

Group members introductions.

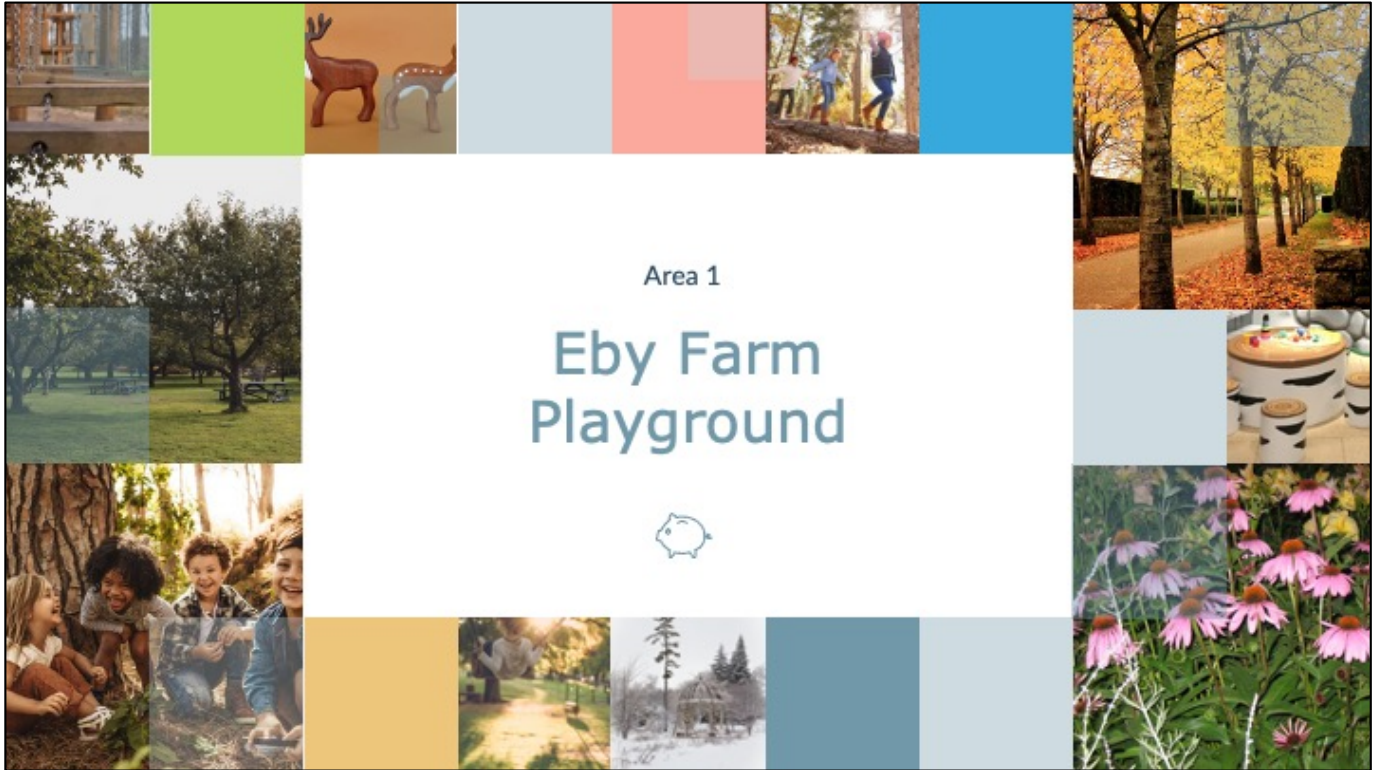
Our objectives for the redesign

- Improve language development + motor development
- Design a space that is inclusive and accessible.
- Foster opportunities for conversational turns
- Encourage exploration and spark imagination
- Ensure all areas look inviting and friendly



We had five focuses when redesigning Waterloo Park:

- We wanted to make sure the elements of the designs we added kept in mind how it can help develop children's language skills as well as motor skills.
- We wanted to improve these spaces to be more inclusive and accessible. The people who live around Waterloo park and the City of Waterloo come from all sorts of different cultural and social backgrounds.
- We wanted to make sure the designs would encourage children and their caregivers and peers to engage in conversations (which would help them in developing their language skills).
- We wanted to ensure children are able to explore safely and freely and create spaces where their imaginations can run freely
- And lastly, we wanted to make these spaces seem more inviting and friendly for members of the community to spend time in.



Our goals for this area



Focus on ages ~2

Toddlers at this age who are still just beginning to learn language and motor skills.



Connect this area with the rest of the park

This area is hidden and overshadowed by the toddler playground beside it and far from the other areas.



