One of the greatest joys of being a child is the ability to play, socialize and interact with other children. This toolkit has all the information and best practices your community needs to design an accessible play space that all children, including those with mobility impairments, can engage in and enjoy. From the development of new spaces to the renovation of existing playgrounds, my hope is that all communities will become fully accessible and inclusive.

- Rick Hansen
All children need to play. It’s essential for their physical, social and emotional wellbeing.

Accessible play spaces are designed to encourage shared play among children of all abilities. They offer a rich variety of play opportunities to children both with and without disabilities, based on an overall site design that draws children into inclusive play experiences. They also allow parents and caregivers with physical disabilities to safely supervise and play with their children.

This toolkit aims to raise awareness throughout the school community of the value and practicality of incorporating accessible design and diversity into outdoor play spaces at schools. It is both an overview of best practices and a concrete how-to guide in undertaking the development of a new inclusive play space project or the renovation of an existing play space at a school. The focus of this resource is accessibility in relation to mobility impairments. Although some issues related to the inclusion of children with other disabilities are included, detailed information falls outside the scope of this toolkit.

Many local examples point to successful and innovative outdoor schoolyards and play spaces that have been created by teachers, parents, students and staff. This toolkit includes photos and examples of successful natural play spaces as well as principles and guidelines for ensuring universal access for all students.

Whether your school is planning a brand new play space or considering renovations on a limited budget, this toolkit presents many ways in which you can enhance accessibility and the quality of play opportunities at your site.
Why is outdoor play important?
Many studies have shown that play, and especially play in natural spaces outdoors, is an essential component in child development. The more diverse the natural and physical surroundings, the greater the range of learning and developmental opportunities will be for all children including those with disabilities (Tai, 2006).

Play is important for:

- Brain development, physical development and health
- Building social, emotional and life skills
- Helping to develop an awareness for risk
- Encouraging children to experiment, generate ideas, practice skills, role play, invent
- Allowing an opportunity for children with disabilities to interact with their peers
- Offering opportunities for choice and decision making
- Establishing a critical bond with nature during childhood (Moore 1986, Tai 2006)

Studies have shown that one of the best ways to inspire stewardship for a more responsible future is “to instill a love of nature during childhood” (Moore 1986, Tai 2006). A well-designed and inclusive play space offers these rich and formative learning opportunities to all children at your school and in your community.
Why are school play spaces so important for learning and development?

Throughout the school year, schoolyards provide young children with daily opportunities for recreation, creative play, and learning. Play areas with diverse natural and built elements enrich and expand on the potential for rich imaginative, social and independent play. Hands on activities, such as planting a tree, add a “real” element to biology class. Bird feeders in the schoolyard inspire observation and promote learning through experience.

The emphasis of an accessible, learning based schoolyard is on diversity and inclusion, encouraging participation from all students. To maximize inclusion and diversity in a schoolyard, the design should:

• appeal to the five senses
• provide children of all abilities and at all developmental stages with opportunities for discovery
• create spaces that are child-scaled and rich in features that can be explored
• provide a variety of types of play including physical and creative play
**Diversity and Inclusion in Play spaces**

Play spaces that welcome children of all abilities to interact and play with each other should be the starting point when thinking through the design for a new play space. Universal design is an approach that meets this goal by focusing on creating a space that meets the needs of the greatest number of people. Diversity is built into the design: parts of a space can be used by more than one child at a time, in more than one way, with a variety of different circuits and ways to get up and down, and a variety of different activities.

Natural features and equipment both play an important role. A play space is more than a structure — it encompasses the total environment in which play occurs. It is the system, not the objects. As outlined in work by King, Goltsman and Brooke (2001), “an exceptional play environment is more than a collection of play equipment. The entire site with all of its elements from vegetation to storage can become a play and learning resource for all children with and without disabilities.” The authors identify 17 types of play and learning settings that address a child’s developmental needs. Many of these settings are described in this toolkit and include: entrances, pathways, signs and displays, enclosures, manufactured equipment, game areas, ground covers and safety surfaces, lands forms, trees and vegetation, gardens, animal habitats, water, sand and dirt, play props, gathering meeting and working places, stages, and storage areas.
How do we develop a good play space?

A rich play environment challenges the social, physical, emotional and intellectual skills of children and encourages constructive play which invites children to play, experiment and learn. The challenge is to combine as many of the “17 play and learning settings” as possible while considering relationships between activities, how features are oriented on the site and how the circulation around the site works. The settings included in the design depend on the desires and values of the school and the site itself. Each setting can be designed thoughtfully to ensure universal access to all areas of the play space.

A successful play space is specifically designed around the site. This means that existing natural features are incorporated, play zones are well located with respect to entrances and connecting pathways, and sun and shade are considered. Issues such as drainage and maintenance are addressed as well as the opportunity to change and evolve the site over time.

