games will enable children to develop logical reasoning in relation to situations of imbalance, at their own pace.

The role of educators

Responsible for creating conditions that allow each child to develop fully at their own pace, educators must give children space to move freely and adopt the postures that suit them.
When a child explores a play structure and all the challenges it has to offer, the adult educator must be attentive to the child's spontaneous interest and initiative, accompany them, identify and respect their ability to do what they want and can do on their own, and allow them to take the initiative. All children are capable of gradually developing their self-protection skills by experimenting with their environment. It is by interacting with their environment that children make their first deductions, thereby developing their cognitive abilities and their capacity to find solutions.

SAND AND WATER ZONE



SAND AND WATER

A sandy area or a table with sand and water can be used for "[projection and fantasy games](#)". With small objects such as figurines, these games allow children to fulfill their fantasies of being all-powerful and dominant, and of becoming someone else, a hero of sorts.

Sand and water are an endless source of activities during a child's early years. Sand, along with water, is often the most popular play material in a daycare centre's playground because of its softness and malleability.

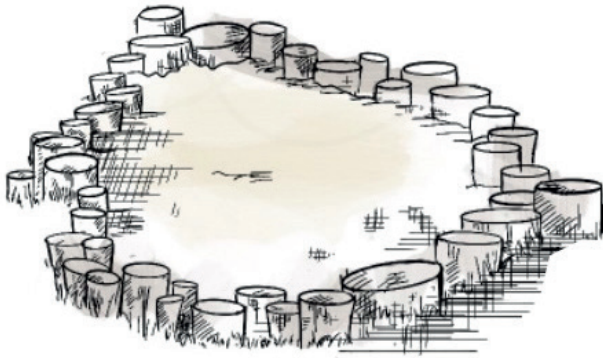
In some ways, highly structured activities are unnecessary given the unique properties of sand, which open countless possibilities for spontaneous play. Sand is an excellent material for creative play and social interaction. Together with water, sand is an indispensable source of play for children, as they can pack it, mold it, dig it, sift it, sculpt it, and pour it.

ESSENTIAL QUALITIES

Sand is a classic, interactive, and natural material that offers a multitude of possibilities when wet. It is easy to handle and mold and offers great potential for construction plays. When dry, it can be dug, sifted, and poured, and children can even draw on it by engraving on a hard surface. It is the ultimate free and versatile material.

It encourages parallel or cooperative play and social interactions that require a certain degree of closeness.

THE SAND PLAY AREA



It should resemble a beach: deep, wide, and close to a water source reserved for play. The surrounding microclimate must be considered so that children can play there for as long as possible and in the best conditions, especially during the hot season.

The sand play area should provide shade on hot days but be open to the sun on cool days, and in all cases be sheltered from prevailing winds. All sand play areas should be located so that they receive rain and sunlight for part of the day, which ensures natural cleaning (Seattle, 1986). Avoid confining the sand to a completely covered area where it cannot be sanitized and cannot be cleaned by the sun's UV rays or rain. To prevent it from spreading outside the play area, it is a good idea to contain it with a border.

The sandbox can also be transformed into a winter playground for children, who can build forts or snow castles there.

LOCATION

The sand play area should be located away from main traffic routes and building entrances to prevent sand from spreading. Corners of the yard or a location along the fence are usually good places. Avoid placing this area in the middle of the playground, as the sand will spread in all directions and this central space may become a thoroughfare for quickly reaching other areas. Children's sand creations could then be quickly stepped on.

The sand play area should be surrounded by an enclosure with a clearly marked entrance and exit to prevent children from disturbing or running through other children's creations. This enclosure (border, fence, or low wall) also provides psychological security. Cedar wood, pesticide-free pressure-treated pine, or recycled plastic can be used to build the enclosure. A less expensive solution is to use logs, placed vertically or horizontally, or large smooth rocks as a border. The sandbox can also be bordered with plants, a sort of mini hedge, which will help contain the sand and provide natural materials.

Since sand can be used both as a play material and a protective surface, it is essential to clearly identify the sand area where children can play. This space should be located away from the physical play zone so that children know they can only play with and in the sand in the designated area. Sand that serves as protection in case of a fall to the ground cannot be used as play material. However, the sand area for playing is very complementary to the symbolic play zone.



DIMENSIONS

The sand play area should offer a variety of places for individual and small group activities. It should be large enough for several groups of children to play without interfering with each other. The total area should be proportional to the size of the entire playground or plays space.

If many children of different ages are expected to use the area at the same time, the total surface area of the sandbox can be divided into several smaller sections. Children tend to play in groups of one to four to build tunnels, canals, castles, and mountains. These sub-areas can be connected to create a larger sandbox that can accommodate more children (Seattle, 1986). A total area of 6 to 7 square meters (65 to 75 square feet) is desirable to accommodate about ten children at a time.



PLAY VALUE OF SAND

Sand composed of fine grains can be molded if it is damp (the grains stick together). Once dry, it is suitable for young children who enjoy transferring it from one container to another, filling a bucket, or making it flow through channels. A low dust content will minimize the messiness of the sand, which will not stick to clothing or skin, and reduce the risk of dust being blown or thrown into the child's eyes.

The ideal sand for play has the following characteristics: washed and sifted, free of almost all dust, dirt, clay, silt, iron oxide, or any other contaminants. The moldability of this sand makes it easy to smooth and sculpt with many details.

In large sand areas, the minimum depth of sand should be at least 450 to 600 millimeters (18 to 24 inches) (Seattle, 1986). The thickness of sand should be sufficient to allow children to dig deep holes without affecting the foundation and drainage of the site. Some authors believe that a sandbox should be deeper, up to 1.2 m (4 ft), so that children can dig in it with proper garden shovels (HAPA, 1978). This depth also ensures sanitation by rain and sun.

Amount of play sand required based on the area of the sandpit and the desired depth

Surface	2,3 m ² (25 ft ² or 5'x5')	3,3 m ² (36 ft ² or 6'x6')	4,5 m ² (49 ft ² or 7'x7')	5,95 m ² (64 ft ² or 8'x8')	7,5 m ² (81 ft ² or 9'x9')
Depth					
100 mm (4 in)	390 kg	540 kg	735 kg	960 kg	1,2 ton
150 mm (6 in)	600 kg	810 kg	1,1 ton	1,45 ton	1,8 ton
200 mm (8 in)	780 kg	1,08 ton	1,47 ton	1,92 ton	2,4 tonnes
300 mm (12 in)	1,2 ton	1,62 tonnes	2,2 tonnes	2,9 tonnes	3,6 tonnes
400 mm (16 in)	1,56 ton	2,16 tonnes	2,94 tonnes	3,84 tonnes	4,8 tonnes
600 mm (24 in)	2,4 tonnes	3,24 tonnes	4,4 tonnes	5,8 tonnes	7,2 tonnes
800 mm (32 in)	3,12 tonnes	4,32 tonnes	5,88 tonnes	7,68 tonnes	9,6 tonnes
1,2 m (48 in)	4,8 tonnes	6,48 tonnes	8,8 tonnes	9,6 tonnes	14,4 tonnes

To increase accessibility, a sandy area can be designed to offer activities at several levels, one of which will be accessible to wheelchair users. The sand area can thus offer play opportunities at ground level and above ground (with sand tables), allowing children to vary their postures while they play. It is best to install the sand tables in the center of the area to prevent sand from spilling onto the surrounding ground. The tables should be wide enough for children to engage in modeling activities. A grid at the exit allows sand to be removed from shoes. It is also recommended that sand bins be installed at the entrances to the building and at the exit of the playground, where children can pour out any sand that has gotten into their shoes.



THE SANDPILE

It is possible to offer play sand in another way, especially for infants and toddlers. This involves a cone-shaped pile of sand 2 meters (6.5 feet) in diameter, placed directly on the ground. There is no need to dig up the ground, as the sand is simply placed in a frame on a grassy surface. The aim is to give younger children the opportunity to play on the sand mound without having to sit on the edge to mold or dig (Vincze, 1976).

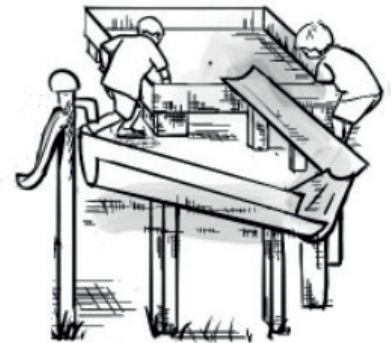
It is essential that this mound of sand, deposited directly on the ground, receives morning sun so that the sand, which was watered and piled up the day before, is dried by the morning sun and naturally cleaned through direct contact with the earth. The sand will then be cleaned by the previous day's watering and sanitized by the sun's UV rays.

This mound should not be placed at the foot of a wall or fence, as it must be surrounded by a strip of grass to facilitate movement around it. It is essential that the sand used for this arrangement be turned, piled up, and watered daily. (Pikler, 1976)

WATER SUPPLY FOR SAND PLAY

A water source is essential for playing in the sand. A limited number of water points should be installed next to or inside the sand area, such as a water pump, a closed container with a dispensing valve, or a channeled running water source. Drinking fountains should be located away from this area (Seattle, 1986), as children tend to bring sand into them, which will block the fountain, or carry water from the fountain to the sand area or table.

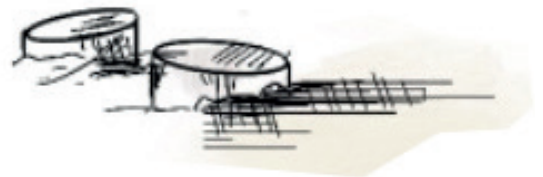
Regardless of soil conditions, the sand play area must be able to drain easily. Drainage systems must be equipped with devices that prevent clogging. If the soil is clayey or drains poorly, it is recommended that drainage pipes be connected to an outlet (CSA, 2007). The best methods will depend on site conditions, but the site must provide controlled drainage to obtain the moisture necessary to compact the sand (Seattle, 1986). A sand play area that remains constantly wet will promote the degradation of natural materials used for play (branches, leaves, etc.) and may become an unsanitary play area.



APPLICABILITY AND COMFORT

SEATS AND STORAGE

Installing a bench in the center of the sandbox can serve two purposes: providing storage for shoes and a platform for play. It is natural for children to take off their shoes as soon as they get into the sand, as it is unpleasant to walk with shoes full of sand. It is therefore preferable to provide them with a place to store their shoes so that they do not spend several minutes searching for them buried in the sand. Storage lockers with bins for play accessories (shovels, trucks, buckets, molds, and natural items), clearly labeled according to their contents, can be placed under this bench or on the sides of the sandbox, and be easily accessible to children. Chests where toys are piled up should be avoided, as both children and adults will tend to throw objects into them randomly, making the play equipment less visible. Dust and clutter will quickly invade the chest.



HEALTH AND SAFETY

It is important that the sandbox area be shaded for part of the day to protect children (and their caregivers) from excessive sun exposure. Leafy trees provide minimal sunlight during the winter. Wooden slats are another solution, allowing light and rain to penetrate the sandbox; rain keeps the sand moist, making it easy to sculpt.

To keep sand healthy and hygienic, it is important to ensure that it is exposed to rain and sun for part of the day. However, sand should not remain wet all the time: it cannot be emphasized enough that wet sand can encourage the proliferation of mosquitoes and microorganisms (bacteria and mold). The sand area should therefore be exposed to the sun to reduce the proliferation of infectious agents. If it is impossible to protect the sand with a net (this is necessary if the sand area is regularly used as a litter box by neighborhood animals) or if it is contaminated with soil, it will need to be cleaned regularly.

The "[Le Guide de prévention des infections dans les services de garde et écoles](#)" revised in June 2023, suggests not using plastic containers with lids. Every day, when inspecting the play area, it is recommended to inspect the sandbox, rake and clean it to remove animal feces and other unwanted materials, if necessary, then remove any sand that may have been contaminated. Depending on the degree of contamination, it may be necessary to replace the sand. Between uses, toys should also be stored in a sheltered area, cleaned, and sanitized weekly³⁰.

WATER PLAY



Children love water for its multisensory nature and the endless possibilities it offers for exploration and creativity using various objects: building a dam with leaves or branches, making water flow between stones, transferring it with containers, painting with water, splashing around, etc.

The best ways to provide water for children are water tables with channels, basins that can be drained at the end of the activity, streams with stone beds, and pipes that ensure downward flow. These water sources can flow into the sandbox for play.

Water nozzles or ground sprinklers should be avoided, as children cannot easily manipulate the water coming out of them or fill containers with it. They can also lead to undesirable behavior, such as stepping on the sprinkler or sitting on it to stop it.

³⁰ Ministère de la Santé et des Services sociaux, Prévention et contrôle des infections dans les services de garde et écoles du Québec, 2015, révisé 2023, chapitre 4 p.18

BENEFITS

It is important to recognize the benefits of water play on child development. With minimal organization, it is possible to provide children with hours of fun by allowing them to play in and with water.

Water activities promote the socio-emotional aspect of child development. When playing in water, children are not required to produce a result. There is no frustration or failure possible since children do not have to conform to adult standards. They enjoy and find satisfaction in simply manipulating water, which gives them a sense of control and achievement.

Water play meets young children's need for relaxation by having a calming effect if they are agitated and a stimulating effect if they are inhibited. Activities involving water encourage social interaction between children and generally lead to moments of joy.

Playing in water provides children with a multitude of sensory experiences and pleasures that precede the development of their abilities to understand and manipulate abstract thought but form the basis for it. Water thus provides children with a wealth of experiences from which they develop cognitive functions that enable them, for example, to understand abstract notions such as volume, horizontality, mass, and other scientific concepts.

Using unusual objects with water in ways other than their primary function develops imagination and allows children to perceive connections between the properties, similarities, and differences of these objects, i.e., connections of class and order. For example, introducing different types of golf balls (regular sinking golf balls, floating golf balls, foam practice golf balls) into objects for playing in water will encourage children to ask questions and appeal to their curiosity.

Activities with water also contribute to children's physical development. When they play with pouring, they develop their hand-eye coordination and fine motor skills.

LAYOUT

It is important to use potable water that drains either into the sewer system or into a "rain garden"³¹. It is best to avoid using a water «recirculation» system, as these are expensive and difficult to maintain. The layout should be designed to ensure proper drainage at the end of each day to prevent the formation of standing water. Hard surfaces around water features should be non-slip and well-drained. Inadequate drainage can be a major obstacle to the use of the childcare centre's playground.

A low-cost device can be created by hanging a hose with a gentle spray head above the children's heads, allowing more active children to run under the water and fill containers, while less active children can enjoy the water to cool off. To prevent the area under the water source from becoming too muddy, slabs or a platform can be used to create a path for children to walk on without getting muddy.

If the soil does not drain sufficiently, underground pipes will need to be installed to drain the water. Models that drain an area of less than 38 square meters (400 square feet) are available at local hardware stores. These devices are relatively easy to install. Trenches are dug to lay the pipes, which are directed to a lower point where it is acceptable to drain the water, such as a sandbox.

BIOSWALE

A bioswale is a drainage ditch with interesting curves and patterns, filled with river stones and vegetation. It is usually less than one meter (3 feet) wide and 150 millimeters (6 inches) deep. To build this vegetation ditch, use smooth river stones that are large enough that children cannot carry them. They will slow down the speed of the water, protect the soil from erosion, and facilitate maintenance. It is recommended to install a geotextile fabric at the bottom to reduce erosion and facilitate water flow. A slope of 2%, or at least 300 millimeters (12 inches) per 15 meters (50 feet) of length, should be provided. Plants can be added for aesthetic or educational purposes.

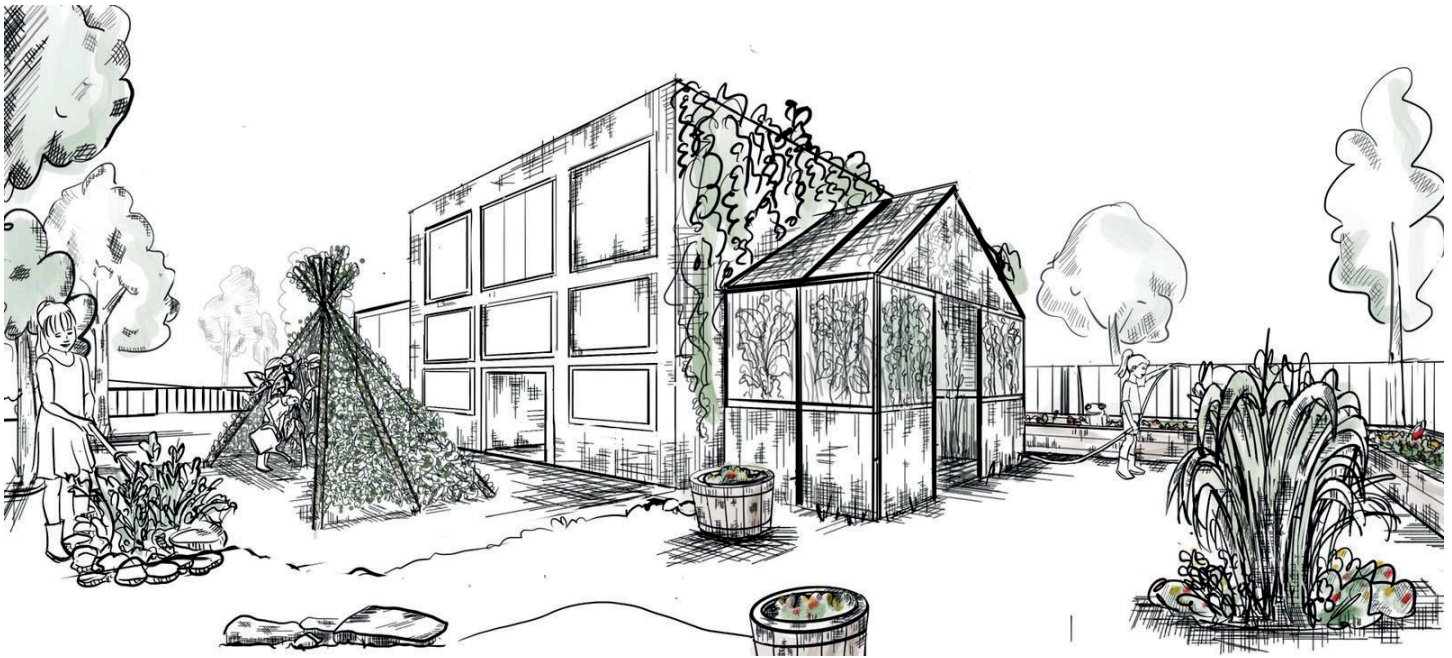


³¹ Petit bassin peu profond composé d'un mélange de plantes vivaces et d'herbage ornemental qui retient l'eau brièvement après une précipitation.

SPECIAL ROLE OF EDUCATIONAL STAFF IN THIS ZONE

The sand and water area requires little direct intervention with the children, which makes it easier for educators to pay attention to what the children are doing. Educators will offer them choices based on their abilities, such as the right to choose their games and play partners, while supporting them when needed. They can observe them to provide them with interesting and appropriate materials at each child's level, targeting all areas of development, so that they can make choices that will become more complex over time and with experience.

GARDEN ZONE AND NATURAL ENVIRONMENT



The playground, as well as the outdoor play area, should provide natural materials that allow children to familiarize themselves with the texture, colors, and smell of each element. These can include sand, water, grasses, and a variety of non-toxic plants. It can also be very interesting, as a learning support, to set up a flower or vegetable garden where children can observe the growth of plants. You can also grow and care for plants with them, to awaken their ecological awareness and introduce them to various meaningful concepts and ideas. Vegetables, bulbs, and annual flowers grow easily and quickly and can provide a series of interesting observations and educational projects.

EDUCATIONAL BENEFITS

Edible landscapes include annual vegetable gardens as well as permanent edible landscape features, such as perennial vegetables, fruit trees, fruit bushes, vines, and other climbing plants that grow on fences, walls, trellises, and trees.

Creating and maintaining a garden where food grows can contribute to several educational goals, particularly those related to health and healthy eating. Children will learn where some of the food they eat comes from and see how it grows. They will also observe how it is prepared before being consumed. Gardening for and with children also promotes fine motor skills and stimulates all their senses. This activity also offers opportunities for cooperation and experiences that require patience and perseverance. Older children can make sketches in notebooks throughout the growth process, from seed to maturity.

LAYOUT

To garden, find a sunny spot in the yard that is well-drained, sheltered from strong winds, and close to a water source and quiet play areas. The garden and natural environment zone should be adjacent to a storage area or building or a small greenhouse.

It is not necessary to concentrate all the plants in one place. Different sections of the yard can be set up for plants by placing them near a hedge of shrubs around a building, or by growing them in pots or containers along paths, while ensuring that there is enough space to bend over, move around with tools and a wheelbarrow, and access the garden without damaging the plants. Raised beds in high-traffic areas will prevent children from stepping on the plants, while still allowing them easy access to the garden.

Gardening activities can continue for much of the year if you start sowing in the spring and harvest until late fall. It is therefore recommended to vary your plantings to spread them out over time. It is also important to choose plants that will produce foods that most children enjoy eating.

VEGETABLE AND FLOWER GARDENS

TOOLS

To carry out a gardening project, you will need spades, rakes, and hoes. You will also need one or more garden hoses, watering cans, wheelbarrows, and gardening gloves. Labels will help to clearly identify the plants. The tools should be standard size for adults, but smaller (and of good quality) for children.

GARDENING IN TIRES

You can create instant planting beds using old tires filled with garden soil and a few plants, which can also serve as edging.

It is also possible to stack more than one tire, if they are securely fastened to each other and that the bottom tire is anchored to the ground to ensure stability. However, edible plants should never be grown in them, as tires contain toxic substances that plants can absorb as they degrade.

RAISED GARDEN BEDS

Raised beds are easier to access and safer. Planters can be raised to a height ranging from 150 to 750 millimeters (6 to 30 inches). There are also "self-watering" containers with water reservoirs. These containers eliminate the need to water plants frequently on hot days.

Due to the limited reach of young children, containers of all types should be narrow (between 600 and 900 millimeters or 24 and 36 inches wide) and accessible from two sides. In fact, the entire garden area should be easily accessible from both



sides: a flower bed should be no more than 1.2 meters (4 feet) wide to avoid accidentally stepping on the plants. Resources and tips are easily found online: just type "gardening in containers" into a search engine.

WILDFLOWER GARDEN

Wildflower seed packets are readily available at any local garden center or even hardware store; the mixes sold there are suitable for our climate. Wildflower gardens can replace lawns or bare soil near borders or fences. Add a little compost to the soil before sowing.



PLANT PROTECTION

To prevent children from stepping on the plants, it may be necessary to install wooden or stone borders, or even ropes. The border should be between 150 and 450 millimeters (6 to 18 inches) high.

Exploratory paths can be created using steps or tree trunks to mark out a route that discourages wandering and provides access to several planting beds.



CHOICE OF PLANTS

See [Appendix 3, List of Plants for Childcare Settings](#), to make your selection or consult a database.

It is recommended that you choose plants that are native to the region and grow easily there, for example, to teach children about healthy eating as part of a specific project.

Temperature variations and sunlight exposure in the outdoor area may influence your choice.

Horticultural clubs and nurseries can provide good advice on finding varieties that are truly suited to the region's climatic conditions. And why not invite a horticultural specialist to come and lead a learning workshop with older children each year ?

The companion planting method involves combining different plants to improve their respective health and growth. Certain plants can provide various benefits to each other (fertilization, repellent or toxic action on specific insects or weeds). For example, if nasturtiums are grown near leafy vegetable crops or at the base of fruit trees, they act as trap plants for aphids that could destroy the desirable plants.

Companion planting, which was commonly practiced before the invention of chemical pesticides, has become popular again in recent years due to ecological imperatives (sustainable agriculture and organic gardening). For more information, see [Appendix 4](#).

Another reference : the [Play Value Plant](#) database, developed in partnership with the Children & Nature Network, the Natural Learning Initiative, and the College of Design at the University of North Carolina.

PLANTATION

Educators can offer children gardening activities, as they enjoy them immensely. They will sow seeds directly into the ground or plant them indoors in containers or a small greenhouse to transplant them outside when conditions are right.

Choosing plants can lead to activities that introduce children to reading and math, as there are labels to read and measurements to calculate. Such experiences contribute to the understanding of meaningful abstract notions and concepts based on concrete elements.³²

Regular weeding will also be part of certain children's responsibilities or an activity to be done together regularly, knowing that once the plants have covered the space, it will no longer be necessary to remove weeds as often. Weeding can become an interesting observation and discovery activity if children are allowed to talk about what they see and make graphic notes (drawings) that they can keep in a small notebook.

WATERING AND MAINTENANCE OF PLANTS

Frequent and careful watering of the seeds that the children have planted can become a weekly responsibility for the group. Once the seedlings emerge from the soil, the children will learn to water them for longer periods, but less often, so as not to drown the seedlings. In preparation for the day, watering will be done early in the morning, when the sun is not at its strongest. Watering in the middle of the day can burn the plants. Future gardeners will need to be reminded that it is the soil that needs to be watered, not the plants themselves! They will also learn to wait until the soil dries out before watering again, slowly and thoroughly.