Foster more parent-child talk

More vocalization and parent-child conversations can help toddler's language development.

Colourful paths: Promoting Exploration



Multiple coloured paths going through the playground area

- Connects the playground, pig statue area and grass circle area
- Slightly elevated "stepping stones" to help develop a toddler's gross motor skills
- Different shaped stepping stones such as triangle, circle, square, etc. Forming different patterns.
- Sitting area in the pit, encourage families to talk to one another

Our focus on the Eby park redesign centers around toddlers around the age of 2 years old, who are still just beginning to learn language and develop their motor skills. Our first idea would be multiple colourful paths that connect the multiple areas of play in this area: the playground, the pig statue area and the grassy circle area. These paths will provide incentive for exploration and a form of unstructured play.

We recommend the stepping stones to be different shapes (triangles, circles, squares, etc.) and for the path to be laid out in a pattern with those different shapes. This is important as toddlers will soon begin to learn about shapes and patterns in preschool or kindergarten. The skill of learning about patterns is strongly associated with language development and will help them as they gradually learn more complex grammar (Kidd & Arciuli, 2015). A sitting area attached to the slightly elevated wood "wall" of the pit will provide seating where kids and parents can sit and relax, allowing for families to interact with one another, further facilitating more of a sense of community.

Images: Image created by us. Stepping stones from wayfair.ca.

Colourful paths: Connecting the Park



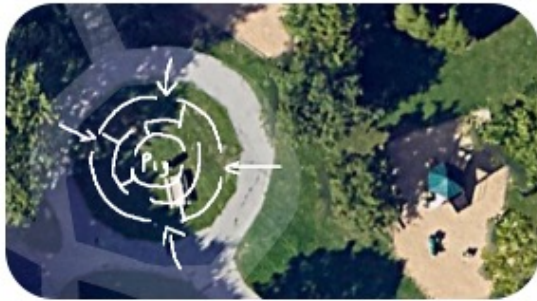
Connects the playground, pig statue area and grass circle area

- Can have different paths leading to the same area, allows child to decide which way to go
- Different shapes - triangle, circle, square, etc
- Can have repeating patterns
- Encourage Parent-Child interaction
 - "Where do you think this leads?", "Where do you want to go?"
"What shapes do you see?"

Here is an aerial view of potential paths that connect the playground, grass circle area and the pig statue area. Since most children head directly to the playground, these paths can help entice the children to explore the rest of the areas of play. Since there are paths going in and around the trees, they can pique the toddler's curiosity as to where the paths may lead. There should be multiple paths going to the same area so that children have the option to choose which path to follow and to encourages parent and child conversation such as "where do you think this leads?", "where do you want to go?" or "what shapes do you see?", etc. Quantity of input and conversational turns is important to help children develop their language skills (Rowe, 2012).

Images: Screenshot from Google Maps. Image created by us.

Maze: Engaging Area for Play



Add short shrubs in the shape of a mini maze

- Toddlers are tall enough to see over shrubbery

Move one of the pig statues towards the center of maze

- Sparks imagination + create their own narrative
- "Why is the pig separated from the others? Or did the pig lose its way?"



Have four openings to maze with coloured pathway leading towards from other areas

- Allows child to decide
- Creates new pathways within maze

For the Grass Circle Area, we thought it would be a good idea to add shrubs or small plants around it. To make it more engaging for toddlers, we think that arranging them in a small maze would be a good idea in order to inspire children to choose different pathways.

We wanted to make sure that the experience wouldn't be scary for the toddlers so keeping the shrubbery at a short height is important. This is so that the child can still see over the shrubs and not feel like they're enclosed or would get lost. The parents can also see where their child is at all times within the maze.

We're planning on moving one of the pig statues towards the center of the maze. With the short shrubs in a maze-like setup, children may be inspired to enter the maze to reach the center and observe the pig. This can also help children to wonder: why is the pig separated from the others? Did the pig lose its way? They can create their own narrative about the pigs which sparks their imagination in play.

The pig statue in the centre will also have a step or something that will allow children to have an easier time to climb on top. The pig statue may also be coloured to make it more appealing and eye catching for children.

At the different “dead-ends” throughout the maze, we decided to add other animals to make the scenery more engaging. Hopefully with this added, children will produce more conversational initiations, such as pointing out the figures to their parents. Also, parents may feel encouraged to initiate conversation by talking about the figures with their child, resulting in an increase of vocabulary used that can benefit late talkers (Wing et al., 2007).

Images: Screenshot from Google Maps. Image created by us.