Here are a few key principles of universal design:

- The majority of features and spaces are usable by all people, instead of having separate “accessible features” for people with disabilities. Features like play equipment, planter boxes or benches are of different heights and sizes to meet the needs of more people.
- Circulating around and using the play space is simple and easy. Accessible surfacing allows wheelchair access to play equipment with minimal effort. The design provides adequate space for all people to access and manoeuvre around play equipment and features regardless of mobility.
- The play space provides opportunities for challenge for all users but minimizes hazards.
Help! How do we get started on our design?

Whether you are working with a designer, with an equipment supplier, or are working on the design yourself, it is important to develop a clear DESIGN PROGRAM STATEMENT, usually by consulting with students, staff and the community.

A design program statement, given to the designer/supplier, outlines the goals and objectives, activities, needs and elements that should be considered in the design. The design program statement can outline what experiences should be offered and what it should feel like to be in the site. For example, a design program may include specific functions required in the play space, such as a quiet space for reading and a place for older children to climb, as well as details on ages and numbers of children using the space. It outlines the basic requirements of the play space.

Once the design program is established, a CONCEPT DESIGN can be developed. In this stage, a drawing is developed showing what goes where and how elements relate to each other. It is always important to check back that the concept plan addresses the needs outlined in the DESIGN PROGRAM STATEMENT.

Involving a designer with a background in landscape architecture/playground design in the design stage of your project has a major impact on the quality and accessibility of the play space. The quality of play is directly related to the quality of the play environment. The cost of having some professional help does not have to be prohibitive and the designer can tailor the design to meet the available budget.

Example of Preliminary Concept Design. PHOTO COURTESY OF ROSS MILLER, KMDG BOSTON SCHOOLYARD INITIATIVE

Completed Concept Design - Everett OC Plan. PHOTO COURTESY OF ROSS MILLER, KMDG BOSTON SCHOOLYARD INITIATIVE
a designer can:

Help to create a strong **design program** by:
- pulling together design ideas as well as identifying site issues and challenges to help inform the concept design
- leading a visioning session with community members, staff and play space users

Develop a **concept design** by:
- creating a concept drawing based on the design program
- leading the process of choosing appropriate equipment and site features
- ensuring that safety and accessibility needs are met

Implement the design by:
- preparing a budget, drawings and construction documents
- develop a phasing plan if the PAC cannot afford to complete the whole project at once
- coordinating construction, trades people and volunteers

**What should we look for in a good designer?**
- Ask the designer for samples of work and call any relevant references
- Visit some of the designer’s completed sites and ask the school staff how well the site works for the people using it
- Ask if the designer is familiar with universal design concepts and has experience incorporating natural features into play spaces
- Ask if the designer has experience working with groups, children and stakeholders in order to be able to understand the needs and issues to be addressed in the design phase
- Ensure the designer is familiar with safety and accessibility standards (CSA/Annex H standards)
- Find out if the designer has experience working with contractors and overseeing the construction of play spaces

**How much will a designer cost?**
Cost will vary depending on the extent of involvement of the designer and his or her level of experience. A designer can be involved in a brief consultation early in the process for help with a concept plan, or he or she can be involved throughout the construction process. Input from a designer is invaluable in developing a really unique and inclusive play space even within a modest budget. A written letter/agreement between the play space committee/PAC and the designer should outline proposed tasks and expectations as well as fees.

Working on play space design ideas.
PHOTO COURTESY OF THE CENTER FOR WOODEN BOATS
The sections below provide important best practices for designing inclusive and accessible play spaces and are also helpful to recheck when reviewing completed designs.

As you think through the individual elements of your play space, keep in mind the underlying value of designing a space that will engage children with their natural surroundings, provide a rich variety of sensory activities to stimulate the senses, and foster rich and imaginative opportunities for shared play.

1.0 Surfacing Materials

Surfacing is a key component in designing safe and accessible play spaces. Many existing play spaces have been built with non-accessible surfacing materials including pea gravel and sand. Accessible options include pour in place rubber surfacing, rubber tile, engineered wood fibre, engineered carpet and crushed rubber products. Sand is not an accessible fall surface, but in combination with other surfacing (e.g. pour in place rubber) can provide an important play element for all children. Other materials such as asphalt paths combined with engineered wood fibre can improve access to equipment.

Although more expensive, rubber surfacing can be used selectively to maximize access to particular pieces of equipment or entry points. Engineered wood fibre, although less expensive, requires fairly frequent maintenance to ensure that ruts around equipment are minimized and adequate depths are maintained to ensure fall safety.

Pea gravel is not an accessible surface and should be phased out of all playspaces. PHOTO COURTESY OF SHERRY CAVES

Rubber tile provides good universal access. PHOTO COURTESY OF LUKE B, PLAYFALL NWR

Engineered carpet provides an accessible alternative in areas with low fall heights. PHOTO COURTESY OF MARATHON ATHLETIC SURFACES INC.