Water can be collected in rainwater tanks connected to the downspout to water plants manually, making it clear to children that this water is not drinkable for humans, but is full of nutrients that are good for plants.



³² Accueillir la petite enfance : programme éducatif pour les services de garde du Québec, page 31.

FIRST NATIONS-STYLE AGRICULTURE

"Some First Nations (especially the Iroquoians) grew three types of crops : corn, beans, and squash, which they called the "three sisters". They created several mounds of earth. Fish, strategically placed in the center of each mound, served as fertilizer. When the mounds were ready, a hole was dug at the top and corn seeds were planted inside. When the corn reached 15 centimeters, bean seeds were planted with it. The corn provided the beans with a structure to climb on, and the beans nourished the soil with nitrogen, an essential element for plant growth.

Next, squash was planted around the corn and bean plants. The large leaves of the squash formed a dome over the soil, which helped to retain moisture and prevent weeds from growing. They also provided protection from frost. In a completely natural way, this method of gardening fertilized the soil, supported the plants, controlled weeds, and protected against the vagaries of the climate."³³



STORAGE

All garden accessories should be stored nearby, in a shed for tools and equipment. This shed could take the form of a small greenhouse attached to the building, not far from the older children's playroom. They can spend time there preparing numerous seedlings and studying each plant throughout the year.

TOO OFTEN FORGOTTEN, THE ORCHARDS

We often forget to include native shrubs that produce berries, such as blueberries and blackberries, or fruit trees in our gardening plans. Fruit trees and shrubs are too often overlooked in daycare yards, even though they provide shade and essential play elements in a naturalized environment. In addition, the flowering of fruit trees in the spring is a spectacle that even the youngest children can enjoy because of the colors and scents it gives off.

An orchard is just as interesting to plant as a vegetable garden. Children can follow the evolution of the flower to the ripe fruit, participate in the harvest, and taste fresh fruit.

You can start with two trees or shrubs at most, adding new varieties over the years. As with vegetable gardens, orchards benefit from a combination of fruit trees. Apple trees are often susceptible to disease and pear trees are not always suited to our climate, so it is best to choose hardy and unusual plants that add an interesting element of discovery.

Among the ever-popular classics, raspberry bushes are easy to grow and multiply generously, so they need to be controlled or given a space marked out by a concrete border. Blueberry bushes also make delicious hedges along fences. A local nursery specializing in fruit trees can advise on the most appropriate choice. In any case, it is best to choose heritage varieties, which are those that our ancestors grew. They are reproduced by open pollination (without human modification), which helps to preserve a natural gene pool for future generations.

Trees can be protected individually or, if grouped together, surrounded by protective plant barriers. Sturdy stakes arranged in a triangle will withstand children's play and allow them to lean on them safely without fear of damaging the trees.



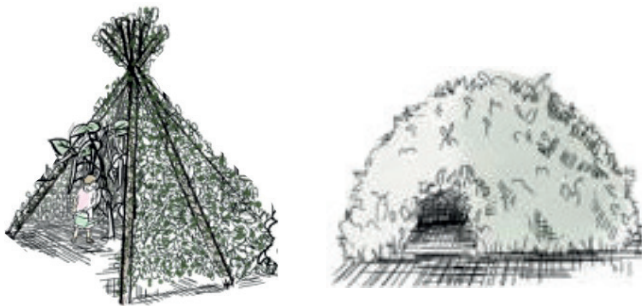
³³ Adaptation et traduction libre de Life Spin, Pocket Sized Farms.

TREES AND SHRUBS FOR PLAY

THE TEEPEE IN WINE VINES

A teepee made from bamboo poles, rope, and climbing plants instantly provides a hiding place or plant trellis. However, it is important to note that even the most durable bamboo will need to be replaced every three to four years. Several species of climbing plants can be used, from edible peas or beans to annual flowers.

A teepee covered with vines or fabric also adds aesthetic appeal to the yard. It is also an inexpensive way to provide a small, sheltered gathering place, regardless of the area.



THE BRANCH HOUSE

Tree-cutting companies can keep branches rather than shredding them if asked to do so. A treehouse made of branches will last up to five years, but a sturdy wooden frame serving as a structure to support the natural materials attached to it will extend its life.

The advantage of a more temporary structure is that it needs to be repaired or rebuilt more often, which can lead to a new construction project every year, much to the delight of children. It is best to use freshly cut branches rather than dead branches that have fallen to the ground and partially decomposed.

It is possible to create a structure made of willow stems, an ancient process that has proven itself around the world. Willows are remarkably easy to plant. The trick is to plant this tree in the fall so that by the following spring, new roots will have formed. As the willow dome grows, you can use cuttings to plant another structure, which will become another dome, a tunnel, a chair, or even a fence.

The role of educator

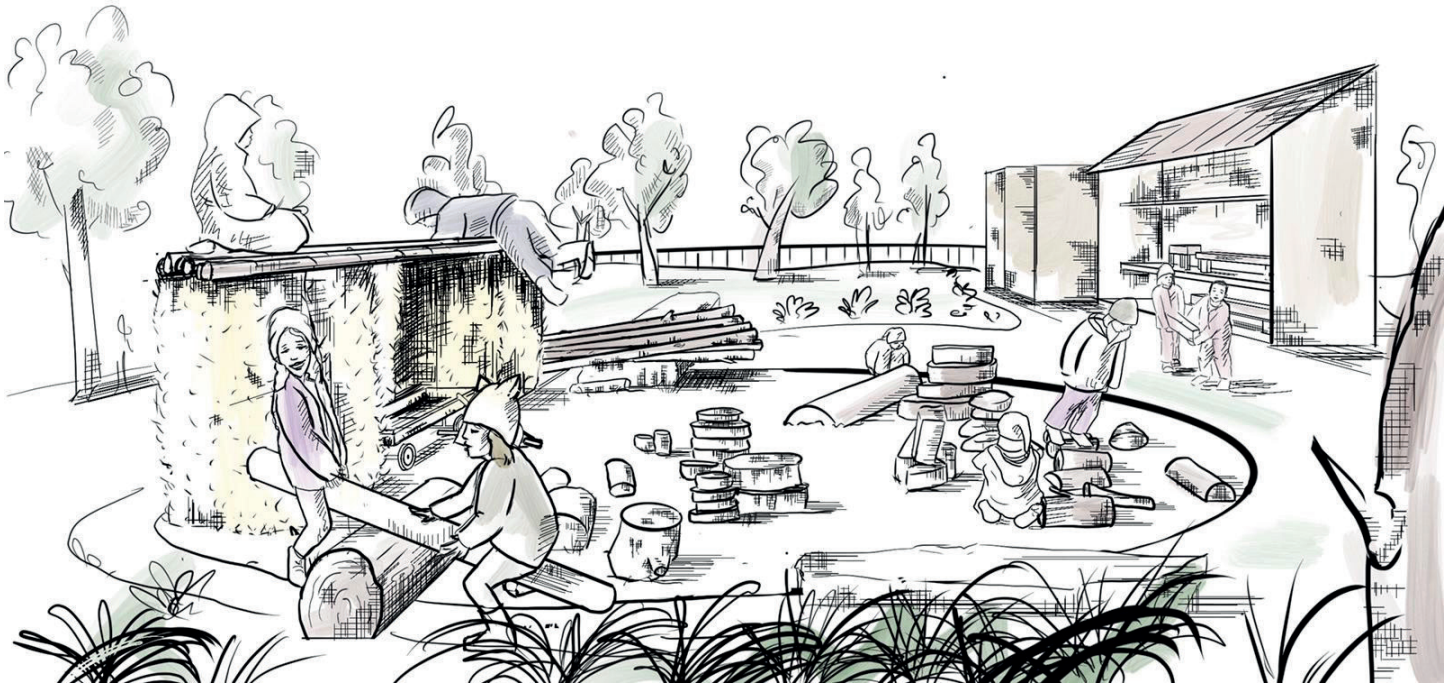
Educators will play a key role in the success of all gardening and vegetation maintenance projects. They will need to ensure that plants grow properly throughout the seasons in order to maximize learning opportunities. They will also need to establish rules and guidelines tailored to children regarding respect for an environment that could be damaged by excessive handling.

Early childhood educators involved in gardening experiences will be able to sustain children's attention, sparking curiosity that will encourage them to learn and sustain their attention, sparking curiosity that will encourage them to learn and engage in enjoyable experiences, which should become increasingly challenging as children build their executive function skills.

Mental flexibility, inhibition, working memory, and planning are closely interrelated.³⁴

³⁴ Accueillir la petite enfance : Programme éducatif pour les services de garde du Québec, page 97.

CREATION AND CONSTRUCTION ZONE



While an outdoor play area cannot provide all the fine motor skills materials typically used indoors (puzzles, Legos, etc.), it is important to consider setting up an activity zone specifically focused on developing children's fine motor skills, manipulative abilities, and creativity.

Natural or man-made elements can provide materials for a free-play area in the creation and construction zone. This space, which mainly contains materials that are larger than those found elsewhere in the playground, will allow children to build structures they can climb into, climb up, take apart, or modify, as well as art supplies.

LOOSE PARTS MATERIALS

The creation and construction zone should be located near the main building to facilitate storage and supervision. This will allow for the storage of clay, paint, carpentry supplies, and materials of various sizes. Outside, children will be able to focus on their creative process without being bothered by mess or noise.

The [Sydney Project Playground](#)³⁵ experience is based on the idea that when children can play freely with materials that require physical effort, they will spend more time engaging in the activity. The large and heavy materials, in addition to requiring physical energy, encourage children to ask other children for help so they can achieve something together. This type of play also offers the opportunity to take manageable risks and experiment with different motor challenges.



BUILDING WITH NATURAL AND SAFE MATERIALS

Any variety of safe, natural materials encourages children to use their imagination to invent their own games. All you have to do is provide the materials—the children will do the rest! In this area, which is clearly marked off by a fence about 68 cm (27 in.) high, you'll find, for example, bamboo poles, bales of straw to serve as supports, small stones, logs, branches, pruned twigs,

³⁵ The Sydney playground project levelling the playing field: a cluster trial of a primary school-based intervention aiming to promote manageable risk-taking in children with disability, 2015

pinecones, burlap, and any other natural materials that children can see, touch, smell, handle, and lift.

All these materials should be inspected frequently to ensure they do not have sharp edges or pointed ends. Observe how the children play to adjust the length of the branches to their needs, making them safe to handle based on the available space in the area.

Usually, the ground in this area is covered with grass, but over time and due to heavy use, the grass will gradually turn into packed earth.

We often hear that today's children don't spend enough time outdoors and aren't in close enough contact with nature. This is one of the many reasons why it's important to keep the playground as natural as possible, avoiding synthetic surfaces even though the grass wears out more easily in this zone.

CONSTRUCTION USING MAN-MADE MATERIALS

Loose-part materials can come from recycled items such as pipes, tires, blocks, spools, cardboard barrels, or fabric in good condition, kept clean and secure.

There are also some excellent commercial products designed for large-scale building projects. The possibilities offered by these materials are endless. Whether they are planks, interlocking wooden blocks, or an innovative construction set, these materials have the advantage of being weather-resistant and able to withstand rough handling by children. They are often of very high quality, and the investment is usually well worth it, both for the play possibilities they offer and for their durability.

PRINCIPLES OF SYDNEY PLAYGROUND PROJECT TO GUIDE THE SELECTION OF LOOSE-PART MATERIALS

1

THEY HAVE NO OBVIOUS PURPOSE :

This principle encourages the use of everyday objects that children's imaginations can transform into anything. Objects with no obvious play value help increase the variety of play and foster cooperation with others. Objects designed to be used in a specific way generally serve only a single purpose or limited purposes. For example, a soccer ball is most often used... as a soccer ball, whereas a bread delivery crate combined with empty spools of electrical wire can quickly be turned into a vehicle.

2

THEY PROMOTE COOPERATION AND THE DEVELOPMENT OF GROSS MOTOR SKILLS :

This principle involves placing large, heavy objects in the children's environment that a single child cannot move on their own. It therefore encourages children to work together. Moving these objects requires some strength and energy, whether to stack them or carry them elsewhere. Examples include a crate of milk or bread, a box of apples, a tire, and so on.

3

FOR MULTIPLE USES :

For example, children can play inside or on top of the object or combine it with other objects. Using these objects stimulates creativity. The same object can be used to hold or carry things, serve as a hideout or a seat, and so on. Whether used alone or in combination with others, they present new challenges. They are essential additions to this play area.

4

THEY PROVIDE INTERESTING SENSORY EXPERIENCES :

Loose-part materials should enhance sensory experiences. That's why they should include elements that are interesting to touch, hold, look at, listen to, or even smell and taste. Color, texture, sound, weight, shape, movement, and size — all of these contribute to an engaging play experience!

5

THESE ITEMS ARE FREE OF HAZARDS THAT A CHILD MIGHT NOT EASILY NOTICE OR HANDLE :

Items must be sturdy and durable, not broken. Special attention should be paid to sharp edges and the composition of materials: items that contain solvents, are made of brittle plastic, or contain decomposing wood should be excluded. Certain "nuisances" can be made easier for children to see and manage on their own; for example, you can paint the inside of a tire to make any insects or spiders that might be inside — as well as all the small toys hiding there — more visible.

6

"GREEN" MATERIALS:

Used items can be obtained at a low cost. Children can use their creativity to give them a new lease on life.

The creative and building zone encourages them to create environments that maximize their potential for active play, while helping them develop key skills related to posture and movement and promoting the use of their strength. It thus helps build muscle tone and a healthy, strong skeletal system. It offers them endless possibilities for combining various elements, which they can use however their imagination leads them — much to their delight.



Photo by Sylvie Melsbach - Daycare in Prague



Photo by Sylvie Melsbach - Daycare in North Caroline

The role of educators

The activities led by the educators will encourage active learning and support verbal interaction when they are tied to the children's current interests. For example, building or creative projects that spark the children's curiosity and questions will provide an opportunity to discuss their knowledge of art and construction.

SYMBOLIC AND DRAMATIC PLAY ZONE



This area can take many forms. The basic principle for designing it is to create opportunities for symbolic play for children engaged in parallel, associative, or cooperative play.

For example, this area could feature a small playhouse furnished with tables and chairs, along with accessories such as pots, buckets, and shovels. A large wooden platform can serve both as a balcony for the playhouse and as a space for dramatic play. The facade or decor can evoke a residential neighborhood or a shopping street. Any other decorative element likely to stimulate children's imagination can find a place in this area. Sometimes, a simple multipurpose platform or a covered porch is all that's needed.

LAYOUT

The pretend play zone can be adjacent to the sand and water area. For example, children can incorporate a sand cake they've made into a role-playing game to add complexity to their play and stimulate their language development. Wheeled toys can be stored near this area to expand play possibilities. A path can connect the symbolic and dramatic play area, the sand and water area, and a gathering spot.

The symbolic and dramatic play zone can also be paired with the socializing and quiet play zone, which includes a table and chairs with storage that is easily accessible to children. There, children will learn to take the initiative to organize themselves to carry out an activity and to put away the materials once it is finished.



THERE'S ALSO AN AREA FOR EATING AND SLEEPING OUTDOORS

Anything that can be done indoors can also be done outdoors. However, it is necessary to make the appropriate arrangements to meet care and educational needs outdoors.

EATING OUTDOORS

Picnics are a good example of an activity that requires planning. They can be held in the quiet play and socializing area or in the pretend play and dramatic play area. Once the space is properly set up, picnics can become a regular activity. Meals or snacks can be enjoyed there without rushing, and children should be able to leave the area at their convenience to engage in another activity or take a rest. It's a wonderful way to spend time talking with them. Plus, it's easier to clean up outdoors.

EASIER HYGIENE

Even when eating outdoors, hygiene requirements still apply. Since it's generally not possible to clean and disinfect outdoor tables the same way as indoor ones, they should be covered with a tablecloth. For handwashing, there must be access to running water nearby, outdoors. Handwashing stations specifically designed for young children can be installed. These portable units can be moved around the area; they are durable and practical and require no electrical connection. This allows children to wash their hands safely and independently.

Restrooms inside the building must be easily accessible from the outside. If this is not possible, eco-friendly outdoor restrooms must be installed.³⁶

SLEEPING OUTDOORS

The area for symbolic and dramatic play is well suited for outdoor napping if a large patio is set up there. Napping outdoors on small beds, free from pollutants, has beneficial effects on health. Children breathe in fresh air that fills their lungs, and even if the temperature fluctuates or is cool, they learn to adapt to it.

Finnish researcher Marjo Tourula, from the University of Oulu, found that children took longer naps outdoors than indoors and were more energetic after napping outdoors³⁷. Professor Rintämäki of the Finnish Institute of Occupational Health, interviewed by the BBC in 2015³⁸, confirmed these findings, adding that children had a better appetite and were more active after an outdoor nap. They hear the sounds around them: birds singing, the wind rustling through the leaves, and the activities of adults going about their business nearby. This space offers them a wider, clearer, and brighter visual horizon, as natural light helps them understand that naptime and nighttime are distinct periods of rest.

The Role of Educators

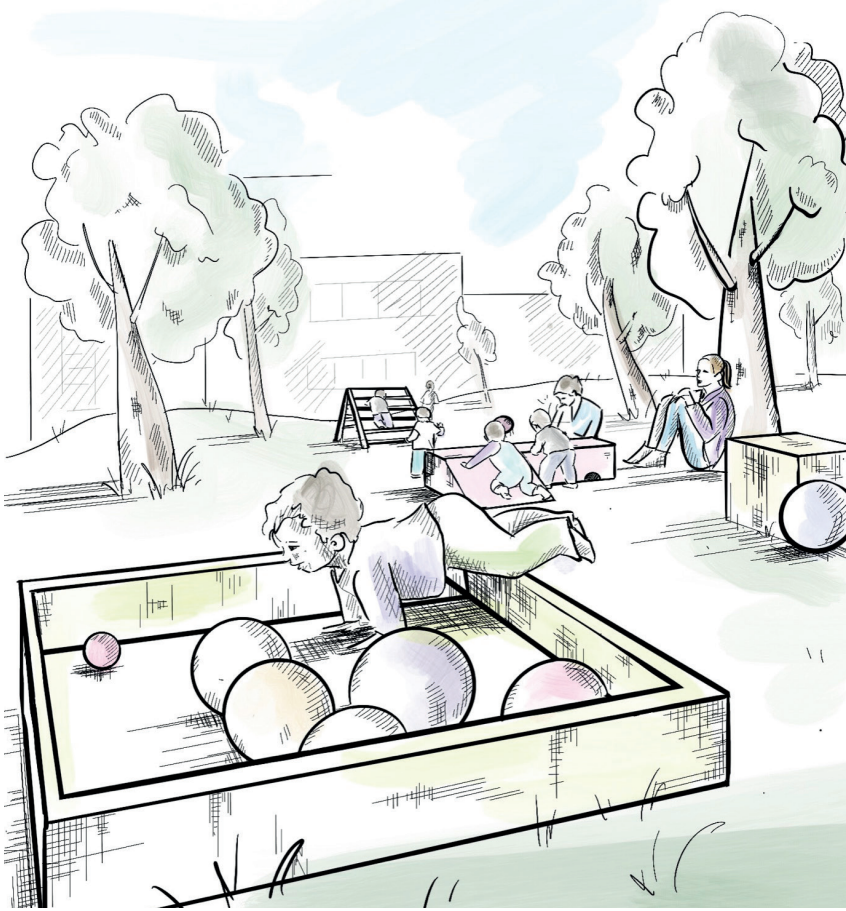
By regularly observing the children's play, educators can adapt their support accordingly. To play to their full potential, children need time, a well-organized space, materials, and playmates. To help develop their imaginative play skills, educators can provide them with versatile props that can easily be combined with other items depending on the games they create. Adults who are receptive to the themes children act out thus continually expand the possibilities.

³⁶ Il est important de se renseigner auprès de sa municipalité sur la réglementation en vigueur, qui peut grandement varier d'une municipalité à l'autre.

³⁷ Marjo Tourula Doctoral student, Arja Isola & Juhani Hassi (2008). "Children sleeping outdoors in winter: parents' experiences of a culturally bound childcare practice", *International Journal of Circumpolar Health*, 67:2-3, 269-278

³⁸ Voir <https://metro.co.uk/2015/02/22/would-you-let-your-baby-nap-outside-in-sub-zero-temperatures-5073710/?ito=cbshare>

THE ZONE-BASED APPROACH IN OUTDOOR PLAY AREAS FOR INFANTS AND TODDLERS



Free play outdoors in a safe space is just as important for babies and toddlers as it is for older children. Because of the major and rapid changes in their development, as well as their individual play and care needs, the types of experiences we can offer them vary greatly. Their experience of life expands through exploring and interacting with their environment, which strengthens their mastery of skills. Rui Olds, one of North America's leading experts in early childhood care and education design, states: "Environments are powerful sources of stimulation, information, and emotional experiences. Babies and toddlers are sensitive to all the qualities of the setting in which they live, whether it be its opportunities for movement, its sounds, its volumes, its textures, its visual and aesthetic vibrations, its shapes, its colors, and its rhythms".³⁹

An outdoor space is ideal for providing them with opportunities for learning and exploration, but only if the physical environment is suited to their need for freedom of movement and their care and rest requirements. A toddler who has the chance to discover their body in a suitable space while receiving proper care often becomes much more independent and very different from a child living in a confined environment with few opportunities for exploration.

From infancy, children need space to explore, sensory stimulation, and challenges they can realistically achieve, that is, within their zone of proximal development as described by the Russian psychologist Lev Vygotsky (Newman and Holzman, 2014). They also need an environment that allows them to take on challenges to learn, even if these challenges lead to behaviors that may be perceived as risky by adults who are often very concerned.

LOCATION OF THE PLAYGROUND FOR TODDLERS AND PRESCHOOLERS

The design of a daycare center's playground must always consider its location relative to the building. Since young children are particularly sensitive to air pollution due to their narrow airways, high respiratory rate, and the development of their lungs and immune systems⁴⁰, the playground should be located as far as possible from busy roads and highways, where cars emit environmentally harmful exhaust fumes and noise is constant.

Although it is not a requirement, it is strongly recommended to provide a separate play area for babies and toddlers, but one that is adjacent to the play area for older children. To support the development of young children, it is essential not to isolate them from older children; they must be able to see and interact with them. A small wooden fence or low wall about 68 centimeters (27 inches) high is sufficient to separate the two areas: it will not prevent observation and interaction between the two groups. Children will be able to share items over this barrier. These interactions are particularly beneficial for the social and emotional development of both younger and older children.

³⁹ Rui Olds, A. (2000). Child care design guide. New York: McGraw-Hill.

⁴⁰ Proximity of Licensed Child Care Facilities to Near-Roadway Vehicle Pollution, Douglas Houston MA, Paul Ong Ph.D., Jun Wu Ph.D. et Arthur Winer Ph.D.

In fact, as they grow and become more capable, young children seek to move into the older children's area. This desire should be seen as a sign that they are ready for more stimulating and challenging environments. Educators could then organize outings with the young children when the older children's area is unoccupied, allowing them to explore this new environment freely.



THE AREAS IN THE PLAY SPACE RESERVED FOR THE YOUNGEST CHILDREN

The layout will be similar to the play area for older children, but on a smaller scale. It will comprise a quiet/transitional play zone, an open area, a physical activity zone, and a natural area. With a well-designed layout, the interconnection of these zones will facilitate a flow of varied activities and help reduce the risk of conflict with children already engaged in play; for instance, the sandpit will be positioned near the quiet activity zone.

QUIET AND TRANSITION PLAY ZONE

Since developmental levels, sleep patterns, and personal care needs can vary greatly from one child to another within a group of infants, it is essential that the indoor and outdoor areas be at the same level. This allows babies who are crawling, toddlers who are almost standing, and even those who are just beginning to walk to move easily between the indoor and outdoor areas.

Therefore, a flat, continuous surface should be provided that extends from the indoor playroom to the outdoor play area, to minimize the risk of tripping and allow children to crawl and walk independently. Toddlers can also sleep, eat, be rocked, and be changed there as needed. This area should be located so that staff can see the rest of the play space, allowing them to observe children playing independently and provide unobtrusive support as needed. It should also include first-aid supplies, a changing table with access to water, small dining tables, and resting furniture.

Building a deck accessible from both the infant room and the playground is essential to meet certain regulatory requirements regarding the obligation to spend time outdoors every day. It allows children to take naps there in winter, spring, summer, and fall — even when it rains. It is important to remember that dressing a very young child in clothes that restrict their movement to protect them from the cold and keeping them seated in a stroller or carriage while they are awake, only harms their development. Therefore, in cold weather, they should be able to sleep outdoors to enjoy the fresh air while they sleep, and indoors in spaces that allow them to fully experience their bodies. Furthermore, in mild weather, they can also sleep there. Within easy reach, caregivers will watch over them while the others play on the ground in a well-equipped playground.

Annelies Smolders⁴¹ confirms that temperature plays a major role in sleep quality. "We sleep much better in cool rooms. And when the temperature is high, as it is in the summer, we sleep less well. A cool body falls asleep more easily."