Stairs and Sitting Area



Steps with numbers to encourage toddlers to climb up

- Develop a toddler's gross motor skills
- Animal sculptures or animal pictures around the steps

Develop their language skills and encourage parent- child interactions

- Combine animal pictures or sculptures with number signage
 - If the steps say "1" there will be one llama, if "2" then two dogs, and so on
- Let the toddlers count to encourages language development

The stairs and sitting area is actually an extension of the Colourful Paths. When we walked around the Eby Farm, although this area is not steep at all for adults, it could be quite a challenge for toddlers around 2 years old since it is the age when toddlers start walking up and down steps with support. Thus, the steps are designed specifically to encourage toddlers to climb up in order to develop their gross motor skills. Although the steps won't be very high, we would put a railing around the steps to further ensure the safety of the toddlers and that they can navigate this area more independently.

From what we observed around this area right now, parents and children do not interact much mainly because there are not enough novel or interesting things to trigger conversation. Therefore, we are planning to have more elements that could encourage more interactions between toddlers and their parents.

We are also planning to put more animal statues or animal pictures around the steps. Parents could introduce more animals to their children and can engage in more conversation turns, such as "Look! There is a peacock!", "what is the color of the cat?". This could be beneficial to the toddlers' language development considering "quantity of input is most important during the 2nd year of life" (Rowe, 2012). On each step, besides the actual numbers, we will add the respective number of animals. Parents could point to the animal patterns and count together with their kids to create more conversation turns. This would be very helpful for toddlers who just encounter with numbers because not only will they read the numbers, but learn the meanings

behind the numbers as well.

We decided to have an emphasis on visuals rather than words to be more inclusive to all communities and cultures around the region. Having signs only in English may provide a barrier for families. We want to encourage translanguaging by providing an inclusive area where children of all cultures and backgrounds are able to learn and enhance their skills (Wang et al., 2021).

All of the ideas incorporated in this Eby Farm Playground area will hopefully excite children and encourage conversation between parents and children.

Images: Image created by us.



Area 2

Forest and Swings Area





Theme: **Animal village in the woods**



Focus on ages 3-6

We want to emphasize imaginative play, exploration and creating their own narratives



Allows for imaginative play

Fostering opportunities for conversational turns and story-telling



Emphasis on nature and animals

Universal and inclusive of different cultures

For this area, we wanted to have a large focus on nature and animals and for children to feel a connection with nature. We wanted to be inclusive of the diverse demographics and cultures of families in neighborhoods around Waterloo Park. Animals and nature, and stories relating to these aspects are universal and are present in all cultures. With our animal village theme, we also wanted to create an area that is reminiscent of walking into a woodland fairytale, where imaginative play is fostered and children can construct their own narratives.

For this age group, we are mainly focusing on children from age 3 to 5, which is a crucial stage for oral language development that can influence future academic skills such as math and reading, as well as social skills (Nelson, 2011). Therefore, we want our design to foster as many conversation turns as possible, and also encourage children's imaginative play, and their exploration of their own narratives.



These are the main concepts prominent in the design of this area and what we imagine sections of the area to look like.

1. Animal habitat and village themed play installations
2. Forest animal statues
3. Round log tables
4. Paths and logs
5. Clearing area and map puzzles



Area layout

- Area remains open for children to run around and explore off the beaten path
- Spaced out to encourage children to seek out the installations that are spread around
- Central path for wheelchair and stroller accessibility

****Note:** the number of icons on the map does not determine the actual number of installations

We wanted to take advantage of the open space as well as the many trees that are present. Research shows strong evidence that outdoor play in natural environments is beneficial to a child's language, physical and cognitive development (Kemple et al. 2016).

Our animal habitat installations are dispersed throughout the area (slightly closer to the swings area) and the place remains open for children to run and explore off-path. We included a main path as well as smaller dirt paths to allow for wheelchair and stroller accessibility but encourage children to explore off these paths with the installations in view slightly further off path. With the installations being dispersed, some may be partially covered by the trees which will foster conversations through exploration and the child's curiosity.

The round tables are closer to one another than the animal habitats but still dispersed enough to provide a more natural setting and sense of openness to encourage running around and exploring.

Images made by us.

Design Details: Animal habitat village



"Habitat" installations to play in and animal statues around it

Animal statues engaging in various curious actions - encourage decontextualized turns and abstract concepts

- Eg. a squirrel giving a deer an acorn - make their own narrative and the concept of sharing

Encourages children to create their own narrative and story-telling

- "Are these animals friends?" "What are they doing?"

Habitat and village installations, such as bird's nests, squirrel's tree holes, small wooden houses will be dispersed around the forest area. A statue of the animal of the respective home will be placed close by to educate children on animals' habitats.