Engineered wood fibre combined with asphalt provides good access to the play equipment. PHOTO COURTESY OF SHIRA STANDFIELD
2.0 Parking and Curbs
If provided, parking areas should allocate at least one space for people with disabilities (3.7 m wide, 7.5 m deep including a 1.2 m wide walkway) with a safe, curb-free route to the main walkway. The walkway should connect directly with the play space.

3.0 Walkways
The most important element of a play space is being able to get to it! Walkways connecting to the play space from buildings, sidewalks and adjacent parking lots are important in creating an easy to navigate site. Play happens along walkways and pathways, and attention should be paid to the design of the route including places to sit and “things to discover.”

Accessible walkways that allow all people to easily circulate are:

- made of firm surfaces (asphalt, concrete, compacted crushed stone, pavers)
- wide enough: at least 1525 mm
- gently sloped: less than 5%
- well drained

4.0 Circulation
A site does not need to be level to make it wheelchair accessible. To add interest and stimulation, existing slopes can be utilized and the site excavated to create a shallow depression or add a slight slope to flat terrain. Ensure that slopes are not at a steeper grade than 5% to remain wheelchair accessible.

Ramps to a structure, if required, can be combined with landscaping to blend equipment into the setting more effectively. Ramps should have a maximum grade of 1:12 slope.

Variety in surfaces and textures to create zones, edges, and approaches helps to improve circulation for people with sensory impairments. This variety also provides more diverse sensory experiences for all children.
5.0 Borders and Entry Points

The best practice for accessible entry into a play space allows for entry points anywhere along a border to a play area. This is provided through flush access with a maximum of ½” drop from the adjacent path onto the play surface.

Other options, if it is not possible to provide flush access, include curb cuts, dropped concrete curbs, and ramps over wood borders in asphalt, concrete or plastic.

Using grading, berms (small mounds) and boardwalks to provide access to raised equipment eliminates the need for additional ramps, and is a more cost effective manner of providing universal access to raised areas.

The practice of providing ramps directly to equipment platforms without providing accessible ground surfacing should be avoided as some children and caregivers are then excluded from being able to circulate freely around the play space.
6.0 Height and Knee Clearances

For universal access, knee clearance (680 mm high) helps to provide wheelchair access under tables, counters and drinking fountains. Reach heights for seated or small users should generally be within the range of 380 mm - 1200 mm above the ground. Items such as gate latches and dispensers should be installed within this range.

7.0 Amenities (Seating, Shade, Site Furnishings)

Benches and seating areas are important components of a play area. They offer important social spaces for students, caregivers and teachers. Here are some important considerations to ensure that they are accessible:

- Benches and seating areas that are integrated into a site should provide a comfortable back support and arm rests for easy movement in and out of the bench.
- Seating areas should be located on firm stable surfaces (asphalt, concrete, compacted crushed rock, pavers).
- A space 760 mm wide by 1200 mm deep beside benches should be provided to allow for wheelchair users to sit beside or transfer to a bench.
- Drinking fountains, trash cans, and other amenities are easiest for all people to use when located on firm, level surfacing.
- Bike racks and accessible washrooms are other amenities that are important if the play space is also shared with the local community.
8.0 Landscape Elements

Natural elements offer some of the most interesting and meaningful play experiences for all children, instilling a sense of autonomy, curiosity and discovery. The elements listed below can be configured with universal design principles in mind, creating a sensory-rich and stimulating environment for children of all abilities. Many schools have incorporated low cost, low maintenance materials to create more natural spaces. The following elements can be incorporated into a school site, providing a more enriching outdoor environment.

- Pathways and boardwalks (supporting exploration, providing better access)
- Garden space providing opportunities for children to create food or create a native plant garden. Raised planter boxes can provide universal access
- Performance spaces (stage) for free play or school programs

![Raised planter boxes create inviting space for seating. PHOTO COURTESY OF BRIAN HYDESMITH, EVERGREEN](image1)

![Example of performance space/outdoor classroom. PHOTO COURTESY OF DOLORES ALTIN, EVERGREEN](image2)

![Using berms and grades to create interest and variety in the play space. PHOTO COURTESY OF SUE GUTTERIDGE, CHAPELFIELD PLAY AREA, SCOTLAND](image3)