Nathalie Schittekatte⁴², a children's sleep coach, knows that babies are sleeping outside increasingly. "We're always taught that children nap better in a stimulus-free environment. On the other hand, we know that babies often fall asleep if you take them for a walk outside. And that constant noise, like white noise, works well. Complete silence is strange for a baby: in the womb, there was a lot of noise. Outside sounds are also quite soft and repetitive. Maybe that contributes to better sleep."

These same patios are also great for playing on when the weather is already warm, even if the yard is still muddy or inaccessible for other reasons.

⁴¹ Annelies est le visage derrière la formation en ligne sur le sommeil de Start to Sleep. Avec plus de 25 ans d'expérience à son actif, elle a aidé des milliers de personnes ayant des problèmes de sommeil à mieux dormir. Tout a commencé dans son cabinet de groupe Huis Midori, où Annelies, en tant que psychologue et psychothérapeute, est régulièrement entrée en contact avec des patients ayant des difficultés à s'endormir.

⁴² <https://snugglesanddreams.com/fr/>

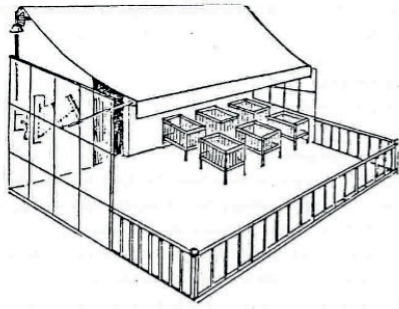


Illustration taken from :

No 30 SCHÉMA FONCTIONNEL DES POUPONNIÈRES, Équipe de Lóczy, 1974, Institut National de Méthodologie Emmi Pikler des foyers d'Enfants du Premier Age Lóczy - Budapest - Diffusion québécoise et canadienne : www.rcpem.com

OPEN ZONE AND PHYSICAL ZONE

For next two areas combined, it is recommended to allow at least 6 square meters (64 square feet) of space per child. This space requirement should not be underestimated.



OPEN ZONE

Babies and toddlers need a space to play on their backs, on their sides, crawl, get on hands and knees, pull themselves up, and take their first steps. This is often a large, covered area surrounded by a barrier that protects them from walkers. Adjacent to this area, there will be another space where they can push an object and practice walking rapidly, which will later develop into running. Ideally, this should be a slightly uneven terrain with undulating mounds or gently sloping embankments, offering the chance to take on challenges, the joy of observing things from above, rolling or sliding down, and crawling back up, in any season.



PHYSICAL ZONE

Often, a sand pile makes a great spot for climbing, sliding down quickly, pushing a small cart, and then watching it roll down the slope.

Motor skills equipment can be gradually introduced in this area over a fairly long period of time, on a flat, grassy surface.

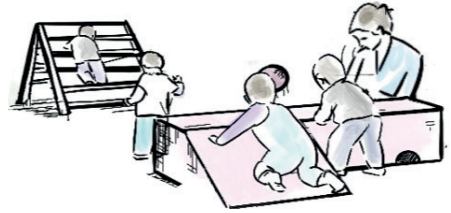
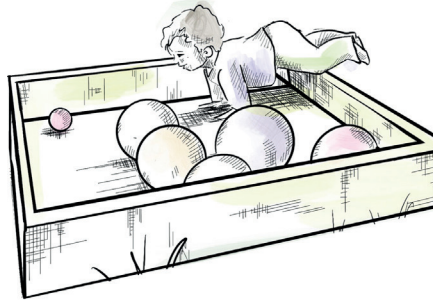
First, the crawling box gives babies and toddlers the opportunity to practice moving up, down, and in and out when they use it upside down.

After a while, we'll add slopes and more boxes to create a complete podium that encourages the little ones to move safely along a "narrow" path, first by crawling, then by running. This will help toddlers become increasingly able to move along relatively steep slopes.

Next, the podium is replaced with a maze made up of long sections and short tunnels that can be combined to form a square tunnel. Babies will explore their body position in space (inside, outside, forward, backward, etc.). This motor skills equipment will allow toddlers to "re-experience the act of crawling", a motor activity essential to a child's healthy psychomotor development, contributing to balance, coordination, and the development of motor skills.

Next comes the introduction of the ladder on the ground, followed by the curved ladder, and then the climbing triangle. This sequence allows children to develop their agility gradually, as well as to become familiar with the equipment and its properties (weight, volume, angles, etc.).

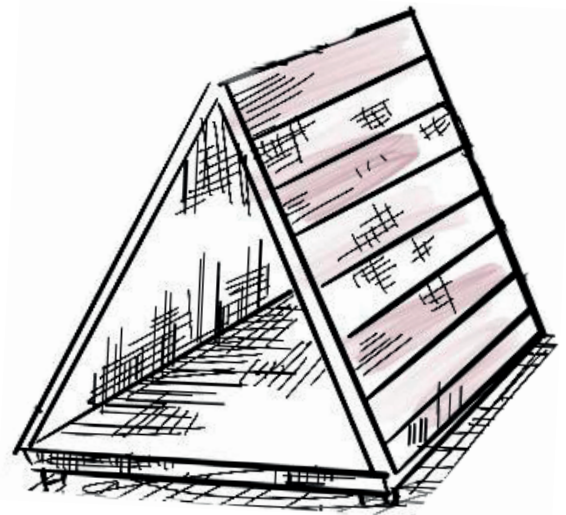
Since this equipment requires agility and intense physical effort, it should not be used for extended periods of time. It should therefore be removed from children's play areas from time to time and stored out of their reach. Like all motor skills equipment, it can be used individually or in groups, under the close supervision of teaching staff.



NATURAL ZONE

It isn't always a clearly defined area, as it can extend throughout the entire space. Natural elements thrive along a fence or near the quiet play area. You can set up a small bamboo and vine hut in this area, or even an herb garden in a raised planter. Ideally, this would be located near a small, shallow pond, beneath a trickling water arch, in a sunny spot.

As with the play area for older children, weather conditions must be considered: it is important to provide both shade and sunlight, particularly through deciduous trees or a pergola covered with vines. In winter, sunlight should be able to warm the play area used by toddlers. Shade-providing plants, which adapt to the different seasons, are necessary not only for older children but also for play areas for younger children. Plant selection must be careful: the seeds of certain species (acorns, samaras, beechnuts, for example) can pose a hazard. They can get into children's ears or noses or get stuck in their throats. Trees that produce them (oak, maple, beech, etc.) should be excluded from this area.



LOOSE PARTS MATERIALS

Loose parts materials require careful selection, as toddlers will handle them, carry them, and even put them in their mouths. It is best to use natural materials, such as small wooden rings or cylindrical wooden objects that can be transported in pull-along, push-along, and ride-on toys in the physical play area, once that area has been cleared of motor skills equipment. Low, smooth logs can allow children to trace paths to follow or settle down to look at the pictures in a book near a playhouse or in a small hideout made from other natural elements.

STORAGE

The rapidly changing needs of growing children call for carefully selected storage solutions and, ideally, a separate storage area next to the quiet play zone. The usefulness of storage depends on the size of the object's children use. Shelves should be provided to hold several small baskets filled with objects for handling, assembling, and carrying. A set of objects for pretend play (dolls, hats, bags, etc.) could also be neatly stored there.

The Role of Educators

Infants and toddlers need comfort and support, as well as meaningful connections with caring adults who provide them with a variety of objects to explore in their environment. Assistance with personal care, individual attention during meals, and preparation for rest should be adapted to children's developmental levels. The same applies to furniture and equipment.

It is important to remember that an effective outdoor play space offers visual enjoyment and can stimulate all the senses, under the watchful eye of adults who have confidence in each child's ability to explore. Having access to a play space suited to their needs in terms of freedom of movement allows them to have essential experiences during this critical period of their development.



Outdoor space at the CPE Joie de Vivre in Saint-Blaise-sur-Richelieu. The space was designed as part of the [Poupons et trottineurs ouverts sur le monde extérieur](#) project - 2024

IN SUMMARY

- The entrance zone allows children to take a break and get a sense of the entire playground before venturing out. This lets them move between indoors and outdoors — and back again — at their own pace.
 - The quiet play and social zone provide a gathering space where children can sit and work in small groups.
 - The physical play zone should combine a natural environment with playground equipment to offer, in a balanced way, optimal conditions for developing various gross motor skills.
 - The sand and water zone offers an excellent combination for encouraging free play.
 - The garden and natural environment zone promotes an awareness of ecology and healthy eating.
-
- The creation and construction zone offers activities with open-ended materials that encourage cooperation.
 - The pretend play and drama zone can take various forms, from a furnished playhouse with kitchen accessories to a platform with costumes that allow children to put on little shows.
 - The area for infants and toddlers allows the youngest children to receive the care necessary for their well-being and to play freely under the caring eye of an adult.

IS THE SPACE TOO SMALL OR TOO LARGE ?

In Quebec, the size of daycare playgrounds can vary. Playing in an outdoor space that is either too large or too small can lead to different problems. In outdoor spaces that are too small, children will not be able to continue an activity they have started without disrupting others' play. It will be practically impossible to play ball there. This lack of space can affect the children's behavior.

In that case, we will need to answer the following questions :

- Is it possible to go gardening with the older groups at the community garden ? To use the city's sports fields for ball games ?
- To use the playground equipment at the neighborhood school during the summer ?
- To go explore what the nearby park has to offer ?

In this case, older children are encouraged to engage with their community, while in the daycare center's playground, efforts will be made to better meet the needs of the younger children.

Flower beds can be installed all around the building to create a garden area. This area will then be accessible to all families at the daycare center.

Another way to overcome the challenges posed by a very small outdoor space is to treat it as an extension of the indoor space. The two spaces then form a single unit that can feel like a reasonably sized area. This approach is based on the principle that the interior and exterior constitute a combined environment, and that both are available for use at the same time, depending on the weather.

A small outdoor space can be much more useful and manageable if it is accessible at the same time as the indoor area and is well-designed. It is highly unlikely that all the children will want to go outside at the same time, but they will move from one activity to another, going from indoors to outdoors as needed.

On the other hand, a very large playground without nearby physical reference points can make young children feel insecure and limit their exploratory movements, as they need the reassuring presence of an adult to move about comfortably.

Ideally, the entire outdoor space should be of an optimal size so that children can move freely and without fear, and it should be large enough to encourage play in several well-defined and well-maintained play areas.

Only in a space of adequate size can educators trust the children and allow them to experience an active and joyful early childhood!

TO THIS END, A CHANGE IN REGULATIONS TO PROMOTE HIGHER-QUALITY OUTDOOR PLAY IS CRUCIALLY IMPORTANT FOR CHILDREN'S WELL-BEING; EVEN THOUGH ANY CHANGE TAKES TIME, WE MUST GET STARTED.



Aerial view of the outdoor playground at the Centre de la Petite Enfance Joie de Vivre - Saint-Blaise-sur-Richelieu.
- Photo by Robert Cornellier

4

MUST-HAVES FOR THE PLAYSACE

To design a play area that meets everyone's needs, several elements must be incorporated, but these must be adapted to the specific realities of each setting. This involves providing :

- A** Storage areas near the various play zones so that equipment is easily accessible to children ;
- B** Facilities that are thermally comfortable year-round ;
- C** Structures that provide shelter so that children can engage in various activities regardless of weather conditions ;
- D** A circulation network that gives children clear guidance on how to access the different play areas.

STORAGE

First, assess both immediate and long-term storage needs to plan the space accordingly. Well-placed storage areas help keep play materials and furniture neatly organized. They allow you to quickly transform the space and ensure that the daily schedule is tailored to the group, thereby offering children a wide variety of enriching experiences.

Storing toys and activity materials in each play area is essential. Constantly asking adults to bring materials outside or fetch them from a large storage shed every day risks undermining children's initiatives, as they will have to wait for an adult to be present day after day to transport the materials, in addition to supervising them. It is better to ensure that there is adequate storage in each play area and that the materials needed for activities are easily accessible to children.



Off-the-shelf storage units can work very well if they're designed for outdoor use. Wooden pallets can be used to create interesting, low-cost furniture near the building. You don't need many tools to make them, and with a little paint or stain, you can customize them to blend in better with their surroundings. For example, you could build a bench for the entryway that also serves as storage for shoes or boots.

Tip: By stacking three or four pallets cut to the same size, you can create several storage spaces for children's shoes near the entryway or near the sand and water play area. Above this storage unit, you can attach a few boards to the wall and screw hooks into them — voilà, a practical and stylish coat rack for hanging jackets, bags, and coats !

Storage chests should be avoided, as items tend to end up jumbled together inside them. Materials should be distributed among individual bins clearly labeled with pictograms to facilitate access and organization. A labeled storage area organized by category allows for quick access to toys and materials and facilitates learning activities such as sorting, classifying, sequencing, and categorizing. A well-organized environment saves time. This allows educators to devote themselves entirely to supervising and caring for the children, without worrying about constantly having to tidy up a storage shed where everything is placed carelessly.

THERMAL COMFORT



A well-designed outdoor play area should enhance the enjoyment of being outdoors. It must be suited to children's overall development, safe, and thermally comfortable, so that children can play freely there, and the educator staff feel at ease. Thermal comfort influences both the level of activity and the length of time spent in the space. If everyone feels comfortable and at ease there, they will tend to stay longer and be more active.

Adequate sun protection is essential for children's health and comfort. In the Northern Hemisphere, the sun casts its shadow toward the north. Because of the harmful effects of the sun's rays, it is essential to provide shaded areas to create safe and interactive play spaces, but it is also important to consider the need for sunlight and warmth during the cold season.

Therefore, structures designed to provide shade should be installed on the south side of areas that need additional shade. There is usually shade under large trees, but if the trees are young, waiting 20 or 30 years for the vegetation to provide sufficient shade is not a viable short-term option.

Structures, whether permanent or temporary, can provide shade in the playground right away. They also give us an opportunity to think about what else we could do to create shade.

Deciduous trees provide better protection from the midday sun than conifers. Their rounded shape offers a wider area of shade than the conical shape of conifers. Deciduous trees also serve a dual purpose: they provide good protection from the sun when the leaves are fully grown, but they allow sunlight and heat to penetrate during the fall and winter. You can choose broad-canopied deciduous trees (such as oak, maple, beech, or ash) or weeping trees (such as willow), which provide more shade than conifers (jack pine, larch, white and black spruce, and balsam fir).

When grouped together in one place, trees provide more shade than several scattered trees. They can be grouped around a platform that will serve as a shaded gathering place. This planting method effectively meets children's natural need to gather in small groups of three or four to play or talk. It is recommended to plant groups of trees in a circle or in a row to ensure vegetation cover within and around existing facilities. Trees and shrubs can not only provide shade but also bear fruit or produce beautiful flowers, allowing children to enjoy a variety of sensory experiences throughout the seasons.

Climbing plants on a fence can also provide shade and promote the growth of fruits and vegetables. Shrubs can be planted along arbors, trellises, or pergolas. Benches can be placed under the trees so that educators can comfortably observe the children at play.

Numerous passive cooling techniques have been developed and studied in relation to urban outdoor spaces and thermal comfort (see Shashua-Bar et al., 2011; Brown et al., 2015; Lenzholzer, 2015). The best-known and most effective design method involves creating shaded areas using structures and trees, followed by methods that promote air circulation. In both cases, air temperature is lowered by controlling both surface heating and air mixing. Consequently, the methods used on playgrounds to reduce sun exposure and improve air circulation during hot weather are the primary means of enhancing thermal comfort. High solar radiation intensity, combined with a lack of air circulation, is often a recipe for extreme discomfort in hot weather⁴³.

During the cold season, landscaping allows for partial control of two important characteristics of microclimates: solar radiation and wind. Unlike in summer, the goal in winter is to reduce wind and increase sunlight to make the play area more comfortable⁴⁴. Using deciduous trees to provide shade in summer and allow sunlight through in winter is a good landscaping strategy for keeping the play area comfortable year-round.

Too cold? Too hot? By monitoring temperature changes, educators can more effectively plan children's activities and outdoor outings, considering factors related to their health and safety. They can refer to the [Charte des températures](#), which has been available since 2005 and was updated in July 2019⁴⁵ by the Regroupement des centres de la petite enfance de la Montérégie. This chart presents heat indices based on humidity levels, as well as wind chill factors to determine whether children can go outside in winter without risk of frostbite. It also outlines the measures to be taken to ensure that outdoor activities are conducted safely during heat waves.

SHELTER STRUCTURES

You might want a shelter that protects only from the sun, or one that protects from both the sun and the elements. There are several types: structures with a sturdy roof and walls or half-walls, which protect against rain, and structures with an openwork roof or a pergola covered with plants, which protect only from the sun.

When designing a new playground, it is important to take the time to observe the proposed play area to see where the sun is positioned throughout the day and to determine where shade would be desirable. These observations should be made over several days and at different times of the day to identify where children will gather in the morning and evening, as well as where they can eat and sleep (keeping in mind that infants can hardly engage in free play outdoors during the cold season). A four-season porch, adjacent to the building, can provide both shelter and shade for playing, eating, and sleeping.

Any shelter can be set up to be useful for a variety of activities: outdoor group activities, gatherings, and a place to read, draw, and rest. You can incorporate playful or educational elements (for example, a wind chime to produce sound, a thermometer, a rain gauge, a windsock with a Beaufort scale to serve as a weather station, or a chalkboard and chalk for expressing oneself through drawing). Barrels can be placed in strategic locations to collect rainwater and be used to water the plants in the garden.

The arches, pergolas, tunnels, and trellises scattered throughout the play area will create numerous shaded spots and provide a comfortable, three-dimensional space appropriate for young children.

GARDEN SHED

A pergola is a small garden structure made of openwork beams, designed to support climbing plants. It can serve as an entranceway to the yard, be installed between sections of the yard, provide shelter along a path, or be in a quiet play and gathering area; in the latter case, it can be used for meals and snacks or even for sleeping. A pergola can be built from wood, bamboo, woven willow, or trellis and can take on various forms: a long corridor, several small corridors serving as tunnels for games, and so on. Climbing plants and seasonal plants will form the canopy.



⁴³ Le confort thermique des terrains de jeu : revue de la littérature et enquête auprès d'experts, National Program for Playground Safety de l'Université de Northern Iowa, 2020, p. 21.

⁴⁴ Le confort thermique des terrains de jeu : revue de la littérature et enquête auprès d'experts, National Program for Playground Safety de l'Université de Northern Iowa, 2020, p. 22.

⁴⁵ Voir https://rcpem.com/wp-content/uploads/2024/04/Annexe-B_2019-charte-temperatures.pdf

GLORIETTE, ARBOR, AND KIOSK

A gloriette and an arbor are also types of garden shelters, sometimes decorated with plants — whether climbing or not. If the structure is larger and requires a sturdy framework, it is referred to as a gazebo. A skilled carpenter or cabinetmaker can easily build such a structure in a wide variety of shapes (hexagonal, rectangular, square, octagonal) and sizes, provided it is large enough to accommodate small gatherings. The structure can consist of half-walls and an open roof where climbing plants can grow, or it can be completely enclosed. Depending on your budget and intended use, you can add a floor, but the structure can also be set up directly on the lawn. These garden pavilions provide a shaded space, sheltered from the wind and inclement weather. You can even hold creative workshops using recycled or art supplies there when a storm rolls in.



TEMPORARY SHELTERS

Lattice structures and tents provide protection from the sun's rays while still allowing light and a breeze to pass through. It's easy to build small temporary shelters with children: for example, simply drape a piece of fabric over four poles set up in a teepee shape or over a bamboo frame that can be taken apart and reused as needed. Umbrellas over tables and benches can also provide some shade on calm days.



See also, the

[Guide pour l'aménagement d'une installation où sont fournis des services de garde](#)

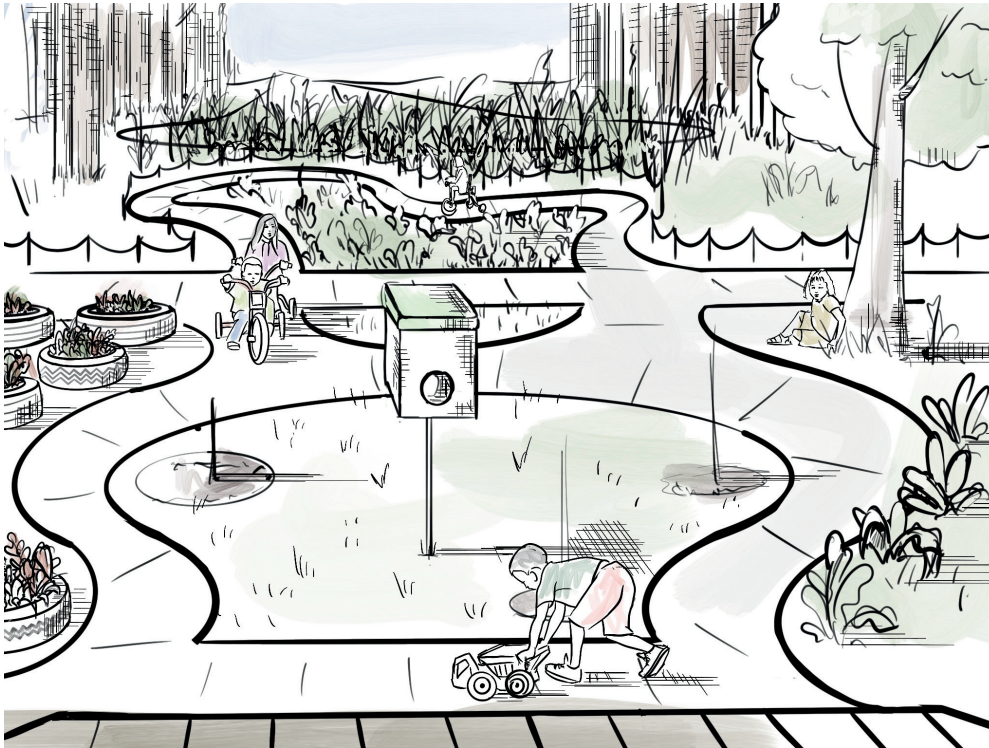


Covered area for the sandbox - CPE Joie de Vivre Saint-Blaise-sur-Richelieu



Dining Shelters - Italy. Photo by Sylvie Melsbach

THE PATHS



Trails are not merely pathways connecting different areas; they also serve as landmarks for children and are, in themselves, places for enriching activities. We often refer to them as "paths" because of their narrow width, but these trails are all too often missing from the playgrounds and play areas of childcare centers.

Study⁴⁶ shows that wide, winding, looping paths—where children can use rolling toys—are stimulating and even promote higher levels of physical activity than most other types of play facilities. Such paths are essential to a high-quality play space. They also define the boundaries of play areas and can be designed to blend seamlessly into a specific play area.

The playground paths form a network that connects the different areas, ensuring overall synergy and reflecting the diversity of activities children can engage in there. This is of great importance, not only for facilitating movement around the playground but also for preserving the natural elements. The paths will also help children orient themselves through sensory cues. If the layout has been carefully designed to meet their needs, they will be able to move around by running, carrying objects in wheelbarrows, or riding on wheeled toys, tricycles, or bicycles.

There is usually a main path that connects to the building's transition area. Children will tend to follow this path, and their activities will be distributed more evenly throughout the play area. Well-planned paths provide a key spatial structure for accessing activity areas.

In addition to the main trail, known as the "primary" trail, there are also secondary and tertiary trails. The primary path connects the indoor area directly to the outdoors and makes it easier for children and adults to go outside. All paths encourage physical activity by facilitating walking, running, tag, and the use of wheeled toys (to ride, push, or pull).

THE TRAFFIC NETWORK

Before designing a network of paths in the playground, it is important to observe which routes the children naturally take to move around. There may already be natural paths leading to various locations; these should be preserved. Paths can be planned to lead to, run near, or border the play areas. While covering the entire play area, the network should be laid out in the form of intersecting circles to allow for the children's continuous movement and prevent them from ending up in dead ends.

In the published literature, a hierarchical approach to pathways is described, which results in three types of trails: primary, secondary, and tertiary. Combined, these three types will create a more engaging and easier-to-navigate pathway system. To enhance opportunities for play and discovery, the different types of trails will be designed based on the features or resources found in the playground. For example, a wood-chip path could be laid out through a wooded area, a stone-dust path through a butterfly shrub garden, a grass path across a meadow, and a wooden walkway near a building.

⁴⁶ Cosco NG. Motivation to move: Physical activity affordances in preschool play areas (Doctoral dissertation). 2006.

THE PRIMARY PATH

The primary path or main walkway is a functional necessity for an outdoor play area. It must be designed to facilitate movement and make it enjoyable, connecting buildings to high-traffic areas. It provides a spatial structure that simplifies children's movement and allows adults to move quickly through the playground when necessary. It serves as a route for accessing all areas of the playground. It should form a loop, with no dead ends, featuring gentle curves and no sharp angles or tight turns. With adjacent plantings, it will offer an interesting and stimulating experience for exploration.

The main path must be wide enough to accommodate pedestrians and wheeled toys. It must be designed to encourage children to stay on the path and pass others smoothly. A width of at least 1.2 meters (4 feet) is recommended. It should be noted that the main path is more than just a circulation area; it is a play feature in its own right.