These statues will be engaging in various actions in order to encourage curiosity, decontextualized turns and abstract concepts. For example, a squirrel may be giving an acorn to a deer close to a wooden house. The child can create their own narrative about what is going on in this area and parents may talk to them about the concept of sharing. In this way, parents and children could have more decontextualized conversations during everyday opportunities and these experiences are a key ingredient in building strong language skills during early childhood (Leech & Rowe, 2021).

Some of the animals' actions that the statues are representing will be inspired by common folklore from around the world such as the fox and the crow, the tortoise and the hare, etc. Oral storytelling is common in many ethnic minority communities and sharing of these stories between parent and child contribute to their language development. Moreover, since there will not be any characters of the story to be directly read off, parents and children can create the story together using their imaginations. Thus, parents could be story-builders instead of story-tellers and children can contribute more, which is beneficial to their narrative skills (Luo et al, 2014).

Images:

<https://downeast.com/home-and-garden/habitat-for-hobbits/>

<https://images.app.goo.gl/GtyohpwKHC1P5YLE6>

Design Details: Round wooden tables



A variety of round tables that fit the forest theme

- Replace the current picnic benches with lower round tables
- Eg. cedar log table, toadstool and mushroom tables, etc.

Encourages families to sit around the bigger log tables and engage in conversational turns as they eat

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We are also planning to change the current tables into the log tables as shown, which are not only more unique, but also fit in better with the forest theme as well. These round tables are designed to encourage families to gather around to sit or have a picnic and encourages conversations. These are also good locations for children to make friends with each other and initiate pretend play such as playing house. Social interaction with their peers is essential for language development and contributes to social competence and the formation and maintenance of friendships. Thus, it is a great opportunity for children, especially from low-income family, since involving siblings and other children language and literacy interventions may be an important pathway to enhancing the language and literacy experiences beyond parent-child talk (Luo et al, 2019).

Family mealtime talk is quite important to a young children's literacy and cognitive development. During mealtime talk for example, children might express what they were learning in kindergarten and the stories of their friends. Extended discourse during mealtime fosters narrative and explanatory talk that can introduce vocabulary as well as meaningful and grammatical utterances (Snow & Beals, 2006). Many cultures, especially that of many indigenous peoples, see storytelling as an important way to pass on traditions, knowledge and provide a more traditional style of learning (McKeough et al, 2008). With this area being a prime spot to sit and see the animal installations, we hope this encourages caretakers to take the time to engage in oral storytelling and engage in more conversation with their child.

Images:

<https://riverbendva.com/repurpose-recycle-fallen-tree/>

<https://images.app.goo.gl/FDGaWXiuEPv2LRsK8>

Design Details: Log structures



Wooden logs placed either horizontally or vertically for children to play on



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Studies provide evidence that outdoor play in natural environments are beneficial to a child's language, physical and cognitive development (Kemple et al. 2016). We want this place to look as natural as possible, yet that are placed intentionally to make these areas seem friendlier, more approachable and to encourage play. The climbable logs are for kids to improve their motor skills and gives some variety to the landscape of this area between the trees.

The many logs already in the area can be placed in a way to encourage exploration and play, such as placing them in a way where they can use them as a balance beam or even just interesting paths to follow and explore and lead children to other animal habitat installations which is why they should be placed in a strategic way where an installation will always be in view from any of these log structures.

Images:

[OFFSET Little girl balancing on colored wooden logs in a forest path stock photo - OFFSET](#)

[Childhood By Nature Forest Schools: How Climbing Trees and Making Dens Can Help Children Develop Resilience - Childhood By Nature](#)

Design Details: Path



Concrete path

Dirt path



- Central concrete path for accessibility
- Leads park goers through the forest area to the swings
- Leads down and connects to Eby Farmstead Playground path



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A central dirt path will cut through from the sidewalk to the swings area and will be relatively flat to ensure wheelchair and stroller accessibility. As children walk down this path, they will notice the many animal habitat installations that may interest them to explore off the path. This path will help connect the swings area to the Eby Farmstead Playground as both are rather hidden from view otherwise.

There will be two dirt paths leading off the main concrete path in order to get deeper into the tree areas and to the round tables. This allows for more interesting exploration, allows the child to choose where to go as well as encouraged to explore more of the area and potentially see more animal habitat structures and statues.