![Interesting performance space that also provides seating for quiet games and reading. PHOTO COURTESY OF JULIE STONE, BOSTON SCHOOLYARD INITIATIVE](image4)
Painted games area (oversize chess board, chalkboard, mazes, 4-square, ball games, hopscotch)
- Landforms/topography (exploration of movement)
- Seating and gathering spaces, for informal play or outdoor classroom
- Games tables and work spaces
- Trees and plants for shade, exploration and creating habitat for butterflies and other wildlife
- Boulders and logs for climbing, discovery, seating and social play
- Sand and water and other loose components for manipulation and discovery
- Rain garden to demonstrate where stormwater goes
- Public Art pieces including murals or sculptures for play and discovery
- Arbor or trellis for shade and visual interest
9.0 Manufactured Equipment

Equipment can play an important role in addressing developmental needs of children. If working with a designer, ask for recommendations on what equipment works well for the site. In some cases school groups will be working directly with suppliers to identify equipment for their site. As you think about equipment choices for your play space, keep in mind the following key principles:

- Focus on providing rich, unique and imaginative play opportunities with opportunities for both active and quiet play. Prioritize features that stimulate open-ended, social and creative play rather than elements that offer limited play opportunities.
- Include a rich variety of interesting ground-level play features to enhance the accessibility for children with mobility impairments.
- When you design access routes to elevated areas of the play space (through ramps and transfer stations), ensure that you are providing access to high-interest, fun areas of the play space. Too often, ramps lead to a platform where there is not much to do for a child using a wheelchair or mobility aid who arrives there.

What direction should I give a playground equipment supplier when selecting equipment for the play space?

- Provide age range and number of children using site
- Describe your vision for the proposed play space. Provide a Design Program (which outlines the goals and objectives for the play space). Discuss the elements you envision such as social and gathering spaces, a focus on creative play, a variety of play choices, and an inclusive environment that fosters shared play.
- Describe the site context - what is around the play area and how it will be used. Provide a site plan if possible.
- Provide your budget for the equipment, keeping in mind costs for landscaping and natural features.
- Emphasize the need to follow CSA/Annex H accessibility standards to ensure universal access.
- Emphasize that equipment should fit into the site plan, not vice versa.

What questions should I ask a playground equipment supplier once I receive a proposed design?

- How does the play equipment area relate to the overall site?
- How does the equipment accommodate various interests and abilities?
- How does the play equipment foster inclusive play and allow for children with disabilities to be part of the action?
- Does this design meet CSA/Annex H standards?
- Is there an information table provided specifying the number and type of ground level play components to confirm it meets accessibility requirements?
- What age group is this equipment suitable for?
- How is this space unique? How is this fun?
- How is this equipment accessible to parents/caregivers with disabilities?
- What are the required safety zones and no-encroachment zones?
Examples of Best Practices for Manufactured Play Equipment

Equipment suppliers offer a wide variety of equipment that is accessible to all children with and without disabilities. Specialized equipment may also be available, but a universal approach offers more opportunity for interaction and fun for all kids.

• **Social and emotional development** - includes features that can be shared by all children encouraging social interaction and inclusion.
  
  • Work, sand and play tables - promote quiet cooperative activities alone or in groups
  • Play counter, play hut/fort - encourages imaginative play with other children
  • Roller slide - encourages social interaction
  • Saucer swing - promotes integration and co-operative interaction
  • Spinning nets - promotes integration and co-operative interaction
  • Crawl tunnel – encourages socialization

![Social play at counters. PHOTO COURTESY OF PETER TAMMETTA, HIGHWIRE](image1)

![Crawl tubes provide an opportunity for social interaction. PHOTO COURTESY OF BIGTOYS, INC.](image2)

![This sand table provides a great opportunity for all children regardless of ability to play together. PHOTO COURTESY OF LANDSCAPE STRUCTURES INC.](image3)

![Saucer swing encourages social play. PHOTO COURTESY OF SHIRA STANDFIELD](image4)
Perceptual Motor Development - includes activities that promote gross and fine motor co-ordination. Activities should include children who may have difficulty perceiving shapes, form, depth or movement. The equipment listed below helps to improve coordination and balance as well as gross motor skills.

- Saucer Swing
- Spring Teeter totter
- Spring rides or platform
- Spinner (bowl or net)
- Slides

An accessible swing seat is often a favorite play feature with children of all abilities. PHOTO COURTESY OF SHIRA STANDFIELD

Double springers provide an inclusive play experience. PHOTO COURTESY OF PLAYWORLD SYSTEMS®
• **Physical Development** - includes activities that promote strength and coordination.
  - Chinning bars, inclined ladders – improve upper body strength and coordination
  - Parallel bars – improve strength, coordination and balance
  - Nets - improve upper and lower extremity strength
  - Slides - improve upper and lower extremity strength
  - Bridges – improve balance and coordination
  - Basketball hoops - improve strength and hand eye coordination

• **Sensory Development** - includes features incorporating texture, manipulative devices, contrasting colours and sound to enhance auditory, tactile and sensory awareness. Sensory features also encourage artistic and aesthetic development.
  - Sound panel or music panel – stimulates auditory awareness
  - Sand and water play – stimulates tactile awareness

Well-Designed Universally Accessible Play Space
This successful example of a universally designed accessible play space engages children with their natural surroundings, provides a rich variety of sensory activities to stimulate the senses, and fosters rich and imaginative opportunities for shared play. The design also considers how people arrive at the site, how they move around, where they sit, and the many different ways of playing and having fun with other adults and children.