It must be located to leave sufficient space for planting along the inner and outer edges. A planting buffer of at least 900 mm (36 in.) must be provided between the pathway and high-activity areas, such as sports fields, as well as fixed structures, such as fences, trees, and walls. Buffer zones must also be provided between any hard-surface trail and sand play areas to prevent sand from spilling onto the trail surface, which would make it slippery. The longitudinal slope must be gentle to allow for the safe use of rolling toys.

SECONDARY PATHS

They can serve as "shortcuts" and offer more exploratory routes between certain sections of the main pathways. These routes are less direct than the main pathways and connect them to more intimate environments conducive to play and learning, allowing children to interact with the natural landscape and make discoveries.

These paths, also known as garden paths, can take many forms and are narrower: they are typically 76 centimeters (30 in.) wide, which is wide enough to walk comfortably without vehicles (toy cars, bicycles, etc.). Their surface materials range from mulch to fine crushed stone and stepping stones.

Side paths connect the various play areas in the playground, such as the butterfly garden, the vegetable garden, the sensory garden, and the container garden. They can lead directly to these areas or pass through them.

TERTIARY PATHS

To children, tertiary paths are "adventure trails" that form small loops. They branch off from primary or secondary paths and invite children to take short walks in intimate settings. They can be as narrow as 45 centimeters (18 inches). They are usually covered with hardwood mulch, fine crushed stone, stepping stones, or logs. They are surrounded by vegetation and may lead to a small willow hut or a small forest feature.

At an educational daycare center, for example, there was already a "forest" area in the yard where blueberries grew. We preserved it and protected it from being crushed by foot traffic by creating a narrow path that winds through the trees.

BRIDGES

Whether they span a stream, a hill, or small dips in the ground, bridges are always an attractive feature in a playground. It has been shown that bridges just a few meters long meet the needs of young children, and that more imposing structures — such as rope bridges — are highly stimulating for older children. You can add play elements to a bridge so that it's not just a way to get from one place to another, but a spot for observation and discovery.

Be sure the bridge is sturdy and safe. You don't need to hire an engineer to build a small bridge, but you still need to do it the right way. A local carpenter can be a valuable resource.



PATH COVERING MATERIALS

(see the table in Appendix 5)

Stone screenings

Stone screening (rock dust or crushed stone) is well-suited for primary and secondary trails. Once properly installed, it can be considered an accessible surface. There are many varieties of stone dust pathways because the stone is typically sourced locally. To ensure a smooth, level surface, it is necessary to use a fine-grained material in combination with a layer of gravel underneath. This surface is not as hard as concrete, but it will gradually become harder with use.

Wood

Wooden walkways were the first urban pathways that allowed people to walk somewhere other than on soggy, muddy roads when it rained. In an day care center yard, they serve the same purpose. They can connect two areas of the yard or be installed in a section of the playground where water tends to pool. A wooden walkway can be built around a sandbox to allow sand to drain away.

It can be made from cedar or treated pine boards. To ensure proper water drainage and prevent children's shoes from getting stuck, the boards should be spaced no more than 1.2 centimeters (1/2 inch) apart.

Concrete

This is the best option for primary pathways. They will be more stable and require less maintenance. However, concrete is more expensive than other materials. It can be stained or painted to enhance its appearance and blend in with the surroundings.

Asphalt

This material is suitable for primary or secondary pathways. Asphalt pathways are less expensive than concrete pathways and require little maintenance. However, they are more expensive than pathways made of fine crushed stone or mulch.

Mulch

This material is suitable for all types of trails. It is the least expensive, but it breaks down over time and must be replenished. It is not considered to promote accessibility and is not recommended for wheeled toys.

Stepping stones or tiles

This material is suitable for secondary or tertiary trails. Natural stone lends a special quality to trails, inviting visitors to explore the natural world. River stones are an effective and durable material for trails. They can be laid in a linear pattern to create secondary trails or used in large quantities to build terraces or sensory gardens. Choose durable stones and, if possible, locally sourced ones. They should be smooth and flat, with a minimum thickness of 50 millimeters (2 in).

Logs

Log sections measuring 75 to 150 millimeters (3 to 6 in.) can serve as stepping stones on informal trails, which provide wildlife habitat and natural building materials. However, they have a short lifespan and will need to be replaced every two or three years. Therefore, they are not a good choice for a primary trail or any other path intended to be permanent. It is best to use hardwoods rather than softwoods so that the trail will last longer. Red cedar is ideal because it is rot resistant. In addition, the logs have fun shapes that appeal to children.

BORDERS

It is recommended to install them along all main pathways to clearly mark the path and keep rolling toys within the limits of the path. They help keep materials on the track and those nearby off the track, and they help children stay on the right direction.

Examples of edging materials:

- Stones or rocks ;
- Logs or stumps (placed vertically or horizontally);
- Bricks or pavers;
- Vertically placed tires and tire planters;
- Wooden beams.

The border can also take the form of a low fence or a fence to protect plants.

Trees and shrubs adjacent to the trails may eventually encroach on them. This risk should be considered before constructing the path or planting new vegetation. It is advisable to plant all vegetation at a safe distance from the path, considering the plants' growth conditions. It is also possible to build a wider pathway to allow plants that require more space to grow normally.

USE OF THE PATHWAYS

Ride-on toys can be used to their full potential in the daycare center playground. Because these toys require subtle balance control, they allow children to test skills that should lead to a comprehensive understanding of their own bodies.

These ride-on toys require varying levels of perceptual-motor skills. Their very design can influence their stability and the child's ability to coordinate their movements and control them safely. The more wheels there are, the greater the stability (which is why children start with a tricycle before moving on to a bicycle). A low-slung vehicle with wider-spaced wheels is more stable (and the ground is closer in case of a fall). The wider the tires, the more stable the vehicle is, even when the child is riding in the sand. The size of the wheels, how easy it is to steer the handlebars or grips, and the ability to pick up speed and brake also determine how well the child can use the vehicle.



Of course, for children to get the most out of these toys in terms of learning, there needs to be a proper path network throughout the playground. This will allow them to move easily from one area to another. Small parking areas can be set up at the entrance to each zone.

There is absolutely no point in building small bike paths that go in circles around the yard of a daycare center. Unfortunately, this is all too often what has been provided as a route around the outdoor play area that children must cross to get to the play structures.

The Role of Educators

Children love vehicles they can ride on and propel themselves with. These allow them to
independently practice their mobility and balance skills, but it is important that they be
able to use them in ways that match their abilities and interests. The role of the educators is
to create the necessary supportive environment and provide the equipment that facilitates
independent use of these toys.

SUMMARY

- Make sure to provide accessible storage in each area.
- Before designing the playground, take the time to observe the play area to determine where the sun is positioned throughout the day and to understand the paths children take to reach different areas.
- Shaded areas should be located on the south side of the playground.
- Shelters will provide protection from the sun, wind, and inclement weather, allowing the playground to be always used for certain activities.
- Wide, winding, looping paths naturally encourage high levels of physical activity and create a network that facilitates movement on foot or by vehicle throughout the playground.



A nature area with a pathway, designed as part of the project "[Nourrir le développement du jeu actif](#)" in 2019, at CPE Joie de Vivre in Saint-Blaise-sur-Richelieu.

5

PLANNING, DESIGN, LAYOUT, AND MAINTENANCE OF OUTDOOR PLAY AREAS

This chapter offers advice, tools, and exercises to support a team as it reflects on, improves, and optimizes the outdoor play area at a childcare center. The goal is to promote the design of playgrounds that effectively meet the holistic developmental needs of young children (ages 0–5) in childcare centers and that enable the implementation of the center’s educational program by adapting it to the outdoor environment.

The process described here aims to improve the quality of the outdoor environment for young children and to promote its daily use throughout the year. It strives for a standard of excellence, not just an average. The goal is to encourage childcare centers to assess the current quality of their playgrounds and outdoor facilities, but also to aspire to achieve a standard of excellence. Initially, few childcare centers will find that they meet all the quality criteria. It is through a process of consultation, situation analysis, and goal-oriented planning that the outdoor play area can be improved and enhanced over the long term.

PLANNING: A COLLECTIVE EFFORT FOR THE BENEFIT OF ALL

The process of designing or redesigning the playground or outdoor play area is a team effort that can bring together educators, administrators, parents who use the facility (whether they are board members), landscaping professionals, an architect, community members, and others. It also involves working as a team, since the design will influence the daily routines of everyone who spends time in this environment. It must align with the daycare center’s educational program and reflect some of its guiding principles.

For a daycare center’s outdoor play area to be viable, sustainable, and effective—and to best meet children’s overall developmental needs—it is necessary to plan its layout carefully. This process ranges from selecting a location or evaluating the current site to drawing up plans and carrying out the work.

Planning requires the involvement of several professionals with expertise in early childhood, as these specialists have a deep and informed understanding of children’s overall development and the types of play facilities they will need. All too often, we see childcare centers that were designed and developed without this expertise and, as a result, have significant shortcomings.

A master plan finalized or approved by a landscape architect will help determine long-term costs by development phase and facilitate the search for funding. Of course, securing all the necessary funds before a project begins can be difficult. It is quite rare for the funds needed to build the desired playground to be fully and immediately available. Therefore, a phased implementation should be considered, so that the complete plan can be carried out as funds become available. The development or redesign of the yard should be viewed as a long-term project that should not be rushed.

The first and most important factor in a project’s success is the commitment of the educational staff to invest themselves in it. If they are convinced of the importance of the outdoor playground for each child’s development, if they have taken the initiative to acquire the necessary knowledge, and if they have had the opportunity to be involved in the design process, then they will be more likely to adopt a positive attitude. They will want the project to succeed and will find ways to make the most of the new playground or renovated play area with the children.

CHILDREN'S EXPERIENCES

The experiences children have in outdoor play areas — guided by the principles of the childcare center's educational program — must be the cornerstone of the quality of care and education they receive. This means creating an outdoor environment where the focus is not on managing every aspect of the children's behavior, but rather on providing them with a setting that offers sufficient cues and incentives for them to engage in activities on their own. Educators then become those who support each child's active learning in a voluntary, committed, and intentional manner. Their role comes into its full meaning when, drawing on the children's interests and questions, they nurture their play while meeting their learning needs.⁴⁷

In the collectively shared environment that is an outdoor play area, it is important to respect the distinct needs of the various users :



Infants and toddlers learn by exploring the world around them. They need an environment that specifically stimulates all their senses. They explore close to an adult, which contributes to their emotional security and allows them to move around confidently in all directions.



Toddlers and preschoolers need creative play spaces that challenge their emerging "pretend play" skills. As their skills develop, the play space will allow them to take on increasingly complex challenges. In this way, they will put to the test the skills that help refine their motor, social, cognitive, and language abilities, both on their own and in groups.

The play area should also encourage children to get together to socialize, spend time with each other, and go outside — even in bad weather. In **Quebec**, winter can sometimes be a difficult time of year. The cold and snow tend to keep people indoors.

The Role of Educators

	Each season offers opportunities for unique activities : educators can organize snow races,
	fort- or castle-building, and many other creative and stimulating activities. It is also
	important for both adults and children to dress warmly, in a way that allows them to move
	freely, and for the playground to be designed to accommodate weather variations
	and take advantage of the opportunities offered by the changing seasons.

TAKE THE TIME TO REVIEW AND PLAN THE PLAY AREA

The size, shape, location, and characteristics of outdoor spaces at childcare centers vary considerably. Some spaces may already contain permanent features such as playground equipment and mature trees, which must be considered during the planning process. This doesn't necessarily mean starting from scratch: making the most of existing elements that can be seamlessly integrated into a new design gives you a head start.

While there are universal characteristics of child development and while there is agreement on a certain diversity of approaches to ensuring children's well-being and stimulating their overall development, there is no single model for an outdoor play area. Every play area must reflect the culture and values of the adults and children who use it and offer a variety of experiences to support children's development on different levels.

⁴⁷ Accueillir la petite enfance : programme éducatif pour les services de garde du Québec, page 48.

However, it must be acknowledged that the size of the space and how it is organized will have a direct impact on the ability to live there in harmony. Nor can it be denied that the more space there is, the more opportunities there will be for activities, play, and learning for children, and the more enjoyable daily life will be. If space is limited, the number of zones will need to be reduced (or the zones made smaller) to encourage a variety of play activities, and you will need to rely on the community or the municipality for access to additional resources (parks, schoolyards, public gardens, etc.).

Redesigning or creating a play area is a significant investment and requires careful consideration. It should not be a turnaround project offered by a contractor or the result of a strategy improvised by a so-called specialist, which could result in a play area that does not align with the culture of the setting or the needs of the users. It is essential to take the time to discuss this with the entire educational staff, administrative staff, and maintenance service. Investing in this preparation time is not a luxury — it is a necessity.

GETTING STARTED

The Implementation Committee is a working group that will guide the initial stages of the project based on a vision. This committee should include at least one representative from the daycare center's management, members of the educator staff, parents who use the daycare center (whether they are board members), and one or more landscape design professionals. These individuals will come together around a shared vision: to transform the playground into a beautiful, attractive space that offers a wide range of opportunities for play and learning.

This committee will inform all educators and childcare partners of the facility's strong commitment to undertaking a project to develop or improve the outdoor environment. It will seek to enlist staff members (one per age group) who are committed to and capable of finding constructive solutions to be incorporated into the conceptual plan for the outdoor play area.

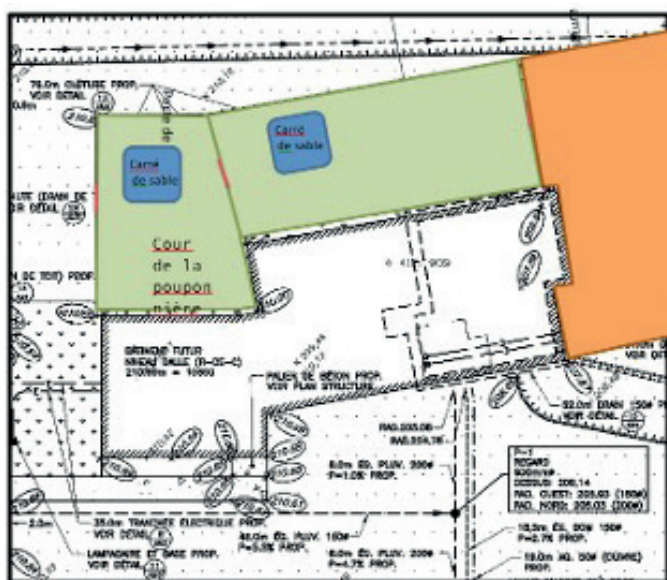
Committee members should take different perspectives into account, share a common vision for the project, have a genuine desire to innovate, and be committed to finding solutions adapted to different circumstances.

STEPS TO PREPARE FOR THE WORK

1

SITE MEASUREMENT WITH PHOTOGRAPHIC DOCUMENTATION

Preferably, use a site plan on a 1/100 scale, where 1 centimeter equals 1 meter. The daycare center manager will be able to provide this plan.



Example of a site plan showing a planned expansion. This is the playground at the Tante Juliette daycare center in Sherbrooke, which is participating in the project:

"Nourrir le développement du jeu actif"⁴⁸.

⁴⁸ Ce projet du RCPem, financé par la fondation Lawson, a permis de sensibiliser des communautés de différentes régions du Québec aux capacités innées des enfants à bouger et à prendre des risques dans des environnements extérieurs, ainsi qu'à revoir et à transformer la cour extérieure pour répondre aux besoins de ces jeunes enfants. Pour en savoir plus, voir <https://www.rcpem.com/saines-habitudes-vie/jeu-actif-developpement-moteur/nourrir-developpement-jeu-actif>.

2

USE OF THE ASSESSMENT TOOL

To assess the quality of the outdoor environment at Daycare Center ⁴⁹ (see Appendix 6) and prepare a report. (see Appendix 7)

The items included in the assessment tool are designed to assist childcare centers that are undertaking a process of redesigning their outdoor play areas. It also aims to improve the quality of the outdoor environment for young children and to promote its use in educational practices. When this instrument is used as a self-assessment tool, the elements can serve as a menu of strategies for improving the quality of the human and physical environment for outdoor play.

Some elements are fundamental, while others are more difficult to implement. Together, these elements represent an "ideal" standard of quality, not an average. As is the case with most quality assessment scales, few childcare centers will initially meet all the criteria. However, the important thing is to continue improving the quality of support for outdoor activities, which are a powerful educational tool.

3

MEETINGS WITH THE IMPLEMENTATION COMMITTEE

It is important to remember that an outdoor play area adjacent to an educational daycare center should be considered an extension of the indoor rooms, where the educational program is carried out through a variety of play-based activities designed for children and where educators interact with the children in a supportive role. When organizing this outdoor space, it is recommended to divide it in the same way as an indoor room.

Referring to Chapter 2 of this guide, the implementation committee must first determine where the various zones selected by consensus on the site plan will be located and then begin to map out the trails connecting them, considering dimensions, orientation, existing conditions, and potential costs. The zones will be located on a scaled grid plan (1 inch = 1 meter). Space must also be allocated within each zone for the equipment the children will need to play.

The areas vary in size, of course. For example, a quiet play area will require less space than an area where children will be more active with larger equipment. You should determine the size of each area based on what you want to include in it and what you want the children to do there, and then consider the areas, making sure they complement each other well. Steen Esbensen's original zoning diagram on page 20 can be a good source of inspiration.

4

IT IS IMPORTANT TO TAKE THE TIME TO IDENTIFY THE ELEMENTS THAT SHOULD BE PRIORITIZED IN TERMS OF TIMELINE FOR IMPLEMENTING THE PLAN

A well-designed outdoor play area reflects the values, philosophy, and discussions of the group of caring adults who make up the implementation committee. This committee will have reached a consensus on the most appropriate design or redesign for the children's well-being and overall development.

Based on the results of the assessment of the daycare center's external environment, and after reading this guide or attending a workshop on facility design, each committee member is invited to individually provide their own list of priority elements and to prepare an educational rationale to justify their choices and convince the other committee members to adopt them.

We can then use the method developed by Jean Schappet ⁵⁰ to reach a consensus on the plan to be implemented for the playground. This innovative process, which has been used repeatedly over the past

⁴⁹ Outil créé et utilisé lors de la mise en œuvre du projet « Nourrir le développement du jeu actif » qui est une adaptation du la grille poems et Outdoor Learning Environment Toolkit, Natural Learning Initiative, College of Design NC State University, 2014.

⁵⁰ Jean Schappet est une conceptrice d'environnement de jeu, inspectrice certifiée en matière de sécurité des aires de jeu et un instructeur de haut niveau pour le programme national américain de sécurité des aires de jeu, tout en faisant partie de leur conseil d'administration.

several years to assist childcare centers in designing their playgrounds, has proven to be highly effective. Jean Schappet drew inspiration from an experiment in which participants are asked to place, in succession, first as many rocks as possible into a jar, followed by pebbles, sand, and water, in that order. She applied this method to help a group design and plan a play area by determining their priorities among the various elements they wanted to include.

Applying the Schappet method requires the presence of a person who will act as a facilitator. This person will help each group member choose their stones, pebbles, sand, and water. Throughout the process, the facilitator will act as a guide. The facilitator will also help the group understand the learning experiences a child engages in when playing a certain type of game or having certain experiences. (See the procedure in Appendix 8)

Throughout the process, he should keep in mind that everything identified for inclusion in the list of elements to be implemented in the courtyard will be installed in the medium or long term, but that certain elements that appear essential in the short term must be prioritized first in order to develop a three- to four-year action plan. (See the improvement plan in Appendix 9)

5

DEVELOPMENT OF A SCALE-BASED MASTER PLAN

At this stage, we make sure we have a representation of each selected element, which we will then transfer to the plan. However, we may find that it is not possible to include all the elements due to lack of space. We will then need to make choices based on the actual conditions of the site.

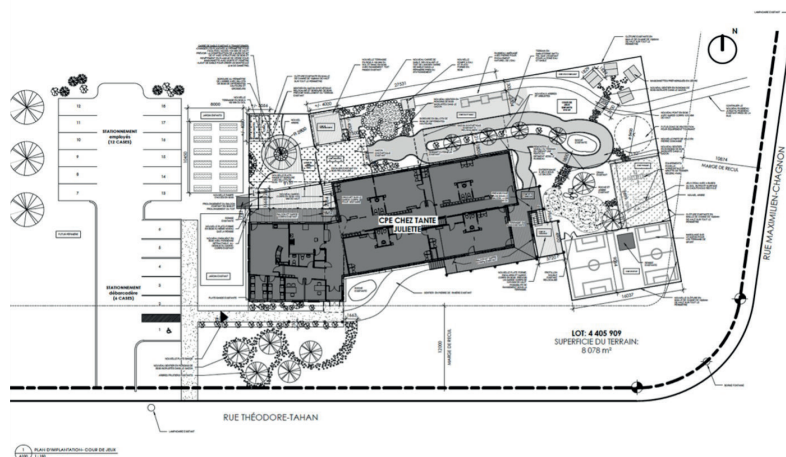
We should first focus on placing the "rocks", then move on to the other elements in order of priority. Since this method isn't perfect, it's possible that some elements that take up little space or room may end up in the layout even if they belong to the "water" category.

Once all the elements have been laid out, we will have a preliminary draft of the new playground, which we will present to all educational and maintenance staff. Everyone will have the opportunity to review it, ask questions, and offer suggestions. The plan will be adjusted as needed.

6

PREPARATION OF A FINAL MASTER PLAN

A professional (urban planner, landscape architect, landscaper, or contractor) may be called upon to use the model as a basis for creating a plan that all members of the implementation committee can review and to which they can suggest revisions.



An example of a master plan revision carried out by a landscaping professional. This is the playground design plan for the Tante Juliette daycare center in Sherbrooke, which participated in the "Nourrir le développement du jeu actif" project.

7

PREPARATION OF A DETAILED ESTIMATE

The landscaping professional will be able to prepare a cost estimate for the entire project. This will be the final step for the implementation committee. The manager will then need to work with the professional to develop an improvement plan — the implementation of which could take several years — and prepare the requests for proposals for the first phase based on the budget estimate.

CPE Tante Juliette 2		2018-02-21
Aménagement de la cour de jeux 1595 rue Théodore-Tahan, Sherbrooke		
Estimation budgétaire à l'étape préliminaire		
Travaux		Coûts
1.0 Conditions générales		
Conditions générales (assurances chantier, contremaître, mise en place, etc)		\$ -
	8,5%	\$ 12 460,63
2.0 Aménagement du site		
Nettoyage à la fin du chantier		\$ 1 500,00
Démolition partielle (balcon, toiture, etc)		\$ 3 500,00
Aménagement extérieur:		\$ -
Excavation (balcon, terrasse, etc)		\$ 5 000,00
Nivellement du terrain, drainage et gazonnement		\$ 16 000,00
Clôture 1,5m de haut		\$ 5 166,72
Nouveaux arbres et arbustes- cour de jeux		\$ 2 500,00
Plantes jardin		\$ 750,00
Bac récupération d'eau de pluie pour jardin		\$ 510,00
Structure de jeux + surface de protection paillis (Tessier récréo-parc)		\$ 15 788,00
Jeux d'eau		\$ 6 600,00
Surface caoutchouc recyclé jeux d'eau		\$ 4 375,00
Nouveaux sentiers piétonniers en pierre concassée (piste de vélo, etc.)		\$ 4 095,00
Nouveaux sentiers piétonniers en rondins		\$ 1 190,00

Example of a cost estimate from the Tante Juliette daycare center in Sherbrooke for the long-term redesign of the playground. This daycare center participated in the "Nourrir le développement du jeu actif" project.

8

SEEKING FUNDING

The success of a community fundraising campaign goes hand in hand with the community's engagement and the visibility of the childcare center; the goal is to "make some noise" and attract the attention of local groups and individuals to support improvements to the playground. Hildy Gottlieb (2006) refers to this initial phase of fundraising as "[funds from friends](#)". In other words, the stronger the ties a childcare center has with its community, the more likely it is to succeed in its fundraising efforts.

Fundraising methods have undergone a transformation with the spectacular growth of social media and the use of the Internet. Social media creates social interaction where communication was once one-way. Many online tools can now be used for fundraising, such as websites, blogs, forums, YouTube, Facebook, Pinterest, and Twitter. Social media can support the development of a project to build or renovate a daycare playground by quickly and inexpensively reaching a large audience and by facilitating connections with potential supporters, volunteers, and donors.

You can quickly find organizations that may provide financial support for certain aspects of the project by searching for "[Grant application for a playground](#)" and reviewing their project eligibility criteria to see if there are any funding opportunities. Many organizations are dedicated to encouraging Quebecers to adopt healthy lifestyles from an early age — an avenue worth exploring. Several charities also fund environmental projects.