Images:

[Concrete pathway](#), [Concrete path](#), [Forest preserve](#)

Design Details: Clearing area map puzzle



Puzzle of an illustrated map of the forest area near the entrance and clearing area

Other side includes images of animals and their respective habitats

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We want the entrance to this area to pique a child's curiosity as well as their sense of exploration. Close to the path, there is a map puzzle to allow the child to know that there are even more interesting things further into the forest and down the path for them to explore. Moreover, the map could also help foster conversations either with their caregiver or their siblings and friends, conversations such as "what's that?", "where do you want to go?" "what do you think that is over there?". In this way, children could engage in high-level conversations because parents questions of high inferential demand immediately evoke inferential responses from children (Tompkins et al., 2013).

The clearing area remains open to allow children to run around freely and engage in other activities such as playing with a soccer ball or frisbee together.

Sketch created by us.

Images:

<https://www.playtop.co.uk/2020/09/21/better-playgrounds-means-healthier-children/>



Our goals for this area



Focus on ages 3-6

Children who are beginning to learn to read and will soon start learning more world-knowledge concepts in the classroom.



A focus on nature and learning

Educational signage to learn more about the area and nature.



Encourage more events

Encouraging more events and programs such as storytelling or outside classroom activities.

View finder: Changing seasons



- Stationary viewfinders placed around the garden, facing the gazebo so kids can circle around the garden
- Through the viewfinder, kids could see the picture/overlay of Victoria Garden of different seasons.
- Signage will be placed by each viewfinder and their respective season so children can learn more about the changing of seasons

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Since the area has an abundance of flowers and plants, this would be a good opportunity to introduce concepts that children will begin to learn as they begin school. General knowledge about the world around us is essential to improving children's vocabulary development and language comprehension (Kaefer, 2014). One example is the changing of seasons. We decided to display stationary viewfinders facing the garden. Inside the viewfinders, there would be a couple of pictures of what the Victoria Garden would look like in different seasons. In this way, children could learn more about the changes throughout the seasons through the viewfinder.

Image from Google maps.

[Viewfinder Toy](#)

[View Finder](#)

View finder: Changing seasons



Spring



Summer



Autumn



Winter

- Signage will describe the change that happens during different seasons with words and images
 - Example: hibernation in the winter, pine trees not losing their leaves in the fall, etc.
- As kids 5-6 will start learning about animal life cycles, plants, butterfly cycle, etc. we can start introducing them through the signage in a way that's informative, but also not so scientific that it will be overwhelming or confusing

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Here we have included examples of pictures of what the Victoria Gardens would look like in different seasons through the viewfinder. The main idea is to highlight the different stages plants go through each season: newly blooming flowers in Spring, green vegetation in the Summer, wilting plants and trees changing colours in the Fall and plants buried in the snow in the Winter. When introducing them to the different seasons, having educational signage would help supplement their observations. We have included some examples on the next slide.

Some potential elements of each weather for signage:

- Spring → butterfly cycle
- Summer → bees, water cycle, plant cycle
- Autumn → leaves falling/changing
- Winter → hibernation

Images created by us: Spring, Autumn, Summer

Winter:

https://www.flickr.com/photos/suemoffett_savingmemoriesphotography/12939345423

Example of signage elements



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There is a nondirective nature of many family conversations, which is why museums can be seen as ideal settings to engage children with scientific topics (Callanan, 2012). Since going to museums on a regular basis is not accessible, we wanted to create a similar experience outdoors. For each educational sign, there should be pictures or illustrations of what they might see during each season. For example, new buds in the Spring, squirrels stocking up nuts for the Fall, etc. In addition, knowledge about nature such as the life cycles of butterflies, the water cycle, how pine trees don't lose their pines in the Winter, can be displayed in a "Science Corner" on each signage for children to learn about. Caregivers would also be more likely to give elaborative answers, thanks to the educational signage (Kurkul, 2017).

Images created by us.

Example of signage elements



Images created by us.

Sitting area: Storytelling programs



Build a sitting area for children near the gardens with small chairs laid out like a classroom.

Encourage local schools to come here for field trips or have outdoor storytelling program to read to the kids.

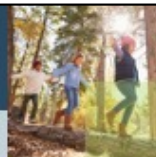
The grass clearing by Victoria Gardens can be a place that will encourage community activities. Building bonds as a community can be incredibly important for newly arrived immigrant and refugee families (Datta, 2016). Small benches and chairs can be placed in a circular format to mimic that of an outdoor classroom or an outdoor library storytime setting. We want to encourage schools, libraries or even just members of the community to host outdoor storytelling programs during the warmer months. Storytime can be a great way for children to get motivated to read and develop their vocabulary. Children learn new words more quickly and effectively when they experience them being used in different contexts such as being introduced in these interactive storytime activities (Montag et al., 2018).

Image from Google Maps.

[Hyde Park NurseryOur new outdoor storytelling circle | Hyde Park School](#)

Thank you for your time!

Open to any questions



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