1. Accessible picnic tables
2. Wildlife interpretation- first nation animal images on fencing, animal prints on court surface
3. Preschool play area with accessible equipment and outdoor classroom
4. Junior play structure, spinning element, ground access featured
5. “Fort” Natural play area- cedar stumps, boulders and mineral samples
6. Natural play area- stumps, trees, planting, boulders and play binoculars
7. Saucer swings
8. Regular swings with accessible moulded bucket swing
9. Toboggan hill cleared of hazards
10. Path to parking area with 2 accessible parking spaces
11. Path connections to adjacent trails

IMAGE COURTESY OF SALLY HOCKING
Landscape Features

Natural play features such as stumps, trees, plantings and boulders provide rich sensory opportunities for play and discovery. Details including the fence art, animal prints, globe and mineral gardens are features can be experienced by all users and also relate to school curriculum.

Logs and boulders for climbing. PHOTO COURTESY OF SHIRA STANDFIELD

Planting and landscape details create a more enriching playspace. PHOTO COURTESY OF STEFIUK

The dotted circles show natural play features found throughout the play space. IMAGE COURTESY OF SALLY HOCKING
**Circulation**

Play areas are linked to the main circulation paths and each other by accessible routes. The paths are connected to adjacent trails providing direct and clear circulation within the site. The internal paths create a variety of loops which also encourage play.

Fall surfacing in play areas is universally accessible, without raised borders.

A path leads directly to accessible parking which facilitates easy access for people arriving by vehicle.
Play Zones

The play space has different activity zones that allow for age groups and activities to be separated. The separation creates a unique and varied play environment addressing the needs of a wide range of users. Quiet spaces, active spaces, and combinations of the two help to create a flexible, safer and usable play space.

Multiple opportunities exist for inclusive social play. Features such as the play counter, natural play spaces and seating areas facilitate social interaction.

The design takes into account adjacent play activities and how they relate to each other in terms of circulation and function.

Manufactured Equipment

Equipment choices including a spinner bowl, springer platform, and saucer swings, are accessible to most users and caregivers. Much of the equipment is accessed from the ground and some users may transfer from mobility devices. The equipment was specifically chosen to work with the site and fits in well with the setting.

Amenities

Consideration has been given to providing accessible picnic tables and seating areas associated with each play zone. These areas are places for caregivers/supervisors to sit and socialize as well as places for children to hang out slightly away from the action.
Frequent Mistakes to Avoid

Design Problems

- Ramps are built to equipment but access is not provided to ground features and site circulation.
- Ramps are built to platforms with little or no play value.
- Specialized equipment that segregates children with disabilities is selected, an approach which is both isolating to children with disabilities and more expensive to maintain (platform swings, for example). This type of equipment, however, may be useful at specialized facilities/centres specifically for children with disabilities.
- Inaccessible surfacing, including pea gravel and sand, is in place.
- Play features are limited to manufactured equipment without natural features.
**Installation Problems**

- Play equipment is inaccessible to users with mobility impairments due to raised borders without curb cuts.
- No connections are provided from play features to pathways within or connecting to the play space. A single access point (ramp or curb cut) to a play area often forces users to circle around the entire area to the entry point. Several access points (or a barrier free border) are preferred to provide direct and easy access for all to the play area.
- Top of fall surfacing is too far below entry access point, creating a drop down into the play space, a barrier for wheelchair users.
- Awkward access points to ramps have been installed with sharp turns and/or steep grades to structures.
- Access points are blocked due to plantings or site furniture.
- Inattention to precise grading creates awkward transitions and sometimes the need for adding steps, creating a barrier for some users.
- Barriers are created at concrete pad edges when site amenities are installed (tables, trash cans, benches).
- Poor drainage installation can create wet areas in play zones, and slip hazards across pathways.

**Maintenance Problems**

- Fall surfacing is not maintained to adequate height to work with access points.
- Ruts are not smoothed out in play surfacing, creating inaccessible areas.
Steps for Creating a Great Play Space

The development of a successful accessible play space project that stays well maintained and viable requires thoughtful planning. Whether the process is lead by a PAC member, play space designer, educator or other stakeholder, a series of steps outlined below can help to organize the development of the play space. Although projects range in scope and scale, the steps from planning and research through to design and implementation can be applied to every site.