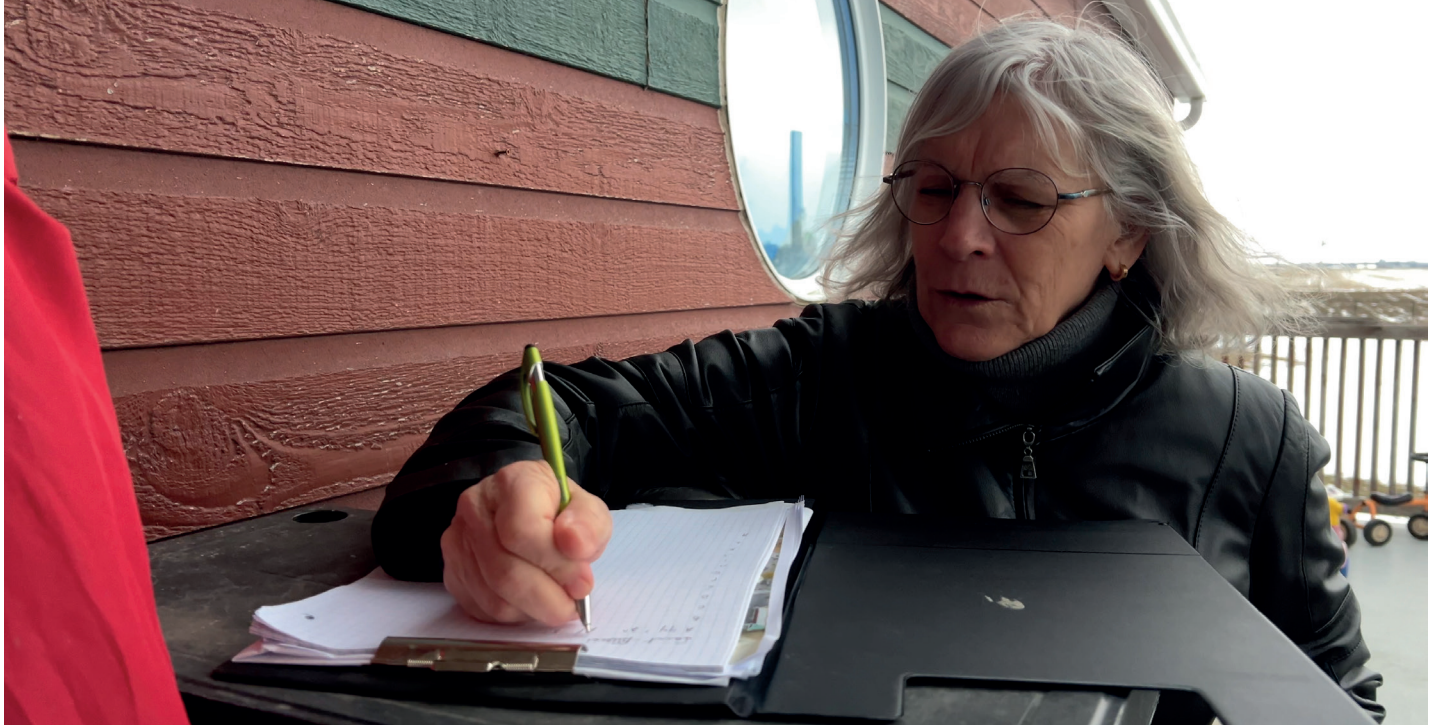
Donation requests are usually made online; the process is quick and easy. All you have to do is visit the website of the organization and fill out a form with your name and contact information.

Success usually depends on the thoroughness of the research. However, it is important to ensure that the project meets the donor's criteria and that the daycare center is eligible. It is also important to know how to present the project effectively.

9

IMPLEMENTATION OF THE IMPROVEMENT PLAN

With the approval of the board of directors, the improvements to the playground will be carried out in several phases or in small steps, as resources become available. At the same time, and on an ongoing basis, the daycare team will be responsible for planning educational activities related to the improvements to the site. This work is essential to improving the quality of the educational services provided to the children and their families.



Taking measurements / determining dimensions for the design of the improvement plan- CPE Joie de Vivre - Saint-Blaise-sur-Richelieu



Scaling Up the Improvement Plan- CPE Bobino de Beauharnois

6

THE USE OF THE DAYCARE CENTER PLAYGROUND FROM AN EDUCATIONAL PERSPECTIVE

In the revitalized outdoor play space, every effort will be made to ensure that adults view this setting as a learning environment. Educators will be encouraged to engage in an educational approach that may differ from what they have known and practiced until now. They will be required to plan and carry out educational activities based on their observations of children at play outdoors and will, in a sense, serve as the architects of this malleable, ever-evolving environment.

The playground will now be an environment that engages all the senses (sight, hearing, taste, touch, smell, the vestibular system, and proprioception), offers contrasts (hot-cold, light-dark, open space-intimate space, dry-wet), and allows children to experience different sensations (light, rain, smells, sunshine, wind). Educators must ensure that children have access to elements of nature (sand, water, trees, shrubs, flowers, vegetables, and fruits) that make the cycles of life perceptible (seasons, buds, fallen leaves, caterpillars, cocoons, and butterflies). They must also support children by helping them develop their dexterity and motor skills, and by allowing them to expend their energy independently. This diverse playground will foster interpersonal relationships while ensuring emotional security (through transitions, supervised play, and gathering spaces). The playground will be a place for daily creativity and building, where children can "pretend" and pursue projects of their own.

The educational intervention process must be emphasized in the external environment. All educational staff must share responsibility for its implementation. The various stages of the intervention process should be included on the agenda for team meetings, where staff will discuss the practical application of educational principles, the children's unique experiences — both positive and negative — and the observations made by each staff member.

EXAMPLES OF OBSERVATION QUESTIONS FOLLOWING THE DESIGN OR REDESIGN OF THE PLAYGROUND

ENJOYING THE OUTDOORS IN EVERY SEASON

- 1 What about the little ones? Are they stuck in clothes that are too big for them to move around in, clothes that get in the way of their first steps?
- 2 What can we give them to help them get some fresh air and boost their immune systems in the winter?
- 3 What conditions are necessary to ensure that all children can fully enjoy the outdoors in all circumstances?

ON THE IMPORTANCE OF PLAYING OUTDOORS

- 1 Do you consider the outdoor environment less important than the indoor environment?
- 2 Think about what you used to do when you were a child and played outside. Share your memories with your team members. Can any of these ideas be put into practice with your groups of children? If not, why not?

- 3 Do your children ever get out of breath? What can you give them or suggest they do to help them burn off more energy?
- 4 When you observe the children in your group, what do they look like physically? Have they developed good muscle tone?
- 5 How much time do the children in your group spend outdoors each week? Is there a way to increase that time? If not, why not?

ON THE LEARNING ENVIRONMENT

- 1 Think of a situation where you weren't given a choice, where a certain way of doing things was imposed on you. How did that make you feel? Now think of a situation where you were given the choice to do things the way you wanted. How did you feel? Remember that it's the same for children: if they're given a choice in a situation, they feel in control, confident, and valued, and they know they have potential. Do they have control over their play in this environment?
- 2 Do the educators strive to offer all types of activities, or do they focus on just a few, thereby giving greater importance to some activities and less to others? Observe and list the opportunities offered by the social and physical environment of the playground.
- 3 How much time do you allow children to discuss their day? What is the quality of the discussion? Are these merely 1- to 5-word responses, using the same words every day, or are they genuine exchanges between an adult and a child or between two children?
- 4 How are the materials and equipment organized? Are the materials accessible to the children at all times?
- 5 What is the connection between the outdoor educational program and the indoor educational program?

ON LEARNING EXPERIENCES AND SITUATIONS

- 1 Is the outdoor space both a place where children can feel at home and a place where they can learn?
- 2 What are the specific needs of your group of children? How can you meet their needs in the outdoor play area?
- 3 Consider the continuity of the children's experiences over a period. Is it important for an experience or activity to last only one day or one morning? What evidence do you have? How can you make an experience or activity engaging and effective for learning over the course of a few days, a week, two weeks, a month, etc.? Use a specific experience or activity to illustrate your thinking — for example, a pretend play activity.

ON CHILDREN'S USE OF THE OUTDOOR ENVIRONMENT

- 1 When using equipment and materials — such as blocks or sand, for example — what are your expectations for younger or older children? How do they use these materials or this equipment?
- 2 Look at the outdoor space from the children's perspective and put yourself in their shoes. How do they feel? What do they think they can do outside?
- 3 Is the environment suitable for children to create their own role-playing games?
- 4 Discuss with the educators the behaviors observed in each area so that you can compile a list of typical or regular behaviors in each area. If there are gaps, decide on measures to implement to improve practices.
- 5 Note what the children are doing outdoors. Who is playing with whom? Who is moving around a lot? Who spends a long time on certain activities? Who are the staff working with, and with what? Which areas are or are not being used?

PLANNING

It is therefore essential that educators take an active interest in this shared space by helping to shape it. Once this potential is realized, it will become a space "where childhood can flourish". Educators will be the ones who listen to, record, and use the children's ideas to propose activities that encourage active learning. Spending extended periods of time outdoors each day will allow children to choose activities that engage them in longer play sessions, physical activities, and exploratory activities. Allowing children to bring outdoor items indoors and indoor items outdoors will also help promote continuity in learning between these two worlds.

Seasonal activities and special outdoor events will help children discover and appreciate the local culture and environment: plants, animals, weather, customs, and more.

Planning fully integrated interventions that involve all children is challenging, but not impossible. The entire educational team will need to be committed not only to this planning but also to its implementation.

See Appendix 10 for an example of planning and organization based on the interpretation of observations.

EDUCATIONAL ACTION

During a group meeting of the educational team, a decision will be made regarding who will implement the planned educational activities based on observation and planning. It is important to hold these meetings so that responsibilities can be shared.

REFLECTION AND FEEDBACK

Next, we will continuously analyze all the measures put in place to ensure the children's overall and harmonious development, and adjust our educational practices as needed. This is an essential step in the process of continuously improving the quality of the educational services provided to the children at the daycare center.

Someone, everyone, all, and no one

The use of the indefinite pronoun...

Once upon a time, there were four individuals called

Everyone — Someone — All — and No One.

There was an important job to be done,
and Everyone was asked to do it.

Everyone was convinced that Someone would do it
All could have done it, but in reality, No One did not do it.

Someone got angry because it was Everyone's job!

Everyone thought that All could do it
And No one doubted that Someone would do it...

In the end, Everyone blamed Someone
Because No One had done what Someone could have done.

MORAL :

Without wanting to blame Everyone,
it would be good if All
did what they had to do without hoping
that Someone else would do it for them...

Because experience shows that
when you wait for Someone,
you usually find No One.

La blague du jour - LA DÉPÊCHE.FR publié le 15/03/2010



CONCLUSION

The quality of the outdoor environment at any childcare center that serves young children daily is a critical factor in ensuring a healthy environment that is appropriate for their overall and optimal development. This generation, in fact, has a great need for spaces where they can move freely. The outdoor environment is the ideal setting for encouraging activity and stimulating child-initiated play, which is a source of learning and physical activity. These outdoor play areas must be designed to allow children to explore their skills in a safe environment that offers a variety of challenges and stimuli at different levels.

The quality of the environment affects not only children but also the relationships between educators and children. It is impossible to protect children from all injuries, but a well-designed and well-organized environment is safe and should minimize the risk of serious injuries. In poorly designed play areas, children often tend to be less engaged in exploring their world and in independent activities, due to restrictive behavior on the part of adults seeking to protect them.

This guide invites you to take a general look at the playground where children play every day. It's a first step toward creating the ideal playground for those who spend their days there.

For babies and toddlers, it's important to consider a design specifically intended to support their development. Otherwise, they may spend little time in the playground, often sitting in strollers or car seats, or engaged in activities led by the educator to keep them occupied—which is not appropriate for their developmental level. At this age, they need to engage in independent activities that allow them to better understand their bodies' capabilities, in a stimulating and safe environment.

In the outdoor setting, exploring the physical environment makes up a large part of the "educational program" for infants and toddlers. The ability to move freely is essential to their physical and emotional development. This should allow babies to start by lying on their backs, out of the way of walkers, where they can first practice lying on their sides and then rolling over. Once they can crawl, sit up on their own, and take their first steps, these activities will become part of their play for most of the day and should be facilitated by their environment.

Young children should have access to equipment they can climb up and down. Exploration on their own initiative—a priority for healthy development—should be encouraged by a well-designed environment tailored to their needs. It is essential to plan carefully to create living spaces that can accommodate all children, outdoors and in all seasons, during all stages of a toddler's day, such as naptime, care routines, and mealtimes. These spaces should also offer a variety of opportunities for free and independent play. It is also essential to ensure that educators have everything they need within easy reach to provide high-quality care experiences. This will allow children to fully satisfy their desire to move and play, without being confined by walls or experiencing the fatigue often associated with group living.





APPENDICES



APPENDIX 1

INVENTORY OF PLAYGROUND EQUIPMENT AT THE EDUCATIONAL DAYCARE CENTER AND NEARBY PARKS - OVERVIEW OF AVAILABLE FACILITIES

INVENTORY OF PLAYGROUND EQUIPMENT AT THE EDUCATIONAL DAYCARE CENTER

[illegible]

INVENTORY OF PLAYGROUND EQUIPMENT IN NEIGHBORING PARKS

Park Name :	Date :
-------------	--------

Type (see Appendix 2) :	Challenge :	Enables :

OVERVIEW OF PLAYGROUND EQUIPMENT AVAILABLE IN BOTH SETTINGS

Enables children to :	Number of components :	Infants :	Toddlers :	Preschoolers :
Climb up and down				
Jump				
Hang				
Sway, swing				
Rotate				
Practice balance				
Total				
Missing challenges				

2

APPENDIX 2

CHALLENGES PRESENTED BY THE COMPONENTS OF PLAYGROUND EQUIPMENT¹

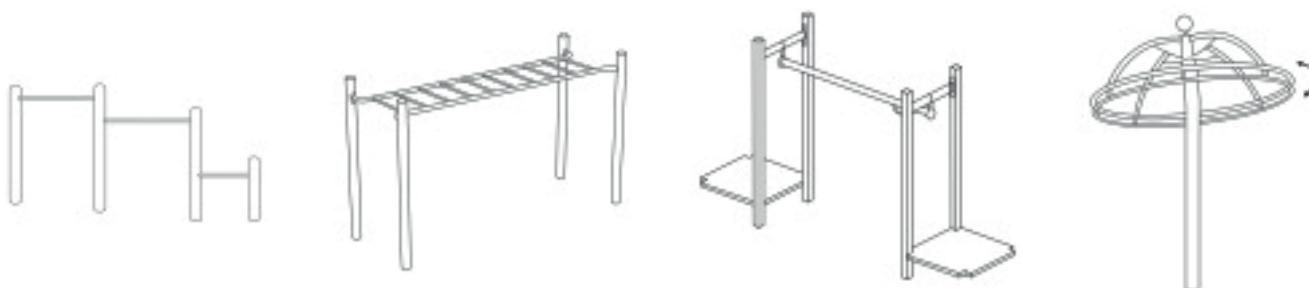
CHALLENGES OFFERED BY EQUIPMENT ACCESS COMPONENTS



ACCESS METHOD	CHALLENGE LEVEL
Ramp	Easiest
Straight staircase	Easy
Spiral staircase	Moderate
Straight slide	Moderate
Stepladder	Moderate
Ladder	Moderate
Spiral slide	Difficult
Freestanding arch climbers	Difficult
Flexible climbers	Difficult
Climbing wall	Difficult
Sliding pole	Difficult
Banister rails	Difficult

¹ Tableaux traduits et adaptés de Frost L. Joe et coll. The development Benefits of Playgrounds, ACEI Editor, Olney, 2004

CHALLENGES OFFERED BY UPPER BODY EQUIPMENT COMPONENTS



EQUIPMENT TYPE	RECOMMENDED HEIGHT
Hanging bar	Approx. 1 m (39.37 in)
Horizontal overhead ladder (18 months to 5 years)	Start : max 450 mm (17.72 in) Bars : up to 1.5 m max (59.06 in)
Horizontal overhead ladder or suspension rings (5 to 12 years)	Start : max 900 mm (35.4 in) Bars : up to 2.1 m max (82.68 in)
Rotating upper body equipment	Start : max 900 mm (35.4 in) Bars : up to 2.1m max (82.68 in)
Trolley rides	Handle height : 1.6 m (62.99 in) – 1.95 m (46.77 in) above the protective surface
Ziplines	Handle height : 1.7 m (66.93 in) – 2.4 m (94.49 in) above the ground

CHALLENGES OFFERED BY ROCKING, TURNING AND SWINGING EQUIPMENT COMPONENTS



EQUIPMENT TYPE	CHALLENGE LEVEL
Toddler swing seat	Adult-assisted
Seated spring rocker	Easy
Hammock	Easy
Standing spring rocker	Moderate
Seated rotating equipment	Moderate
Single-axis swing	Moderate
Single-axis multi-user swing	Moderate
Standing rotating equipment	Difficult
Multi-user swing with multiple axes	Difficult
Seesaw	Difficult
Combination swings	Difficult

CHALLENGES OFFERED BY EQUIPMENT COMPONENTS TO EXERCISE BALANCE



EQUIPMENT TYPE	CHALLENGE LEVEL
Pleasant floor surface for turning / sitting	Balance maintenance
Small low platform	Support practice
Small step	Easy
Small hanging step	Moderate
Small spring step	Moderate
Balance board	Difficult
Balance beam	Difficult
Log roll	Difficult
Rotating circular device	Difficult

3

APPENDIX 3

LIST OF PLANTS FOR CARE CENTERS

FOR THE COLORS

TREES

	Common name	Scientific name	Special Features	Sunlight	Soil	Hardiness Zones *
	Red Maple	Acer rubrum	Red leaves in the fall	Partial shade / sun	Moist	4, 5
	Sugar Maple	Acer saccharum	Orange-red leaves in the fall	Sun	Rich, deep	4, 5
	Ginkgo or Maidenhair tree	Ginkgo biloba	Yellow Leaves in Fall Medicinal Uses	Sun	Light, deep (not very demanding)	4, 5
	Tamarack	Larix Laricina	The needles turn yellow in the fall and fall off to form a carpet	Partial shade / sun	Moist, well-drained soil	1, 2, 3, 4, 5

SHRUBS

	Common name	Scientific name	Special Features	Sunlight	Soil	Hardiness Zones *
	Canadian serviceberry	Amelanchier canadensis	White or pink leaves Edible red berries that attract birds	Partial shade / sun	Cool	2 b, 3, 4, 5
	Smokebush or Smoke tree	Cotinus coggygia	A cloud of pink or white flowers in summer; green or purple leaves	Sun	Light, well-drained	4 b, 5
	Tatarian dogwood	Cornus alba	Red stems visible in winter	Partial shade / sun	Cool and Moist	2, 3, 4, 5
	Bunchberry dogwood	Cornus canadensis	Early spring flowers Edible red berries that attract birds	Partial shade / shade	Moist, acidic	2, 3, 4, 5
	Golden Bells or Easter Tree	Forsythia	Early yellow flowers in spring	Sun	Cool, well-drained	4 b, 5
	Mountain ash	Sorbus aucuparia	Edible red berries that remain on the branches in winter	Partial shade / sun	Well-drained	3, 4, 5

	Staghorn sumac	<i>Rhus typhina</i>	Red leaves in the fall Edible red berries that remain on the plant all winter	Sun	Gravelly and fairly dry	3, 4, 5
	American cranberrybush	<i>Viburnum trilobum</i>	Red leaves in the fall; Edible fruits that birds love	Partial shade / sun	Fertile, well-drained	3, 4, 5

FOR THE SHAPE

SHRUBS

	Common name	Scientific name	Special Features	Sunlight	Soil	Hardiness Zones *
	Lauder's Walking Stick or Corkscrew Hazel	<i>Corylus avellana</i> "Contorta"	Twisted branches; Wrinkled-looking foliage	Sun /partial shade	Rich, cool, and well-drained	5

PERENNIALS

	Common name	Scientific name	Special Features	Sunlight	Soil	Hardiness Zones *
	Ornamental Onion	<i>Allium</i> sp	Large clusters of dark pink flowers, creating a spectacular effect	Sun	Light, cool, and well-drained	4, 5
	Gayfeather or Blazing Star	<i>Liatis spicata</i> "Kobold"	Dense spikes of purplish-pink flowers	Sun / partial shade	Rich, well-drained	3, 4, 5

	Leopard plant "The Rocket"	Ligularia stenocephala	1.5-meter-tall spikes of yellow flowers, very large leaves	Partial shade	Rich and rather moist	4, 5
	Gooseneck Loosestrife	Lysimachia clethroides	White flower spikes shaped like a swan's neck; Attracts hummingbirds and butterflies	Partial shade / sun	Cool, rich, and well-drained	3, 4, 5
	Ox-eye daisy	Chrysanthemum leucanthemum	A classic flower found in fields throughout Quebec	Sun	Cool and well-drained	2, 3, 4, 5
	Sunflower	Helianthus annuus	Impressive for its height	Sun	Rich, calcareous	4

GRASSES

	Common name	Scientific name	Special Features	Sunlight	Soil	Hardiness Zones *
	Chinese Silver Grass or Maiden Grass	Miscanthus sinensis	Autumn blooms in the form of large, fluffy plumes	Sun	Rich, moist	4, 5

FERNS

	Common name	Scientific name	Special Features	Sunlight	Soil	Hardiness Zones *
	Ostrich fern	Matteucia struthiopteris	A large, dense, upright fern Edible shoots	Full shade / partial shade	Cool, moist	3, 4, 5
	Sensitive fern	Onoclea sensibilis	A native or wild fern with a ground-covering growth habit	Full shade / partial shade	Cool, moist	3, 4, 5

FOR ODORS

FINES HERBS

	Common name	Scientific name	Special Features	Sunlight	Soil	Hardiness Zones *
	Lavander	Lavandula	Can easily be dried to make potpourri	Sun	Light and well-drained	4 b, 5
	Marjoram	Origanum majorana	Can easily be dried and used in cooking	Sun	Cool, well-drained	Not hardy
	Lemon balm	Melissa officinalis	Good in herbal tea; smells like lemon	Partial shade / sun	Moist, well-drained, acidic	4, 5
	Mint	Mentha	Good for making herbal tea Can be easily dried	Partial shade / sun	Rich, well-drained	5
	Oregano	Origanum vulgare	Flowers and leaves are used to flavor various dishes	Sun	Cool, well-drained	5
	Pineapple sage	Salvia elegans	Pineapple-scented leaves for herbal tea or cooked dishes	Sun	Rich, cool, well-drained	Not hardy
	Thyme	Thymus vulgaris	Pleasant aroma ; can be easily dried and used in cooking	Sun	Light, cool, well- drained	4,5

SHRUBS

	Common name	Scientific name	Special Features	Sunlight	Soil	Hardiness Zones *
	Lilac	Syringa	Edible Flowers Attracts butterflies	Sun	Cool, well-drained	3, 4, 5
	Phlox	Phlox	Attracts butterflies	Sun	Deep, well-drained	3, 4, 5
	Virginal mock-orange	Philadelphus virginialis	Double, very fragrant flowers; Attracts butterflies	Partial shade / sun	Rich, cool, well-drained	4, 5

TO TOUCH

FINE HERBS AND OTHERS

	Common name	Scientific name	Special Features	Sunlight	Soil	Hardiness Zones *
	Common Houseleek	Sempervivum tectorum	Dense rosettes of fleshy leaves	Sun	Well-drained	3, 4, 5
	Oreille d'ours	Stachys byzantina	Silvery, fuzzy leaves that are very soft	Sun	Light, cool, well-drained	4, 5
	Thym laineux	Thymus pseudolanuginosus	Forms a lovely carpet of tiny, fragrant, evergreen leaves that are soft to the touch	Sun	Light, cool, well-drained	3, 4, 5
	Pennisetum à queue de renard	Pennisetum alopecuroides	Very tender ears that turn golden yellow from mid-summer onwards	Sun	Well-drained	Not very hardy

FOR FRUIT

	Common name	Scientific name	Special Features	Sunlight	Soil	Hardiness Zones *
	Black chokeberry	Aronaria melanocarpa	Beautiful fall colors, fragrant flowers, and black fruits that attract birds Suckering roots	Partial shade / sun	Poor, acidic, and rather moist	4, 5
	Lowbush blueberry	Vaccinium angustifolium	The perfect fruit for cooking or freezing	Sun	Acidic, cool, and well-drained	4, 5
	Blackcurrant	Ribes nigrum	Black berries in July for eating fresh, making jam, or making jelly	Sun	Rich, fresh, and well-drained	4, 5
	Strawberry	Fragaria anassa	Juicy, sweet fruit all season long	Sun	Well-drained	5
	Apple	Malus	Most cultivars are susceptible to disease	Sun	Well-drained	3, 4, 5

TO ATTRACTLES BUTTERBLIES

SHRUBS

	Common name	Scientific name	Special Features	Sunlight	Soil	Hardiness Zones *
	Butterfly bush	Buddleia	Several varieties	Sun	Loamy, well-drained	5

	Cotoneaster	Cotoneaster	Evergreen foliage Red berries that attract birds and butterflies Slow-growing	Partial shade / sun	Fresh and well-drained	5
	Spirea	Spiraea	Several varieties	Sun	Light, well-drained, or dry	4, 5

FLOWERS

	Common name	Scientific name	Special Features	Sunlight	Soil	Hardiness Zones *
	Aster	Aster sp.	Blooms late in the fall	Partial shade / sun	Fresh and well-drained	4, 5
	Borage	Borago officinalis	Edible Flowers and Sprouts	Partial shade / sun	Light, dry	Annual
	Mountain bluet	Centaurea montana	Edible Flowers Invasive	Partial shade / sun	Loamy, well-drained	3, 4, 5
	Échinacea	Echinacea purpurea	An easy-to-grow perennial that produces a profusion of large, dark pink flowers	Partial shade / sun	Rich, fresh, and well-drained	3, 4, 5
	Bergamot	Monarda	Edible Flowers Several varieties	Partial shade / sun	Rich, moist, and well-drained	3, 4, 5

SOME EDIBLE FLOWERS

	Common name	Scientific name	Special Features	Sunlight	Soil	Hardiness Zones *
	Ornamental Onion	Allium	The fresh leaves are edible Decorative flowers	Sun	Lightweight and well-drained	2, 3, 4, 5
	Nasturtium	Tropaleum majus	Great in salads Works well in flower boxes	Sun	Cool and well-drained	Annual
	Daylily	Hemerocallis	Slightly sweet salad flavor Easy to grow	Partial shade / sun	Fresh	3, 4, 5
	Musk mallow	Malva moschata	Used as a herbal tea to treat coughs	Partial shade / sun	Fresh and well-drained	3, 4, 5
	Violet	Viola	Self-seeds and spreads easily	Partial shade / sun	Well-drained	5
	Marigold	Calendula officinalis	A good companion for vegetable plants	Sun	Fresh and well-drained	Annual

HARDINESS ZONES (QUEBEC)

A hardiness zone is a geographic area in which a specific category of plant can survive. Canada is divided into nine zones, numbered 0 through 8, determined based on various criteria, such as minimum winter temperature, maximum summer temperature, the frost period, precipitation, wind, and elevation. Each zone is divided into A and B (with B being slightly warmer than A). In Quebec, Zone 5B, the warmest zone, corresponds to the Montreal region. The zone numbers decrease progressively to 0 as one moves northward.