Planning

1. Form a team to undertake the planning process.
2. Organize a working session with the team.
   a. Evaluate the existing play space
      i. What do you like/dislike about the existing site?
      ii. What do the kids/like or dislike? Ask them!
      iii. Use the questionnaire provided at the end of this toolkit to evaluate the existing site
   b. Discuss a preliminary vision:
      i. Who are the users, what are their needs?
      ii. What do you want to achieve?
      iii. Consider your community’s values and needs and how they can best be reflected in the development of your project.

Research

3. Research
   a. Look at examples of good play spaces (on internet, or in person).
   b. Use resources provided in this toolkit.
   c. Make contact with the appropriate school board staff person/s who you will be working with as you develop plans for the play space. Ensure continued communication throughout the project as you will likely need your project reviewed by a variety of staff members in various departments.
   d. Inform yourself about school, school district and union policies, standards, safety issues regarding volunteer labour, maintenance concerns and any long term issues (school expansion, closures etc.)
   e. Determine what construction costs may be covered by the District (e.g. demolition, fall surfacing) if applicable.
   f. Investigate funding sources and available resources (labour and materials).

Design

4. Consultation
   a. Consider hiring a park designer to help with the consultation and design process. Emphasize the need to incorporate universal design principles and Annex H guidelines into the design.
   b. Organize workshops (see sidebar) with children, families, teachers and the community to generate new ideas for your play space. This group should include children and caregivers with disabilities and their families as well as disability resource groups.
5. Determine final vision for the play space
   a. Incorporate feedback and research to create a play space plan. (A designer can really help with this!). Review ideas with your school and appropriate school district staff.
   b. Work with play equipment supply companies (if applicable) to select equipment and determine costs. Instruct companies that equipment and site design should meet CSA/Annex H standards and guidelines.
   c. Review ideas with School Board/Facilities Staff. Determine if any permits or other permission are required.

6. Finalize design and budget
   a. A play space designer can put together construction drawings and finalize the budget. On more complicated projects, a contractor/installer may require:
      i. Grading and layout plan (location and dimensions of all existing and proposed site elements as well as proposed elevations to accommodate drainage and contouring of the site)
      ii. Planting plan (plant name, size, location, quantity, spacing)
      iii. Site details (borders, paving, site furnishings)
      iv. Specifications (detailed written requirements for installation)
   b. When working on projects without a designer, it is important for school groups to work closely with district staff to ensure written specifications and directions are provided to installers and contractors.
   c. Discuss and develop with school district staff a maintenance and safety inspection plan to ensure the long term viability of the play space.
   d. Obtain final approval with school district staff.

Implementation
7. Coordinate build
   a. A play space designer can work with the school district, contractors, equipment installers, and volunteers to coordinate construction. Permits may be required and should be coordinated through school district staff. For smaller projects, a school group may decide to coordinate construction directly with a contractor or equipment installer.
   b. School district staff will likely require a playground safety inspector to review the constructed site and issues any approvals.
   c. Consult http://www.allabilitieswelcome.ca/Playspaces/files/PlayspacePolicyTemplate.pdf for more information on construction procedures for equipment installation.

8. Project use
   a. Ensure that ongoing maintenance is organized with school district staff and volunteers (if applicable).
ORGANIZING A WORKSHOP TO CONSULT WITH PLAY SPACE USERS

Consultation is key to ensure your play space is well used and enjoyed. Holding a hands-on workshop with children and caregivers who will be using your play space is a great way to gather creative ideas and design a space that is responsive to the needs and interests of its users. Consult with disability organizations and children and caregivers with disabilities in your community as you develop your plan. As school play spaces are often also used by the community, consider how your community’s values and needs can be actively included in the project development. A play space designer can help with this step or you can organize a workshop on your own.

Here are some ideas on holding a workshop with play space users including children and caregivers:

- Gather images of accessible play spaces to spark discussion and interest. Provide a brief overview of how play spaces can be designed to be inclusive of all children/caregivers with pictures to illustrate accessible design.
- If the group is large, break into smaller groups.
- Encourage the children and adults to design a model play space with materials you provide such as playdough, modelling clay, paper, markers, and pens.
- Ask each group to present their designs to the larger group.
- Give the workshop participants an opportunity to vote on their favourite design elements.
- The creative and innovative elements designed by the children often inspire groups to create a unique play space that goes beyond standard models.
- Summarize the ideas and develop a “design program” (goals, objectives and needs of the play space)
- The design program can then be developed into a “concept design”
What additional help is available?

- Page 31 of this toolkit includes a list of resources to support your school in developing an accessible play space.
- Evergreen is a national non-profit environmental organization with a mandate to bring nature to cities through naturalization projects. Through its Learning Grounds Programme, Evergreen provides some funding, expert advice, design tools and workshops, as well as policy and educational materials, to help encourage the greening of school grounds. [www.evergreen.ca/en/lg/lg.html](http://www.evergreen.ca/en/lg/lg.html)

What are some examples of projects that I could do on a smaller budget?