Region	Zone	Region	Zone	Region	Zone
Alma	3a	Amos	1 b	Amqui	4a
Asbestos	4a	Baie-Comeau	3a	Baie-Saint-Paul	4a
Beauceville	4a	Bécancour	4a	Belœil	5b
Blainville	5a	Blanc-Sablon	3a	Bromont	4b
Cabano	3b	Carleton	4a	Chambly	5b
Chandler	4a	Chibougamau	1b	Châteauguay	5b
Clermont	3b	Coaticook	4a	Cookshire	4a
Cowansville	4a	Deschambault	4a	Dolbeau-Mistassini	2a
Donnacoona	4a	Drummondville	5a	East Broughton	4a
Eastman	4a	Forestville	3b	Frampton	3b
Gaspé	4a	Gatineau	5a	Granby	4b
Grande-Vallée	3b	Havre-Saint-Pierre	3a	Huntingdon	5a
Joliette	4b	Kamouraska	4a	Kingsey Falls	4b
La Baie	3a	La Malbaie	4a	La Pocatière	4a
La Tuque	3a	Lac-Brome	4 b	Lac-Drolet	3b
Lac-Etchemin	3b	Lachute	5a	Lac-Mégantic	3b
L'Assomption	5a	Laval	5 b	Le Bic	4a
Lebel-sur-Quévillon	2a	Les Îles-de-la-Madeleine	5a	L'Isle-aux-Coudres	4a
L'Islet-sur-Mer	4b	Longueuil	5 b	Lotbinière	4a
Lévis	4b	Magog	4 b	Malartic	2a
Matagami	1b	Matane	4a	Mingan	2b
Mirabel	5a	Montebello	4 b	Mont-Joli	4a
Mont-Laurier	3a	Montmagny	4 b	Montréal	5b
Mont-St-Hilaire	4b	Mont-Tremblant	3a	Napierville	5b
New Carlisle	4a	Napierville	5 b	Nicolet	4b
Normandin	2a	Oka	5a	Paspébiac	4a
Percé	4a	Pierreville	5a	Plessisville	4a

Port-Cartier	3b	Portneuf	4a	Québec	4b
Repentigny	5a	Richmond	4 b	Rimouski	4a
Rivière-du-Loup	4a	Roberval	3a	Rouyn-Noranda	2a
Saguenay	3a	Saint-Apollinaire	4 b	Saint-Charles-de-Bellechasse	4b
Sainte-Adèle	4a	Sainte-Agathe-des-Monts	3 b	Sainte-Anne-de-Beaupré	4a
Sainte-Anne-de-la-Pérade	4a	Sainte-Croix	4 b	Sainte-Famille	4b
Sainte-Justine	3b	Sainte-Marie (Beauce)	4a	Sainte-Pétronille	4b
Saint-Eustache	5a	Saint-Félicien	3a	Saint-Georges (Beauce)	4a
Saint-Hyacinthe	5a	Saint-Jean-de-Matha	4a	Saint-Jean-Port-Joli	4b
Saint-Jean-sur-Richelieu	5b	Saint-Joseph-de-Beauce	4a	Saint-Jérôme	5a
Saint-Pamphile	3b	Saint-Sauveur-des-Monts	4a	Salaberry-de-Valleyfield	5b
Senneterre	2a	Sept-Îles	3a	Shawinigan	4a
Sherbrooke	4b	Sorel-Tracy	5a	Sutton	4b
Tadoussac	4a	Terrebonne	5 b	Thetford Mines	4a
Trois-Pistoles	4a	Trois-Rivières	4 b	Témiscaming	4a
Val-David	3b	Val-d'Or	2a	Varennes	5a
Vaudreuil-Dorion	5b	Verchères	5 b	Victoriaville	4b
Ville-Marie	3a	Warwick	4 b	Waterloo	4b
Waterville	4b	Weedon	4a	Windsor	4b
Woburn	4a	Yamachiche	4 b	Yamaska	5a

References :

www.quebec-horticole.ca

Aménager l'aire extérieure de jeu d'un CPE et d'une garderie – Guide MFE, 2002

Source : www.planthardiness.gc.ca

4

APPENDIX 4

COMPANION PLANTING

References :

Agriculture urbaine MTL, Craque-Bitume, Espace pour la vie

Vegetable	Companions	Friends	Enemies	Effect
Artichoke	Tomato, eggplant, and zucchini			
Asparagus	Radishes, lettuce, chicory, spinach, tomatoes, buckwheat, fava beans, parsley	The scent of tomato leaves, tansy, rue, and sage repels the asparagus fly. Marigolds keep worms away	Onion	
Basil	Cucumber, zucchini, fennel, bell pepper, horseradish, tomato		Mustard	Controls several insects
Beans	Eggplant, beet, borage, carrot, cabbage, cauliflower, cucumber, squash, spinach, strawberry, lettuce, corn, walnut, marigold, peas, potato, radish, tomato	Potatoes, savory, and rosemary repel flies. To increase bean yield, plant sweet peas among them to attract pollinating insects	Garlic, broccoli, chives, fennel, onion, leek	Nitrogen fixers
Bell pepper	Yarrow, eggplant, basil, calendula, carrot, flax, lovage, marjoram, marigold, onion, oregano, peas, thyme, tomato, clover		Beet, rutabaga, fennel, mustard	
Beet	Yarrow, garlic, dill, calendula, cabbage, cauliflower, fava beans, lettuce, lovage, green beans, marjoram, onion, radish, thyme	Vegetables to pair with dwarf nasturtiums, which attract aphids. Lettuce helps control flea beetles. Garlic promotes growth and enhances flavor	Spinach, pole beans, bell peppers	
Borage	Fava bean, common bean, tomato			Attracts bees, reduces the number of Colorado potato beetles
Broccoli	Yarrow, dill, calendula, chamomile, nasturtium, celery, cucumber, lovage, marjoram, mint, onion, oregano, parsley, potato, rosemary, sage, thyme		Strawberry, bean, lettuce, leek, tomato	Keeps flies away

Brussels sprouts	Dill, nasturtium, celery, fava beans, hyssop, mint, potatoes, rosemary, sage		Strawberry	
Cabbage	Celery, lettuce, spinach, beets, Swiss chard, cucumber, onion, potato	Thyme, celery, and sage repel cabbage white butterflies. Anise and tansy repel aphids, flies, and caterpillars. Clover, tansy, and nasturtium repel cutworms. Rosemary and sage repel moths	Strawberry	
Calendula (Marigold)	Garlic, beet, broccoli, carrot, cabbage, cucumber, spinach, fava beans, lettuce, onion, peas, bell pepper, potato, leek, radish, tomato		Since marigolds are known to keep insects at bay, plant them in your vegetable garden alongside carrots, cabbages, and lettuces	A powerful repellent against harmful pests such as aphids, cabbage worms, asparagus worms, tomato worms, whiteflies, black fleas, and Colorado potato beetles
Carrot	Beet, lettuce, yarrow, garlic, mugwort, calendula, cabbage, chives, cilantro, fava beans, green beans, lettuce, flax, lovage, marjoram, marigold, onion, leek, peas, bell pepper, leek, radish, rosemary, sage, marigold, thyme, tomato	Onions, leeks, cilantro, sage, and rosemary repel carrot flies, while radishes aid germination		
Cauliflower	Dill, beets, chamomile, nasturtium, celery, fava beans, green beans, hyssop, mint, onions, oregano, potatoes, radishes, rosemary, sage	Marigolds and chicory repel flea beetles	Strawberries, tomatoes	
Celery	Garlic, broccoli, cabbage, Brussels sprouts, cauliflower, cucumber, spinach, fava beans, onion, leek, tomato	Cabbage improves the quality of these crops	Lettuce	Keeps cabbage white butterflies away
Celeriac	Leek, lettuce, cabbage			
Chamomile	Garlic, broccoli, cabbage, cauliflower, onion			

Chervil	Strawberries, lettuce, onions			
Chicory	Lettuce, cabbage, spinach, onion, carrot, beet, celery, celeriac, peas			
Chives	Nasturtium, fava beans, corn, mint, radishes		Potato	Treats black spot on rose bushes, repels Colorado potato beetles, and deters insects from climbing fruit trees
Cilantro	Carrot		Fennel	Keeps Colorado potato beetles away
Corn	Pumpkin, squash, zucchini, fava beans, green beans, melon, mizuna (Japanese mustard greens), walnuts, peas, potatoes, sunflowers	Green beans, pole peas, clover, and field beans stimulate growth and reduce the presence of certain pests. Alfalfa and fava beans reduce the presence of caterpillars	Tomato	
Cucumber	Corn, dill, yarrow, garlic, dill, basil, broccoli, calendula, nasturtium, celery, cabbage, spinach, fava beans, green beans, lettuce, lovage, marjoram, onion, peas, radishes, tansy, thyme, tomato	Marjoram repels insects. Broccoli, radishes, and corn keep flies away	Zucchini, potatoes, rue, sage	
Garlic	Lettuce, spinach, carrots, beets		Beans, peas	Repels Colorado potato beetles and insects in general
Dill	Beets, broccoli, cabbage, Brussels sprouts, cauliflower, cucumber, lettuce, onion		Carrot	Repels aphids and spider mites
Eggplant	Tomato, artichoke, spinach, tarragon, green beans, peas, bell pepper, thyme	Green beans keep the Colorado potato beetle away		
Fava Bean	Yarrow, beet, borage, calendula, carrot, celery, cabbage, Brussels sprouts, cauliflower, pumpkin, cucumber, squash, strawberry, morning glory, lovage, corn, marjoram, marigold, petunia, pea, potato, radish, rosemary, thyme, tomato		Garlic, chives, fennel, gladiolus, onion, leek	Nitrogen-fixing plants

Fennel	Basil		Carrots, cabbage, cilantro, fava beans, green beans, bell peppers, tomatoes	Repels aphids
Hyssop	Cabbage, Brussels sprouts, cauliflower		Radish	Repels moths and larvae
Horseradish	Basil, parsley, potato			Keeps Colorado potato beetles away
Leek	Celeriac, cabbage, yarrow, garlic, calendula, carrot, celery, spinach, strawberry, lovage, marjoram, onion, marigold, thyme, tomato		Broccoli, fava beans, green beans, alfalfa, onion, peas	
Lettuce	Yarrow, garlic, dill, beet, calendula, carrot, chervil, cabbage, cucumber, spinach, strawberry, bean, pole bean, lovage, marjoram, onion, pea, potato, radish, rose, marigold, thyme, tomato, clover		Celery, watercress, parsley	
Marjoram	Garlic, beet, broccoli, carrot, cabbage, cucumber, spinach, fava beans, lettuce, onion, leek, peas, bell pepper, potato, radish, tomato			Protects against insects and other pests
Marigold	Carrots, fava beans, green beans, potatoes, bell peppers	Pair marigolds with their fragrant foliage with tomatoes, cabbage, green beans, carrots, potatoes, and leeks to combat whiteflies. Their scent repels many insects and promotes tomato growth		Repels Colorado potato beetles and nematodes
Melon	Corn, squash, pumpkin, radishes, spinach	Marjoram protects against pests		
Mugwort	Carrot, cabbage			General-purpose insecticide; repels mice and other rodents, as well as snails and slugs

Nasturtium	Broccoli, cabbage, Brussels sprouts, cauliflower, cucumber, pumpkin, squash, potato, radish, tomato	Plant nasturtiums between your rows of tomatoes, cabbage, carrots, potatoes, and beans to keep whiteflies (aleurodes) away		Keeps aphids, Colorado potato beetles, and moths away
Onion	Yarrow, garlic, dill, beet, broccoli, calendula, chamomile, carrot, celery, chervil, cabbage, cauliflower, cucumber, spinach, strawberry, lettuce, lovage, marjoram, bell pepper, potato, thyme, tomato	Carrots keep flies away		
Oregano	Broccoli, cabbage, cauliflower, bell pepper			
Parsley	Asparagus, broccoli, horseradish, rosebush, tomato		Lettuce	
Peas	Yarrow, eggplant, calendula, carrot, chicory, pumpkin, cucumber, squash, spinach, fava beans, green beans, lettuce, lovage, corn, marjoram, bell pepper, potato, radish, thyme, tomato, sunflower		Garlic, onion, leek, chives	
Potato	Yarrow, broccoli, calendula, nasturtium, cabbage, Brussels sprouts, cauliflower, fava beans, green beans, lettuce, lovage, marjoram, marigold, onion, peas, petunia, horseradish, thyme	Dwarf beans stimulate growth and repel Colorado potato beetles. Flax repels Colorado potato beetles	Eggplant, pumpkin, cucumber, squash, spinach, walnut, apple, tomato, sunflower	
Radish	Yarrow, beet, calendula, nasturtium, carrot, cabbage, cauliflower, pumpkin, cucumber, squash, watercress, spinach, fava bean, strawberry, green bean, lettuce, lovage, marjoram, melon, pea, thyme, tomato		Potato, hyssop, grapevine	Repels several insects

Rosemary	Broccoli, carrots, cabbage, Brussels sprouts, cauliflower, fava beans, sage			Repels several insects
Rutabaga and turnip	Peas, beets, carrots			
Sage	Broccoli, carrots, cabbage, Brussels sprouts, cauliflower, rosemary, tomatoes		Cucumber	
Squash and pumpkin	Nasturtium, fava beans, corn, mint, peas, radishes	Marjoram repels insects. Nasturtiums and petunias keep worms away	Potatoes, cabbage	
Strawberry	Garlic, chervil, chives, spinach, fava beans, green beans, lettuce, mustard greens, onions, leeks, radishes, marigolds		Cabbage, Brussels sprouts, cauliflower	
Swiss chard	Onions, garlic, cabbage			
Thyme	Garlic, eggplant, beet, broccoli, carrot, cabbage, cucumber, spinach, fava beans, lettuce, onion, potato, bell pepper, peas, leek, radish, tomato			
Tomato	Yarrow, garlic, asparagus, basil, borage, calendula, nasturtium, carrot, celery, chives, cucumber, spinach, fava beans, green beans, lettuce, lovage, marjoram, monarda, onion, parsley, leek, peas, bell pepper, radish, sage, thyme	Basil and parsley stimulate growth and improve fruit quality. Marigolds keep nematodes away from the roots and are said to boost fruit production. Borage and marigolds repel pests (worms). The sticky leaves of ornamental tobacco are an excellent trap for whiteflies. Nasturtiums are said to limit downy mildew	Dill, beets, broccoli, cauliflower, fennel, corn, mustard, walnut, sorrel, potatoes	Repels Colorado potato beetles, moths, and flies
Watercress	Radish		Lettuce	

5

APPENDIX 5

CHOICE OF PATH SURFACING MATERIALS

Type of Materials	Advantages	Disadvantages
Concrete 	• Suitable for any wheeled vehicle • Excellent sidewalk surface	• Difficult to install • Water may accumulate if the path is not level • Relatively high cost • Users may scrape their knees
Asphalt 	• Suitable for all types of rolling objects	• The area must be prepared before laying the asphalt • Subject to lifting in winter • Increased heat buildup in the play area • Users may scrape their knees
Brick, tile, or concrete paving 	• Suitable for any rolling object if properly installed • Can take various forms to define areas (garden, road, playground, etc.) • Permeable, allows water to filter through	• Must be laid on gravel to prevent lifting and to accommodate wheeled objects • Can be laid on sand, but will not be suitable for wheelchairs

Crushed stone 	• Suitable for any rolling object • Multiple possibilities • Color can be added	• High cost (but this material can be obtained as a charitable donation) • The path requires a lot of maintenance and repairs to keep it in good condition • A border may be required depending on the location • Tends to be dusty
Wooden Deck Flooring 	• Easy access • Versatile uses: walkway, bridge, sidewalk, etc. • Natural appearance • Texture and the sound of cracking, which children find interesting	• High cost (but materials can be obtained as charitable donations) • A skilled worker must supervise the cutting and assembly of the wooden planks
Wood chips 	• Natural material • Can be used in any season, as it does not become muddy • Texture and crackling sound are appealing to children • Requires an additional layer of mulch • Low cost (can be obtained for free from the municipality or a nursery) • Soft surface • Easy to install	• Requires an additional layer each year • Inaccessible to people in wheelchairs unless the wood chips are small and compact • Geotextile fabric required as a base to control weeds • The compost resulting from the decomposition of wood chips can cause allergies • A border may be required to prevent the chips from ending up on the lawn
Grass 	• A grass pathway in a clearing causes less damage to the soil than a pathway made of other materials • Easy to maintain • Very low cost • Soft surface • Ideal for paths with light traffic	• Deteriorates under constant foot traffic and becomes muddy when it rains • Edges require maintenance • Difficult for wheeled objects to access

6

APPENDIX 6

ASSESSMENT TOOL FOR MEASURING THE QUALITY OF THE OUTDOOR ENVIRONMENT IN A DAYCARE CENTER

Developed as part of the [Nourrir le développement du jeu actif](#)² – RCPEM project, inspired by and adapted from POEMS³

This tool was created to be used in conjunction with existing health and safety measures, guidelines, and standards, not to repeat or incorporate them. There is no intention to ignore or neglect these issues, as the outdoor environment must be safe. Fortunately, there are a multitude of resources on these topics. For example, this scale promotes playground equipment in physical play areas that allows children to experiment with certain movements that could not be performed elsewhere. We believe that the [CSA-Z614 standard, Playground Equipment and Protective Surfacing](#) is an important guide for promoting education about hazards in playgrounds. Its application is mandatory, since playground equipment in a daycare center in Quebec must comply with this standard as it stood on the date the equipment was installed.

Using this assessment tool, a daycare center can conduct an initial analysis of the condition of its outdoor environment and begin developing an improvement plan.

The tool for assessing the quality of the outdoor environment in childcare centers consists of [12 chapters presenting 22 quality indicators](#). The educator or manager, who acts as an observer when using the tool, must remain as objective as possible during the observation. Information must be collected solely based on the current observation and not on past experiences. The goal is to assess the quality of the outdoor environment on the day of the observation.

Once the ratings have been entered into the scoring sheet ([Appendix 7](#)), a report can be prepared and submitted to the implementation committee, along with a graphical representation of these results. The evaluation results may indicate that certain elements require an improvement plan. If this is the case, the implementation committee should be informed before the design workshop.

² <https://rcpem.com/les-aires-de-jeu-et-le-developpement-moteur/>

³ Échelle de mesure de l'environnement préscolaire Université de la Caroline du Nord, version française RCPEM



Identification of the Childcare Service

1. Name of the childcare service

--

2. Name of the facility

--

3. Address

Number and Street	
City	
State	
ZIP Code	

4. Observation dates

First observation	Start:	End:
Second observation	Start:	End:

5. Weather conditions on the day of the observation

- ☐ Sunny ☐ Rainy
☐ Cloudy ☐ Other (please specify)

6. Observation hours

First observation	
Second observation	

7. Type of childcare service

- ☐ Subsidized Daycare
☐ Non-subsidized Daycare

8. Observer Identification

Last Name	
Professional Title	

9. Names of the educators present during the observation

1 -
2 -
3 -
4 -
5 -
6 -
7 -

10. Number of children per group at the time of observation : _____

11. Total number of children in the playground at the time of the observation :

Infants and Toddlers	
18 months - 2 years	
3 - 4 years	
5 years and older	
Multi-age	

12. Total area of the outdoor play area : _____



The Physical Environment – General Information

The outdoor environment should be integrated with the building and other facilities, such as the parking lot and the entrance.

Special attention should be paid to circulation pathways, including paths, as well as traffic flow and all areas located near the facilities.

Parking areas should be designed with pedestrian safety in mind and located so that play areas are not exposed to car exhaust fumes.

The quality and diversity of a playground affect children's play behaviors. Thus, depending on the characteristics and type of space available, children engage in high-, medium-, or low-intensity activities. Reaching the top of a hill, walking among shrubs, exploring the garden, and drawing or painting outdoors are experiences that support children's overall development. Children are therefore sensitive to beauty and order.

A well-organized and well-maintained environment will encourage behaviors that promote the conservation and respect of this space, which has been designed and landscaped for daily life.

1. The space between the parking lot and the facility entrance allows for easy and safe drop-off and pick-up for both parents and children. What features are present ?

- | | |
|---|--|
| ☐ Parking near the entrance | ☐ Crosswalk |
| ☐ Limited traffic | ☐ Covered entrance (rain/snow) |
| ☐ Speed bump | ☐ No amenities—do not count |
| ☐ Sidewalks leading to the entrance | ☐ Other (please specify) : |

Gradual Improvement Process – Secure entrance

- | | |
|--|--|
| ☐ Level 1: 0 feature | ☐ Best practice: 5 or more features. The service entrance layout is safe for pedestrians |
| ☐ Level 2: 1 to 2 features | |
| ☐ Level 3: 3 to 4 features | |

2. The main external entrance to the facility is child-friendly. What features are there ?

- | | |
|--------------------------------------|---|
| ☐ Children's Art | ☐ Landscaping |
| ☐ Art Exhibition | ☐ No landscaping—do not count |
| ☐ Banner | ☐ Other (please specify) : |

Gradual Improvement Process – Welcoming Entrance

- | | |
|--|--|
| ☐ Level 1: 0 feature | ☐ Best practice: 5 or more features. The building's entrance is aesthetically pleasing and welcoming |
| ☐ Level 2: 1 to 2 features | |
| ☐ Level 3: 3 to 4 features | |

3. The outdoor play area is completely fenced in—the fencing is attractive, appropriate, and safe.

Fence features :

- | | |
|--|--|
| ☐ 1,50 m (5 ft) high | ☐ Has no protruding parts |
| ☐ Solid | ☐ Opens directly onto a green space |
| ☐ Equipped with a safety latch | ☐ No other elements or fences—do not count |
| ☐ Has no gaps through which a child's body could fit | ☐ Other (please specify) : |

Gradual Improvement Process – Fence

- | | |
|--|---|
| ☐ Level 1: 0 feature | ☐ Best practice: 5 or more features. The outdoor space is surrounded by a functional and secure fence |
| ☐ Level 2: 1 to 2 features | |
| ☐ Level 3: 3 to 4 features | |

4. The drainage of the outdoor space appears to be adequate.

- ☐ Landscaped waterways
- ☐ No standing water
- ☐ Mulch in good condition
- ☐ No soil erosion
- ☐ Well-drained sand
- ☐ Bridge allowing passage over the water
- ☐ No landscaping—do not count
- ☐ Other (please specify) :

Gradual Improvement Process – Drainage

- ☐ Level 1 : 0 feature
- ☐ Level 2: 1 to 2 features
- ☐ Level 3: 3 to 4 features
- ☐ Best practice : 5 or more features. The outdoor space is well-drained.

5. The outdoor space gives the impression of a natural area. What elements are present, what types are they, and how many are there ?

Variety of trees	
Variety of shrubs	
Variety of non-toxic flowering plants (perennials or annuals)	
Variations in terrain (topographical)	
Well-maintained lawn	
Climbing plants	
Vegetable garden	
A few secondary dirt or gravel paths	
Smooth rocks	
No landscaping	
Other	

Formula for calculating the recommended number of trees based on area by Natural Learning Initiative
<https://naturalearning.org/about-nli/>

Area in square feet divided by 600

Example: For an area of 10,000 square feet, the number of natural elements required would be: $10,000 \div 600 = 16.66$, or 17, which is the nearest whole number.

Gradual Improvement Process – Natural Elements

- ☐ Level 1 : (0 à 29 % of the recommended number of natural elements)
- ☐ Level 2: (30 à 64 % of the recommended number of natural elements)
- ☐ Level 3: (65 à 99 % of the recommended number of natural elements)
- ☐ Best practice: There are enough natural ingredients — that is, 100% of the recommended amount of natural ingredients



The Physical Environment – Play Areas in General

The concept of "zone-based" design is a practical and concrete approach that addresses the wide range of children's developmental needs.

Dividing the space into zones also indirectly encourages free play through the very layout of the areas and contributes to the enjoyment that both adults and children can derive from spending time in this environment.

Play zones are the primary means of infusing genuine play value into the play space by intentionally designing them to stimulate a sense of adventure and discovery. Children can make choices within these zones and the freedom to use safe and stimulating equipment, capitalizing on their natural desire to explore.

To allow for real choices, even when space is limited, we must find a way to accommodate the following groups :

- Homogeneous groups: a place for the little ones, an area for the older children;
- Heterogeneous groups: girls and boys, older and younger children;
- Active groups: ball games, races, etc.;
- Adventurous groups: acrobatics, balancing acts, etc.;
- Quiet groups: building structures or sandcastles, playing with dolls, reading, etc.;
- Social groups: board games, group drawing, etc.

The use of the playground as a space for physical activity should not be the primary focus of the design ; it should accommodate all types of play.

The outdoor play area offers an appropriate variety of play zones featuring built or manufactured elements.

- | | |
|--|--|
| ☐ Quiet Play and Social Interaction Area | ☐ Symbolic and Dramatic Play Area |
| ☐ Physical Play Area | ☐ Pathways |
| ☐ Sand and Water Area | ☐ Designated Area for Infants and Toddlers |
| ☐ Garden and Natural Environments Area | ☐ No elements by zone—do not count |
| ☐ Creative and Construction Area | ☐ Other (please specify) : |
| ☐ Transition Area Facilitating Movements Between
Indoors and Outdoors | <hr/> |
| | <hr/> |

Gradual Improvement Process – Plays Areas in General

- | | |
|---|---|
| ☐ Level 1 : 0-2 zones | ☐ Best practice : 8 or more zones, including areas reserved for infants |
| ☐ Level 2 : 3-4 zones | |
| ☐ Level 3 : 5-6 zones | |



The entry area : transitional spaces between the interior and exterior

Children — especially the youngest ones — who leave the building to begin exploring the outdoor play area should have access to a space where they can stop and look around the entire site before adventuring out into it.

1. Transition Spaces

- | | |
|--|--|
| ☐ The infant care rooms open directly onto the courtyard | ☐ These transition areas are designed to allow children to stop and spend time there |
| ☐ Some rooms open directly onto the courtyard | ☐ The building allows for easy movement from indoors to outdoors and vice versa |
| ☐ Some rooms open onto transitional spaces (e.g., platform, terrace, pergola) | ☐ No transition areas — do not count |
| ☐ These transition areas are large enough to accommodate care, observation, hands-on, or creative activities | ☐ Other (please specify) :

_____ |

Gradual Improvement Process – Welcoming and Transition Spaces

- | | |
|--|---|
| ☐ Level 1: No rooms open directly onto the playground | ☐ Best practice: The building provides sufficient transition areas that allow children to move from indoors to outdoors at their own pace |
| ☐ Level 2: 1–2 rooms open directly onto the playground | |
| ☐ Level 3: A few rooms open directly onto the playground via a transition area | |

2. What elements are found in transitional spaces ?

- | | |
|--|--|
| ☐ Care Environment (changing table for infants, first-aid kit, washcloths, etc.) | ☐ Planters |
| ☐ Water supply | ☐ Adjacent to the building with visible boundaries |
| ☐ Shed or locker for children's shoes and clothing | ☐ Contains small toys |
| ☐ Tables for games | ☐ No items — do not count |
| ☐ Benches or swings | ☐ Other (please specify) :

_____ |
| ☐ Parking area for wheeled or rocking toys | |

Gradual Improvement Process – Design of the Transition Area

- | | |
|--|---|
| ☐ Level 1: 0–2 transition elements leading to the playground | ☐ Best practice: 7 or more elements, including a section reserved for infants |
| ☐ Level 2: 3–4 transition elements leading to the playground | |
| ☐ Level 3: 5–6 transition elements leading to the playground | |



The Quiet Play and Socializing Area

Gathering spaces encourage children to meet and work in small groups. They foster social interaction and cooperative relationships.

They also support certain program activities, including the arts, reading, and scientific exploration. The goal is to create a space where children can sit, interact, and talk with their friends or the adults accompanying them.

1. The area contains the following items :

- | | |
|--|--|
| ☐ Tables | ☐ Books |
| ☐ Benches | ☐ Measuring instruments (thermometer, rain gauge, rulers, measuring tapes, etc.) |
| ☐ Patio, a central covered area that provides protection from the rain | ☐ None — do not count |
| ☐ Wind protection | ☐ Other (please specify) :
_____ |
| ☐ Sun protection | _____ |
| ☐ Trays and containers for collecting items and specimens | |

Gradual Improvement Process – Quiet Play and Socializing Area

- | | |
|---|---|
| ☐ Level 1: The environment does not allow for any group activities | ☐ Best practice: A multipurpose area set up for large-group games, music, role-playing, discussions, etc. (Tip: Assess the space by imagining 15 children standing in a circle) |
| ☐ Level 2: 1–2 elements for small-group projects | |
| ☐ Level 3: A variety of raised horizontal work surfaces is available (e.g., picnic table, tree stump, raised platform) for subgroup work, discussions, etc. | |



The Physical Play Area

Children develop their motor skills by moving around the entire play area. A site with uneven ground, featuring mounds, slopes, rock piles, and large stones, encourages motor challenges. These challenges can be enhanced by incorporating paved sections and providing opportunities to use wheeled vehicles such as wheelbarrows, tricycles, and small bicycles.

Children also need access to stationary equipment where they can swing, hang, climb, jump down, and slide in groups. This is what most sets the physical play area apart.

1. Which playground equipment components encourage climbing up and down ?

- | | |
|---|--|
| ☐ Mounds and raised beds for toddlers | ☐ Ladder |
| ☐ Tunnel | ☐ Rigid climbing structures |
| ☐ Low platform | ☐ Flexible climbing structures |
| ☐ Climbing wall | ☐ No playground equipment—do not count |
| ☐ Ramp | ☐ Other (please specify) : |
| ☐ Stairs | _____ |
| ☐ Slide | _____ |

Gradual Improvement Process – Climbing and Descending

- | | |
|--|--|
| ☐ Level 1 : The environment does not provide any opportunities for climbing and descending | ☐ Best practice: The environment offers a variety of elements for climbing and descending that provide challenges for all age groups |
| ☐ Level 2: 1–2 elements that encourage climbing and descending | |
| ☐ Level 3: 3–4 elements that encourage climbing and descending | |

2. Which components of playground equipment promote suspension-based movement activities ?

- | | |
|---|--|
| ☐ Low bar | ☐ No playground equipment—do not count |
| ☐ Horizontal ladder | ☐ Other (please specify) : |
| ☐ Suspension rings | _____ |
| ☐ Rotating upper-body equipment | _____ |

Gradual Improvement Process – Suspension activities

- | | |
|--|--|
| ☐ Level 1 : The environment does not allow for any suspension activities | ☐ Best practice: The environment offers a variety of components that allow for suspension activities and provide challenges for all age groups |
| ☐ Level 2: At least 1 component that allows for suspension activities | |
| ☐ Level 3: At least 2 components that allow for suspension activities | |

3. Which pieces of playground equipment allow children to rock, spin, and swing ?

- | | |
|---|--|
| ☐ Ground-mounted swinging equipment | ☐ Multi-user swing |
| ☐ Spring-mounted swinging equipment | ☐ Spinning swings |
| ☐ Spinning equipment | ☐ No playground equipment—do not count |
| ☐ Single-axis swing | ☐ Other (please specify) : |
| | _____ |
| | _____ |

Gradual Improvement Process – Rocking, Swaying, Rotating

- ☐ Level 1: The environment does not allow for any rocking, rotating, or swinging activities
- ☐ Level 2: 1–2 components for rocking, rotating, and swinging
- ☐ Level 3: 3–4 components for rocking, rotating, and swinging
- ☐ Best practice: The environment offers a variety of elements that allow for rocking, rotating, and balancing activities, which provide challenges for all age groups

4. Which pieces of playground equipment help children practice their balance?

- ☐ Adequate, protected space for playing on the back, on the side, and rolling over
- ☐ Small, low platform
- ☐ Small steps
- ☐ Small spring-loaded steps
- ☐ Balance board
- ☐ Balance beam
- ☐ No playground equipment—do not count
- ☐ Other (please specify) :

Gradual Improvement Process – Practicing Balance

- ☐ Level 1: The environment does not provide any opportunities to practice balance
- ☐ Level 2: 1–2 elements for practicing balance
- ☐ Level 3: 3–4 elements for practicing balance
- ☐ Best practice: The environment offers a variety of elements for practicing balance that provide challenges for all age groups



The area of sand and water

Sand and water are an endless source of activities for young children. Combined with water, sand is the most popular play material thanks to its softness and malleability. A playground that includes both sand and water allow children to give free range to their imagination and creativity using small objects.

A sand area should resemble a beach: it should be deep, wide, and close to the water. It is essential that children be able to play there as long and as comfortably as possible.

1. The area contains the following items :

- ☐ A small fence or other enclosure
- ☐ Sand depth of at least 60 cm (24 in.)
- ☐ Area of at least 2 m² (21 ft²)
- ☐ The sand has a low dust content
- ☐ The sand compacts when wet
- ☐ An area sheltered from the midday sun
- ☐ For infants, a cone-shaped pile of sand 2 m (6 ½ ft) in diameter, directly on the grass
- ☐ The sand can be self-cleaned through direct contact with the soil, via rain and sunlight

- ☐ The area has access to a water source
- ☐ A hard surface in the center where sand can be placed
- ☐ Sand and water toys
- ☐ An adjacent storage cabinet for sand toys

- ☐ No item — do not count
- ☐ Other (please specify) :

Gradual Improvement Process – Sand and Water Area

- ☐ Level 1: The environment does not allow for any sand and water activities
- ☐ Level 2: 1–4 items available for sand and water activities
- ☐ Level 3: 5–6 items available for sand and water activities

- ☐ Best practice: The environment has more than 8 items available for sand and water activities



The Garden and Natural Environments Area

The entire outdoor play area should include natural elements that allow children to become familiar with their textures, colors, and smells.

Furthermore, nothing is more interesting to them than watching the plants in a flower garden grow or picking vegetables and fruits.

1. The following elements can be found in the environment :

- | | |
|--|---|
| ☐ Annual Vegetable Garden | ☐ Plants that attract wildlife |
| ☐ Perennial Vegetables (artichokes, asparagus, etc.) | ☐ Textured plants that can be touched |
| ☐ Fruit Trees | ☐ Gardening tools |
| ☐ Shrubs and Vines That Produce Edible Crops | ☐ Adjacent shed for storing tools |
| ☐ Trellises for Supporting Crops | ☐ Area is sheltered from the midday sun |
| ☐ Plants distinguished by their colors | ☐ No landscaping—do not count |
| ☐ Plants distinguished by their scent | ☐ Other (please specify) : |

Gradual Improvement Process – Garden Area and Natural Environments

- ☐ Level 1: The environment does not allow for any gardening activities
- ☐ Level 2: 1 to 4 resources available for gardening
- ☐ Level 3: 5 to 6 resources available for gardening

- ☐ Best practice: The environment allows for growing and caring for plants as an integral part of the learning program



The creation and construction zone

This area can help children develop their fine motor skills, as well as their ability to manipulate objects and express themselves through various media.

1. The following elements can be found in the environment:

- ☐ Earth, clay, modeling clay
- ☐ Easel for painting or any other support
- ☐ Carpentry supplies
- ☐ Craft supplies
- ☐ Building blocks
- ☐ Markers, chalk, colored pencils, and a surface to draw on
- ☐ Assortment of natural loose materials (sticks, logs, pieces of wood, etc.)
- ☐ Assortment of manufactured open-ended materials (boxes, tires, spools, pipes, etc.)
- ☐ Possibility to transport materials in trucks, wheelbarrows, by bike, etc.
- ☐ Equipment and supports for throwing (balls, balloons, goals, baskets, etc.)
- ☐ Equipment and supports for kicking (balls, goals, etc.)
- ☐ Storage shed for equipment
- ☐ Access to a water source to facilitate cleaning
- ☐ None of the above — do not count
- ☐ Other (please specify) :

Gradual Improvement Process – Creative expression and construction

- ☐ Level 1: The environment does not allow for any hands-on or creative expression activities
- ☐ Level 2: 1 to 4 items are provided for hands-on and creative expression activities
- ☐ Level 3: 5–6 items are provided for hands-on and creative expression activities
- ☐ Best practice: The environment allows for a variety of hands-on and creative expression activities as an integral part of the learning program



The Symbolic and Dramatic Play Area

Children enjoy playing symbolic games, which they engage in through parallel, associative, or cooperative play. They should be given a variety of opportunities to engage in these activities whenever they wish. The layout of this area will also allow them to eat their meals without rushing. They can then easily leave the area to engage in another activity or take a rest, which can take place in the same area or nearby.

1. The following elements can be found in the environment :

- ☐ Small house furnished with tables and chairs, along with accessories such as pots, kettles, and shovels
- ☐ A place to have snacks and meals
- ☐ A place to rest
- ☐ Space to park wheeled toys
- ☐ A stage that can be adapted to the program's needs
- ☐ Props for singing or dancing (CD player, musical instruments, etc.)

- ☐ Pretend-play accessories (costumes, dolls, puppets, etc.)
- ☐ Storage for materials

- ☐ None—do not count
- ☐ Other (please specify) :

Gradual Improvement Process – Symbolic and Dramatic Play Area

- ☐ Level 1 : 0 to 2 elements that support symbolic play, mealtimes, and rest
- ☐ Level 2 : 3 to 4 elements that support symbolic play, mealtimes, and rest
- ☐ Level 3 : 5 to 6 elements that support symbolic play, mealtimes, and rest
- ☐ Best practice : The environment offers several opportunities for children to engage in symbolic play, eat meals, or rest, which is an integral part of the learning program



The Physical Environment – Circulation

A network of paths connects the various play areas, thereby promoting a more holistic flow of movement throughout the playground and allowing for a wider variety of activities for the children.

If the main path is connected to the building's transition area, children will tend to follow it, and their activities will be distributed more evenly throughout the play area. This main path directly connects the interior to the exterior and makes it easier for children and adults to move outside.

Well-designed paths create a spatial structure that facilitates access to the various play areas.

1. The following elements can be found in the environment :

- ☐ Main trail
- ☐ Secondary paths providing access to all play areas
- ☐ Tertiary paths in the form of small loops that offer "adventure routes" for children
- ☐ No trails—do not count
- ☐ Other (please specify) :

Gradual Improvement Process – Circulation

- ☐ Level 1 : No main path or a straight main path with no curves
- ☐ Level 2 : Loop-shaped main path
- ☐ Level 3 : Winding main path and loop-shaped secondary paths
- ☐ Best practice : A network of loop-shaped and winding paths makes it easy to move around the playground and use wheeled toys



The Human Environment – Supporting Children on the Playground

To allow children to choose from a wide variety of activities, we must find ways to foster natural and harmonious interactions between children and adults, even when space is limited.

This approach is the most creative way to facilitate learning and problem-solving. By observing children, adults can identify their abilities to explore and learn about their environment. Active adult participation, in the form of open-ended questions, can help optimize a child's development.

It is not advisable to prioritize direct interventions. A child's independent play can be just as beneficial to their development and the acquisition of new knowledge as a structured activity led by the educator.

Adults who show curiosity about the outside world and are always ready to explore it can inspire children. However, any activity suggested by an adult should be something the child can then engage in freely on their own.

1. What are you doing to inform families and parents about the importance of outdoor play?

- | | |
|---|--|
| ☐ Parents are made aware of the value of outdoor play during a meeting at the beginning of the year | ☐ Posters on the daycare center's walls promote outdoor play |
| ☐ A notice on this topic is sent to all families every year | ☐ No communication—do not count |
| ☐ A message is sent to families at the start of each season | ☐ Other (please specify) : |

Gradual Improvement Process – Raising Awareness of the Importance of Outdoor Play

- | | |
|---|--|
| ☐ Level 1: No information about the value of outdoor play is communicated | ☐ Best practice: Multiple types of communication strategies regarding the value of play outside are used |
| ☐ Level 2: There is only one type of communication strategy regarding the value of outdoor play | |
| ☐ Level 3: There are 2–3 types of communication strategies regarding the value of outdoor play | |

2. Educational staff are attentive to students' health needs outside of educational settings

- | | |
|--|--|
| ☐ Apply sunscreen before going outside | ☐ Weather forecast posted at the entrance |
| ☐ Apply insect repellent as needed | ☐ No specific measures—do not count on this |
| ☐ Always drinking water available | ☐ First-aid kit nearby |
| ☐ Access to personal care products and water for washing up in the playground | ☐ Easy, independent access to restrooms for older children |
| ☐ Access to a changing table and personal care products in the infant area | ☐ Other (please specify) : |
| ☐ Ensure that each child is dressed comfortably (clothing available to borrow if needed) | |

Gradual Improvement Process – Health

- ☐ Level 1: 0–1 of the elements listed above
- ☐ Level 2: 2–3 of the elements listed above
- ☐ Level 3: 4–5 of the elements listed above
- ☐ Best practice: Every effort is made to ensure that all children can play outdoors when the weather permits and that basic personal care can be easily provided.

3. How do educators foster a close, rich, meaningful, lasting, and stable emotional bond with children to promote their health?

- ☐ Each child is assigned a caregiver (primary caregiver)
- ☐ Physical care is provided by the caregiver in charge of the group
- ☐ The caregiver takes a keen interest in the children's play and daily development
- ☐ The educator notices when children need support and offer assistance as needed
- ☐ The educator knows how to wait, lets the child act on their own, and observes without intervening
- ☐ The educator establishes a close relationship with the child, occasionally engaging in eye contact or exchanging words or sounds
- ☐ Children approach the educator to ask questions, seek support for their learning, and the educator responds appropriately
- ☐ The educator supports children's ongoing learning without forcing their participation or imposing themselves
- ☐ The educator supports the child through conversation, reflection, problem-solving, and understanding
- ☐ The organization of the care period allows the educator to have one-on-one time with the child
- ☐ The educator encourages or facilitates small-group activities
- ☐ The educator asks open-ended questions to explore the children's interests, which lead to learning activities
- ☐ No elements observed—do not count
- ☐ Other (please specify) :

Gradual Improvement Process – Meaningful Interaction and Relationships

- ☐ Level 1: 0 to 2 of the elements mentioned above
- ☐ Level 2: 3 to 4 of the elements mentioned above
- ☐ Level 3: 5 to 6 of the elements mentioned above
- ☐ Best practice: The educator demonstrates that she is attentive to the children's needs, takes an interest in what they are doing, intervenes only when necessary, and can put their thoughts into words



The Outdoor Child Care Program's Educational Curriculum

- ☐ The educator demonstrates the ability to effectively organize the three periods that make up a child's day: rest and sleep (as needed), mealtime, and playtime
- ☐ The educator sets an example when it comes to the daily upkeep of the outdoor environment (e.g., watering, weeding, staking plants) and invites children who wish to participate to join in this activity
- ☐ The materials and activities offered to the children are tied to seasonal changes (e.g., snow play, water play, gardening, kite flying, etc.)
- ☐ The educator has taken care to make a sufficient variety of objects available to the children for manipulation, exploration, symbolic play, construction, and movement
- ☐ The educator demonstrates commitment to setting up the play environment (ensuring that the materials are in good condition, rearranging them in interesting ways, etc.)
- ☐ The educator supports and enriches the activities initiated by the children
- ☐ The educator allows children to bring items from outside into the indoor area and to take indoor items outside to promote continuity of learning between the two environments
- ☐ The educator may plan activities or allow children to initiate activities based on interacting with interesting materials found in the outdoor space
- ☐ The educator extends outdoor learning by organizing educational field trips OR by taking the children to a place suitable for exploring the outdoor environment, such as a park, a farm, or a garden
- ☐ No elements observed — do not count
- ☐ Other (please specify) :

Gradual Improvement Process – Curriculum

- ☐ Level 1: 0 to 2 of the elements mentioned above
- ☐ Level 2: 3 to 4 of the elements mentioned above
- ☐ Level 3: 5 to 6 of the elements mentioned above
- ☐ Best practice: The educator demonstrates that she views the outdoor space as an extension of the group's room and is actively involved in its organization, and she offers a genuine outdoor learning program

7

APPENDIX 7

SCORE SHEETS FOR THE ASSESSMENT TOOL TO MEASURE THE QUALITY OF THE OUTDOOR ENVIRONMENT IN A CHILDCARE CENTER



Identification of the Childcare Service

1. Name of the childcare service

2. Name of the facility

3. Address

Number and Street	
City	
State	
ZIP Code	

4. Observation dates

First observation	Start:	End:
Second observation	Start:	End:



Assessment Sheet 1

INDICATORS OF BEST PRACTICES FOR OUTDOOR PLAY AREAS

Gradual Improvement Process – The Physical Environment – General Information

	Level 1	Level 2	Level 3	Best practice
The space between the parking lot and the facility entrance allows for easy and safe drop-off and pick-up for both parents and children				
The main entrance to the facility is child-friendly				
The outdoor play area is fully enclosed in an aesthetically pleasing, suitable, and safe manner				
The drainage of the outdoor courtyard appears adequate				
The outdoor area gives the impression of a natural setting				

Gradual Improvement Process - Play Areas in General

	Level 1	Level 2	Level 3	Best practice
The outdoor play area offers an adequate variety of play zones featuring built or manufactured elements				

Gradual Improvement Process - Welcome and Transition Area

	Level 1	Level 2	Level 3	Best practice
Transition areas are designed for passive or quiet activities that allow children to move from indoors to outdoors at their own pace toward the play area				

Gradual Improvement Process - Quiet Play and Socializing Area

	Level 1	Level 2	Level 3	Best practice
This area is a comfortable space where children can watch or gather without being required to participate in active play				

Gradual Improvement Process - Physical Play Area

	Level 1	Level 2	Level 3	Best practice
This area offers a variety of climbing and descending elements that provide challenges for all age groups				
This area offers a variety of elements for suspension activities that provide challenges for all age groups				
The area offers a variety of components for swaying, rotating, and swinging activities that provide challenges for all age groups				
This area offers a variety of components for practicing balance that provide challenges for all age groups				

Gradual Improvement Process - Sand and Water Area

	Level 1	Level 2	Level 3	Best practice
This area is comfortable and well-equipped				

Gradual Improvement Process - Garden Area and Natural Environments

	Level 1	Level 2	Level 3	Best practice
Children can grow and care for plants, which is an integral part of the learning program				

Gradual Improvement Process - Creative and Construction Area

	Level 1	Level 2	Level 3	Best practice
This area offers open-ended materials that children can use however they like, which is an integral part of the learning program				

Gradual Improvement Process - Symbolic and Dramatic Play Area

	Level 1	Level 2	Level 3	Best practice
This area offers several opportunities for children to engage in symbolic play, eat meals, or rest, all of which are an integral part of the learning program				

Gradual Improvement Process - Circulation

	Level 1	Level 2	Level 3	Best practice
A network of paths connects adjacent play areas, promotes a more holistic synergy of movement in the playground, and contributes to the diversity of children's activities				



Assessment Sheet 2

INDICATORS OF BEST PRACTICES FOR OUTDOOR PLAY AREAS

Best-practice indicators are used to assess the quality of the child-centered environment in the daycare center's playground.

The four indicators presented below outline best practices for high-quality interventions and support provided by the educational team.

Gradual Improvement Process - Communication about outdoor play

	Level 1	Level 2	Level 3	Best practice
Measures have been taken to inform families and parents about the importance of outdoor play				

Gradual Improvement Process - Health and well-being

	Level 1	Level 2	Level 3	Best practice
Every effort has been made to ensure that all children can play outside when the weather permits and that they can easily receive basic personal care				

Gradual Improvement Process - Relationships

	Level 1	Level 2	Level 3	Best practice
Educators are attentive to the children's needs, take an interest in what they're doing, step in only when necessary, and can help the children put their thoughts into words				

Gradual Improvement Process - Curriculum

	Level 1	Level 2	Level 3	Best practice
The outdoor space is viewed as an extension of the group's room; the educational team is involved in organizing it and implements a genuine outdoor learning program there				

8

APPENDIX 8

PROCESS FOR GUIDING THE IMPLEMENTATION COMMITTEE IN SETTING PLANNING PRIORITIES

1. Implementation committee meeting (6 to 10 members) during which participants will be able to express a variety of viewpoints.
2. A person with expertise in child development may be invited to facilitate the group. This person may be a daycare staff member but must remain impartial during the debate and discussions. The facilitator will ensure that all adults can share their goals regarding the play environment and the key elements they would like to include in the outdoor playground. The facilitator will guide each participant in explaining how these elements could contribute to the well-being and development of the children who will use the playground throughout the seasons.
3. The committee must prioritize ideas from the very beginning of the planning process. To do this, it will create a matrix⁴. This matrix will help evaluate the design plan as it evolves, guide the group through an organized process to develop the project, and identify the necessary space and financial resources.