There are many ways of enhancing accessibility at your play space if you are not currently planning a major installation or renovation. Projects budgeted at under $15,000 can make a real difference for children and caregivers with a disability.

- Replace inaccessible surfacing (pea gravel, sand) in an existing play space with accessible surfacing (wood fibre, rubber tile etc.).
- Provide a curb cut/ramp into a play box.
- Add an accessible seating area to an existing play space including tables, child sized seats, shade.
- Add pathways and improve pedestrian circulation to and within the play space.
- Add an accessible sand play/and or small water play area.
- Purchase and install a few small inexpensive pieces of accessible play equipment.

If your current play space is already accessible, here are examples of inexpensive features that can be added to create an enhanced and inclusive experience for children of all abilities:

- Enhance an existing play space with natural features including boulders, trees, logs and plants.
- Create a sensory garden with colourful and fragrant plants with seasonal interest.
- Plant some fruit or shade trees.
- Create small grassy hills to encourage imaginary play.
- Add one interesting piece of public art (giant chair, interesting sculpture) to enhance your play space.
Is an inclusive play space more expensive?
A well designed play space does not need to be expensive. Often, equipment is the most expensive part of a play area, and not well used in many cases. Interesting natural spaces, trees, planted areas, seating and other features that all people can get to and enjoy can be inexpensive and built with volunteer help and donated materials. Some surface options including pour in place rubber can be more expensive than non-accessible materials (sand and pea gravel). However, when used selectively in combination with other materials, accessible surfacing provides access to the play space for all users. Striking a balance among surfacing, landscaping and equipment is crucial in creating an engaging, accessible and affordable play space.

Do children with disabilities require specialized play equipment?
An accessible and inclusive play space is designed to create varied and interesting play opportunities for children of all abilities. It fosters shared play by providing universal access to fun and appealing areas at the heart of the play space. An inclusive play space does not require that every piece of equipment be accessible to every child. When selecting manufactured pieces, however, try to choose a variety of features that are usable by children of all abilities.

Inclusive play spaces do not focus on separate stand-alone features designed for the exclusive use of children with disabilities. Keep top of mind access to the social experience of play for all children.

How much will the play space cost to build?
Costs of play spaces vary depending on equipment chosen, the overall size, surfacing, availability of volunteers and donated materials. A designer can work with the available budget and can suggest options for more modest overall costs. A phasing plan can help determine how to build the play space in phases (over time) as more funds become available. Costs may range from $8-$35 (or more) per square foot but highly depend on location and features included in the design. A redesign of a site with existing drainage and pathways may be significantly less than a completely new site.

How do we maintain an upgraded play space at the school?
Maintenance needs to be considered in the master plan and design details including planting, grading and materials. It is important to work with district staff to outline any special maintenance requirements in the design not normally undertaken by the district and to inform yourself about relevant school district and union policies and safety issues. Many schools have successfully coordinated “special” maintenance by having a PAC subcommittee organize volunteers. A maintenance manual for the new play space helps to outline specific tasks and a volunteer can ensure that maintenance tasks are assigned. Volunteers can then select a specific task and agree to volunteer for one year. The manual helps to ensure that “special” maintenance tasks are completed in perpetuity, so that as PAC members change, the special features in the play space are still maintained.

Examples of volunteer tasks include weeding planter boxes, cleaning out bird boxes, etc. Routine maintenance such as grass cutting, and safety surface renewal can be maintained by the school district. Communication and cooperation will help to ensure that the new play space is well maintained.
6) REFERENCES

- A guide to the ADA access guidelines for Play Areas [www.access-board.gov/play/guide/intro.htm](http://www.access-board.gov/play/guide/intro.htm)
- Annex H, “Accessibility to Children’s Play spaces and Equipment” and additional information on design, construction and maintenance policies: [http://www.allabilitieswelcome.ca/Playspaces/index.html](http://www.allabilitieswelcome.ca/Playspaces/index.html)
- BC Landscape Architects [www.bcsla.org](http://www.bcsla.org) has an online list of designers with skills in play space design
- Examples of Natural Play from [freeplaynetwork.com](http://freeplaynetwork.com) and [www.Playlink.org](http://www.Playlink.org)
- Kaboom.org (examples, online workshops, fundraising etc.)
- Learning Through Landscapes (UK based organization) [ltl.org.uk](http://ltl.org.uk)
- Natural Learning Initiative [naturalearning.org](http://naturalearning.org)
- Play for All Guidelines, 1997, Moore, Goltsman and Iacofano, Mig Communications, Berkeley, CA
- Play and Natural Learning Spaces Design, Construction and Maintenance Policy Template [http://www.allabilitieswelcome.ca/Playspaces/files/PlayspacePolicyTemplate.pdf](http://www.allabilitieswelcome.ca/Playspaces/files/PlayspacePolicyTemplate.pdf)
Play Space Questionnaire

This questionnaire will help you to evaluate the existing school playground and think about areas for improvement. It is designed to give you a sense of what is important in meeting the needs of all people (with and without disabilities) using the play space - including kids, educators and caregivers. If working with a designer, the answers from the questionnaire will assist the designer in understanding some of the challenges and opportunities in the play space. The questions can also be used to evaluate equipment proposed by an equipment supplier.