Materials Needed

- Large sheets of paper
- Markers
- Adhesive tape



Phase One: Brainstorming

1. Individual lists

- Ask each committee member to draw up a list of about ten important elements to include in the outdoor space;
- Each individual list will remain confidential for now;
- Allow enough time for everyone to review their list before the brainstorming session, since the prioritization process will require three hours of debate and discussion.

2. A Shared List

- Ask each participant, in turn, to choose one item from their list to add to the shared list of items to consider. Each time a participant names an item from their list, the others must cross it off their own lists if it's already there, to avoid duplicates;
- Write each named item in large letters on the matrix;
- Include both concepts and materials;
- At this stage, there should be no discussion.

⁴ Inspiré des matrices en mathématiques, qui sont des tableaux où l'on note des données ou des solutions.

3. Add up the items

- Number and add up the items on the shared list until everyone has finished their list ;
- The shared list should have at least 20 items. Try to end up with an even number ;
- It is important to ensure that everyone has a chance to speak so that everyone is satisfied.



Second phase : the vote

- We must insist that everyone participates in the vote ;
- If the number of participants is even, the group will need to decide how to break the tie ;
- During the first phase of voting, it is important to allow for discussion as long as the group has not yet reached a consensus (majority vote with no opposition). It is worth noting that this process helps establish a priority order for all the elements to be implemented in the yard, whether in the short or long term.

There will be three rounds

Round 1

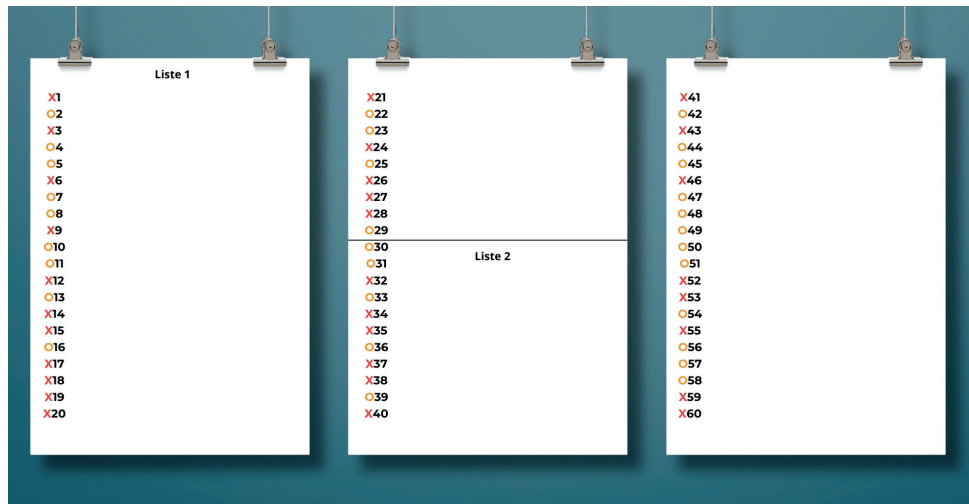
Divide the list in half and compare the first item in the first half with the first item in the second half.

Example: Suppose there is a list of 60 items. The first half contains items 1 through 30, and the second half contains items 31 through 60. We then compare 1 with 31, 2 with 32, 3 with 33, and so on.

During this round, the facilitator asks all participants who listed the two compared items to justify their choices. To facilitate decision-making, the facilitator may propose the following scenario: "You have just enough funds left to decide whether to implement one of these two items in the courtyard this year — which one will you prioritize?"

Voting is done by a show of hands for each pair of elements until a consensus is reached. This means the facilitator must listen to every point of view and subject it to constructive criticism to make it acceptable and accepted by everyone. The facilitator plays a key role in this process. They must facilitate and summarize the discussion, manage speaking time, ensure that everyone can express themselves freely, control speaking time, and keep the discussion on track without losing sight of the objective.

On the sheet, the facilitator will mark the prioritized element with an X and the other with an O.



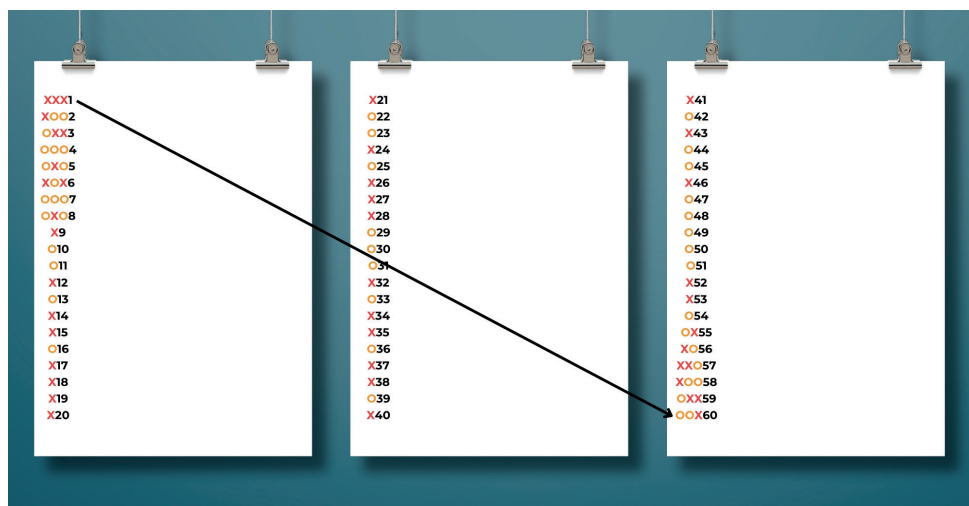
Round 2

During this round, participants will no longer be able to present arguments. Voting will be done by a quick show of hands. The same process as in Round 1 will be used, but in a different order: the choice will be between 1 and 2, 3 and 4, 5 and 6, and so on.



Round 3

Same process as in Round 2, but pairing 1 with 60, 2 with 59, 3 with 58, and so on.



List of selected and prioritized items, to be implemented over a three-year period.

At the end of the process, there will be four types of symbols :

- XXX will denote the most important elements. These should be the first to be included in the design of the play area ;
- XXO will denote the next most important elements in order of priority ;
- XOO will denote third-order elements ;
- OOO will denote valid elements, but ones with lower priority.

This process allows you to prioritize the elements to be implemented based on budget and space. Some, with the highest priority (XXX), will be included in the early phases of the project, while others (OOO) can be deferred to later phases.

Tip : The key to success when using this method is :

- To have a group made up of people from diverse backgrounds who can express a wide variety of viewpoints ;
- To keep the entire group engaged to ensure cooperation ;
- To encourage all participants to speak up and share their opinions.

Designing outdoor play spaces for children is enjoyable but requires a tremendous amount of planning. Teamwork and everyone's participation should help create a playground that effectively meets the children's actual needs and reflects the local culture.

9

APPENDIX 9

DEVELOPMENT OF A PLAN TO IMPROVE THE OUTDOOR ENVIRONMENT

The results of the assessment may indicate that certain elements require an improvement plan. If this is the case, it is important to involve all educational and administrative staff at the daycare center, parents who use the center, a landscaping professional, community partners, and any other individuals who can make a meaningful contribution to the implementation committee tasked with reviewing this environment.

Process Planning

Based on the results of the assessment of the daycare center's external environment, and after reading this guide or participating in a workshop on the subject, you should draw up a list of needs, considering the site's opportunities and constraints.

Short-and long-term goals should be established to ensure the continuous improvement of the quality of this environment.

RESULTS OF THE EVALUATION ANALYSIS

	Identified Needs	Short-Term Objectives	Estimated Costs	Long-Term Objectives	Estimated Costs
--	------------------	-----------------------	-----------------	----------------------	-----------------

GENERAL INFORMATION

Secure Entrance					
Welcoming Entrance					
Fence					
Drainage					
Natural Elements					

PLAY AREAS

Play Areas in General					
-----------------------	--	--	--	--	--

	Identified Needs	Short-Term Objectives	Estimated Costs	Long-Term Objectives	Estimated Costs
--	------------------	-----------------------	-----------------	----------------------	-----------------

WELCOME AND TRANSITION AREA

Welcoming and Transition Areas					
Design of the Transition Area					
Quiet Play and Socializing Area					

PHYSICAL PLAY AREAS

Climbing Up and Down					
Hanging					
Swaying, Swinging, and Spinning					
Practicing Balance					
Sand and Water Area					
Garden and Natural Environments Area					
Creation and Construction Area					
Symbolic and Dramatic Play Area					
Circulation					
Communication About Play					

INTERVENTION AND SUPPORT

Health and well-being					
Relationships					
Curriculum					

10

APPENDIX 10

EXAMPLE OF PLANNING AND ORGANIZATION

PLAY AREAS	PLANNING CRITERIA					
Layout	Play value	Experiences offered	Safety	Maintenance	Accessibility	Challenges
Transition Parking for wheeled toys Table Benches	Easier access to the playground A buffer between the indoors and outdoors. Time for children to observe their surroundings	Weather station for the oldest Installation of an outdoor clothing rack Setup of a care area for infants	A roof to provide shade and shelter from the rain A bench for taking breaks and keeping the youngest children secure	Maintenance of Equipment and Furniture	Auditory cue created with wind chimes Fully wheelchair accessible	Everything You Need for Child Care, Right at Your Fingertips
Paths Primary Secondary Tertiary	Wide enough for traffic and wheeled toys	Easier movement of bicycles and wheeled toys A road network that makes it easier to enter and exit these areas	Access for fire trucks Paths at least 1.2 m wide for bicycles Contrasting-color curbs, benches along the paths	Free trails that are well-maintained and in good condition	Change in ground texture at trail junctions and around benches 1:20 slope on the bridges	Rolling objects that can move quickly on trails
Vegetation Trees Shrubs Flowers and vegetables	Environmental Education Natural, Open-Ended Materials Symbolic Play	Child-Initiated Play Hide-and-Seek Great Potential for Environmental Play	Observable Non-toxic Non-allergenic	Pruning Leaf cleanup Protecting new growth	Height of the overhanging branches Ability to approach and enter the vegetation	Having Staff Who Are Passionate About Gardens

Play area for infants and toddlers Sandbox Sensory paths Motor skills equipment Water basin Furniture for care, meals, and sleep Vegetation	Exploration and Environmental Awareness Learning About Your Body and How It Works Feeling Safe	Individualized support for children Opportunities to provide individualized care Objects for hands-on exploration Materials for developing motor skills independently	Soft surfaces where a baby can be placed Appropriate vegetation Non-toxic materials Equipment that provides age-appropriate challenges for babies	Sand piled into a mound and watered every evening Daily check for debris or objects carried by the wind Check for hazardous substances	Multisensory indicators	Adjacent to a care area so that adults can watch the children play freely Older and younger children can see each other
Symbolic Play Area Picnic Table / Work Table Playhouse Small Stages Vegetation	Drama Pretend Play Social Skills Practice Quiet Play	Great potential for child-initiated play	Carefully selected grasses and natural groundcover Visible from a distance	Tall grass, mowed as needed Keep play materials clean (dolls, costumes, etc.)	Small house with wind chimes hanging from the roof as an auditory indicator Accessible small house	Need for many accessories Well-organized storage
Sand and Water Area Water nearby Sand tables	Fine Motor Skills and Socialization Role-playing games, manipulative games	Free Play Experimenting with Physical Factors	Access to benches of various heights in the center of the area Access to a water source Shelf for storing shoes	Edge to contain the sand Put the sand back in the container Sweep the sand onto the steps	The details of the edges provide visual guidance Wheelchair access to a raised area Universal play activity	Make sure the sand stays clean Keep it away from water fountains
Water Features Sprinklers Snow meltwater Waterfall Elevated Waterfall Stream Green Vase	Exploration Sensory Stimulation Socialization Environmental Education	Child-Initiated Play Exploring Physical Factors Great Potential for Play	Potable water Non-slip surfaces under the playground equipment	Clean the drains Water quality Daily inspection	Fully accessible water plays areas A variety of water-based experiences at various levels of accessibility	Good drainage Have the necessary clothing for water and mud Design that incorporates natural elements as the most important play feature

Quiet Play and Social Area Terrace Shelter Lawn Storage Area	Socialization Group Meetings	Great for meals and sleep For group events	Shade	Mowing the lawn	Access to the terrace via a 1:10 ramp over a distance of 4.5 m Difficult access across the lawn	Nearby electricity source
Creative and Construction Area Benches and Table Plants Surfaces for Drawing Loose Materials Storage	Problem-Solving Socialization Creativity Construction	Free play Child-initiated play Exploring physical factors Great potential for refining the senses and motor skills	Open-Source Materials Art Supplies	Cleaning the Equipment Well-Organized Storage	Removable seats for wheelchairs Table with an opening for adapted chairs	Check the accessories in the storage compartment Restock as needed
Physical Play Area Playground Equipment Slides Swings Combination or Functional Structures Play Mound Benches Topography Vegetation Motor Skills Equipment	Active Play Locomotion Progressive challenges for ages 0–5 Opportunity to practice different movements and develop various motor skills	Group game suggestions from the educational staff Games initiated by the children that challenge their physical abilities	Protective surfacing zone under and around the playground equipment Observation benches for adults Lawn area for ball games and sports activities (all year round) Motor skills equipment placed on a stable surface	Cleaning the trails Safety checks, Detailed monthly equipment inspection Carefully maintained surfacing	Handrails Accessible terraces with variable heights or defined textures Multi-user swing with a synthetic surface, including one at the entrance to the facility	Preparing the space for sports activities according to the season Moving motor skills equipment to an open area and putting it away when supervision is not possible

BIOGRAPHY

Sylvie Melsbach

Since 2004, Sylvie Melsbach has worked at the Regroupement des centres de la petite enfance de la Montérégie (RCPEM) as the person responsible for partnership support and playground safety. Recognized in Quebec as a pioneer in playground safety, she has served as an educator and educational director at early childhood centers for more than 25 years.

Even as a child, she took every opportunity to play outside. That is certainly what led her to take a special interest in the importance of outdoor play for very young children and to pursue university studies in early childhood education, psychomotor development, and, ultimately, small-group facilitation.

In February 1997, the childcare system was profoundly shaken by the death of two-and-a-half-year-old Sébastien, who was found strangled to death in the play structure at his daycare centre in Laval. This tragedy was the catalyst that led her to make playground safety her daily work. With the full cooperation and support of the RCPEM, she was able to travel to the United States to attend one of North America's most renowned training programmes on playground safety: the S.A.F.E. programme offered by Northern Iowa University.

This training enabled her to obtain a U.S. playground inspector certification and learn more about play spaces for young children. Upon returning, she adapted the U.S. programme to Canadian standards. She subsequently progressed from junior trainer to senior trainer to consultant, eventually attaining the "Train the Trainer" rank with the Canadian Parks and Recreation Association (CPRA). She has since served on the CSA group's technical committee on playgrounds, enabling her to exchange ideas with high-level trainers from across Canada. She is also the Technical Director of the Institut québécois de la sécurité dans les aires de jeu (IQSAJ).

Eager to expand her knowledge, she undertook an internship in France in 1990 as part of a Franco-Quebec exchange programme focusing on childcare services. Since then, she has broadened her understanding of different educational methods by completing internships in the United States, Hungary, Austria, the Czech Republic and Italy.

Sylvie Melsbach has taught early childhood education at college level for more than fifteen years and has consistently worked to build partnerships with the early childhood sector, municipalities, the school system and community parent groups. She has also served on numerous editorial committees for educational materials, including the first editions of *La sécurité des enfants... en services de garde éducatifs*, *Ensemble dans la ronde !*, *En services de garde éducatifs – Réussir l'intégration des enfants handicapés* and the Quebec Early Childhood Education *Accueillir la petite enfance*.



In the Montérégie region specifically, she played an active role in creating the "Cadre de référence pour l'élaboration d'une politique d'intégration et de maintien d'enfants handicapés en service de garde", as well as "Au-delà des différences, ICI on collabore". This guide promotes collaboration and partnership between early childhood education services and specialised rehabilitation services to include children with autism spectrum disorder.

She is also the author of numerous articles, texts and books, covering topics ranging from safety and pedagogy to child development and the inclusion of children with special educational needs. One example is the "Bouger c'est Naturel" framework, a reference document that accompanies a comprehensive national training programme.

Her education and professional experience have enabled her to develop the flexibility needed to adapt her approach to the various groups she works with.

She is still very active in the Montérégie region of Quebec and beyond, continuing to advocate for children and their rights. She believes that every child exhibits unique characteristics from the moment of birth that give them their own distinct personality. This is why she continues to reflect on and explore all possible measures to support children in early childhood centers.

Recognised as an expert in playground safety and child development, she served as a technical advisor for the ESPACES project, a large-scale initiative in the field of municipal recreation. The project plays a significant part in creating accessible and safe outdoor spaces that encourage active play and physical exercise among young people.

She served on the ESPACES project's technical committee for nearly four years, promoting active play and physical activity among young people in municipalities. She remains active within this community, currently participating in the revision of documents produced during the project.

She was also in charge of the "Nourrir le développement du jeu actif" project, which was supported by the Lawson Foundation from 2016 to 2018, as well as the "Poupons et trottineurs ouverts sur le monde extérieur" project, which is supported by the Lawson Foundation from 2021 to 2024. The latter project highlights the importance of understanding the role of free play and motor skills in brain development. It also emphasises the importance of regularly providing activities that develop motor skills and enable children to overcome challenges in a safe environment. It emphasises the importance of adults learning to let go and allowing children to explore the world around them with all their exuberance, which can sometimes be overwhelming.

These projects enabled information to be gathered from several pilot communities across the province regarding the attitudes of educational staff and parents towards outdoor play. The projects also enabled the development and testing of various tools and resources with pilot daycare centres and certain community partners. These included training modules, workshops and webinars in French, which were rolled out across Quebec. Resources for the public and parents on how to better support children in taking risks while playing were also developed.

Since then, personalised support has been provided to all CPE implementation committees wishing to redesign their outdoor play areas, alongside workshops on designing residential play areas for coordinating offices and family daycare providers.

BIOGRAPHY

Awaza Anaïs Kaya Amah

A dual American and Ivorian citizen, she lived in Quebec in both 2008 and 2017. While there, she attended the School of Fine Arts at Concordia University.

She is a portrait artist, graphic designer and illustrator with diverse experience in various roles. As a freelancer, she has worked with a variety of clients, taking on responsibilities ranging from social media marketing to illustration and typography. She was also the head graphic designer at a company, where she was responsible for creating textile prints and other designs.

As part of a study project, she has also taken product photographs, performed extensive photo retouching, and participated in branding and packaging design projects. She is also capable of doing some light modelling using ZBrush and Maya.

She is the president of BDP. The company's purpose in Côte d'Ivoire and abroad is as follows :

- Design
- Digital communication
- Graphic design
- Advertising
- Packaging
- Illustration
- Marketing
- Web design and development
- Consulting
- 3D modelling
- Sales
- Architecture
- Printing
- Audio-visual production
- Event planning and art gallery
- Art studio and applied art



More generally, this includes any industrial, commercial, financial, civil or real estate transactions, or personal property transactions, that are directly or indirectly related to the company's corporate purpose or any similar or related purposes. It also includes transactions that facilitate the company's expansion or development. The company may also participate in any transactions related to its corporate purpose, either directly or indirectly.

awazakaya@gmail.com

<https://anaisawaza.wixsite.com/portfolio>

REFERENCES

- Blanc, Olivier, *Un coin nature pour tous*, Éditions Réseau école et nature, Montpellier, 2016
- Belleau, Paule, *Accueillir la petite enfance : programme éducatif pour les services de garde du Québec*, Les Publications du Québec, Québec, 2019
- Bundy, Anita C. et coll., *The Sydney playground project- levelling the playing field: a cluster trial of a primary school-based intervention aiming to promote manageable risk-taking in children with disability*, BMC Public Health, 2014
- De Bord, Karen et coll., *POEMS Échelle de mesure de l'environnement extérieur préscolaire*, Éditions du RCPEM, Saint-Hubert, 2011
- Bilton, Helen, *Outdoor Learning in the Early Years Management and Innovation*, Third Edition, Routledge Taylor&Francis, London and New York, 2010
- Esbensen, Steen B., *The Early Childhood Playground: An Outdoor Classroom*, HighScope, 1987
- Frost, L. Joe et coll., *The Development Benefits of Playgrounds*, ACEI Editor, Olney, 2004
- Frost, L. Joe et coll., *Play and Child Development*, Pearson Education, San Francisco, 2008
- Frost, L. Joe and Wortham, Sue C., *Playgrounds for Young Children: National Survey and Perspectives*, American Alliance for Health, Physical Education, Recreation and Dance, Reston, 1990
- Gabbard P. Carl, *Lifelong Motor Development*, Pearson Education, San Francisco, 2008
- Hanscom, Angela J., *Balanced and Barefoot: How Unrestricted Outdoor Play Makes for Strong, Confident, and Capable Children*, New Harbinger Publications, 2016
- Humphreys, Chloe, *Dynamic Horizons: A Research and Conceptual Summary of Outdoor Education*, COEO Publication, 2018
- Kennedy, Eric, Heather Olsen, Jennifer Vanos, *Le confort thermique des terrains de jeu : revue de la littérature et enquête auprès d'experts*, National Program for Playground Safety de l'Université de Northern Iowa, 2020
- Lacombe, Josiane, *Le développement de l'enfant de la naissance à 7 ans*, De Boeck & Larcier, Bruxelles, 1996
- Louv, Richard, *Une enfance en liberté, Protégeons nos enfants du syndrome de manque de nature*, Éditions Leduc Pratique, 2020
- Melsbach, Sylvie, *Bouger c'est naturel*, RCPEM, Saint-Hubert, 2016
- Moore, Robin C. et coll., *Creating and retrofitting play environment*, Playcore and Natural Learning Initiative, College of Design NC State University, 2009
- Moore, R. *Nature Play & Learning Places. Creating and managing places where children engage with nature*, Raleigh, NC: Natural, 2014
- Mathias, Henry, *Seeing the wood for the trees: How the regulation of early learning and childcare changed to improve children's experience of outdoor play in Scotland*, CARE inspectorate, 2018
- Moore, Robin C. and Cosco Nilda, *Outdoor Learning Environment Toolkit*, Natural Learning Initiative, College of Design NC State University, 2014.
- Moore, Robin C. et coll., *Patchways for play – Best practice guideline*, Playcore and NLI, NC, 2010
- Moore, Robin C. et coll., *Play for all guidelines, Planning, Design and Management of Outdoor Play Settings for All Children*, Berkeley, 1987
- Paoletti, René, *Éducation et motricité de l'enfant de deux à huit ans*, Gaëtan Morin éditeur ltée, Montréal, 1999
- Rivkin, Mary S., *The Great Outdoors, Restoring Children's Right to Play Outside*, NAYEC, Washinton, 1995
- Sando, Ole Johan, "The outdoor environment and children's health: a multilevel approach", *International Journal of Play*, 8:1, 39-52, 2019
- Walsh, Prue, *Early Childhood Playgrounds Planning an outside learning environment*, Routledge Taylor & Francis, London and New York, 2016.

TRAINING COURSE

Embracing Active Learning

Understanding Movement to Better Support the Child



DEEPEN YOUR KNOWLEDGE

Free play, as an essential element in the optimal development of a child's abilities, has long been part of pedagogical knowledge. It is essential to place this certainty at the heart of our thinking and actions so that we can effectively and positively support children's free play — an indispensable means for them to discover and learn about the world. This training is primarily intended for professionals who support and assist children aged 0 to nine and their families.

THE PROGRAM

- Lectures and interactive presentations
- Scenarios
- Exchange of expertise
- Videos

2-DAY TRAINING COURSE

to complement the book,

This training aims to enable :

- To acquire general knowledge about the movement ;
- To recognize and acknowledge the movements naturally initiated by children ;
- To reflect on the guidance needed to support the manifestation of natural, innate movement ;
- Reviewing the environments and materials provided to ensure they are appropriate for the children's movement needs.

FOR INFORMATION ON COSTS, DATES, AND REGISTRATION

Phone : 450 672-8826 # 221 | cpemonteregie@rcpem.com
Visit the www.rcpem.com

Outdoor space planning and optimal use of outdoor play areas in an ECE setting

Reference framework

All Early Childhood Education (ECE) services in Quebec have a threefold mission: to ensure the well-being, health and safety of young children in their care; to provide an environment that supports their development and prevents difficulties from arising; and to promote their social inclusion.¹

With financial support from the Ministry of Family (MF), the "Regroupement des centres de la petite enfance de la Montérégie (RCPEM)" is proposing this framework to stimulate interest among educational teams in designing well-structured play spaces and outdoor play areas that offer children multiple opportunities to explore and engage all their senses.

This framework encourages reflection on the design of outdoor spaces in childcare centres. It views these spaces not merely as places for fun or recreation, but as settings that empower children to act, support the quality of their experiences and enrich their learning.

¹ Accueillir la petite enfance : programme éducatif pour les services de garde du Québec, p. 2.