It will be helpful to take photos of the site as you work through the questionnaire to illustrate important site issues for everyone involved in the project.

This questionnaire is modified from the Ontario Parks Association’s “Playability Toolkit.”

Entrance to the Play Space – the entrance is important because it helps create a welcoming space for all users, and also aids in way-finding for people with visual impairments. Accessibility of the primary entrance make an important statement to users with disabilities.

1. Is there a formal entrance to the play space (archway, main path, sign, bulletin board, map, etc.)?
   • If yes, describe
   • If no, what is the transition to the play space?
2. Are there gates, bollards or other features that obstruct the entrance?
3. Is there a steep pathway, curb or other barrier at the entrance?

Pathways – are crucial in providing a universally accessible play space. People and especially those with mobility impairments can more easily circulate on wide, smooth and level pathways.

1. Is there a path connecting the adjacent street sidewalk or school to the play space?
2. Is there a path connecting elements within the play space?
3. If yes to either or both above:
   a. Is the pathway in good repair? What is the surface material?
   b. Is the pathway free from obstructions (concrete barriers, tree roots, garbage cans)?
c. Is there a steep slope to the pathway?

d. Is the width of the pathway a minimum of 1525 mm (allows 2 wheelchairs to pass each other)? If no, what is the width?

e. Is the surface texture of the play space different from the pathway (to help persons with vision impairment detect play space)?

**Play Equipment** – can provide excellent accessible play opportunities if well maintained and well configured with universal access in mind. Structures may contain a number of play components which should be evaluated for universal access. (For more information see Annex H of the CSA Playground Standards at http://www.allabilitieswelcome.ca/Playspaces/files/Annex_H_Guidebook.pdf)

1. Is there a play structure, made up of multiple components in the play space?

2. What is the condition of the structure? (ok, needs repair, beyond repair)

3. What is the total number of play components making up the structure? (ie. 3 - if there is a play panel, climbing ladder and slide). A play feature could be a panel, steering wheel, talk tube, overhead climbing bars, slide, etc. Ramps, stairs, roofs, steps and decks are not considered to be play features.

   a. How many features are elevated (accessed by a ladder, or stairs)?
   
   b. How many features are elevated but are accessible by a ramp?
   
   c. How many features are accessible by transfer steps (accessible to some users able to transfer from wheelchair to transfer steps)

   d. How many features are at ground level? (Accessible)

Annex H recommends that at least one of each type of ground level play component (e.g. swing, springer, play panel) be accessible. Table H.1 in the guidelines outlines the minimum number of ground level play components required to be on an accessible route based on the number of elevated play features provided. A play structure with less than 20 elevated play components may use a transfer system to connect to 50 percent of elevated components. A play structure with more than 20 elevated components must provide access to a minimum of 25 percent of those components. For more information consult www.allabilitieswelcome.ca/Playspaces/files/Annex_H_Guidebook.pdf.
4. Is there space on the structure for an adult caregiver to assist a child accessing the play structure?
   a. Caregiver with a disability- yes (adult with a disability can access upper area of structure to assist child) or no (adequate space or ramp access not provided)
   b. Caregiver without a disability- yes (enough space for adult to access upper area of structure) or no (space too small or awkward for adult to assist from upper area of structure)

5. Are there stand-alone play features, such as spring rockers, or teeter totters? (Stand alone features often provide good universal access, because they can be accessed from the ground surface)
   a. If so, what are they?
   b. Could someone using a wheelchair transfer to use them? (Is there a backrest? Are they about the same height as a wheelchair seat?)

6. Are there swings?
   a. What types of swings (belt swings, disc swing, tot swing)?
   b. Do any have a back rest?

7. Are there upper-body activities at appropriate heights for children standing and sitting? (Examples include low chin up bars, rope climbers, etc.)

8. Is there a range of activities providing different levels of challenge for different ages? (Examples include big and small slides or high and low decks, play houses for smaller children and challenging climbing equipment for older children)

9. Are there manipulative play opportunities like sand, water, moving activity panels, moveable objects? (objects children can move themselves are an important feature for children to experiment, discover and control their own environment)
   a. How are they accessed? (Is there an accessible route to the objects?)

10. Are there activities to stimulate the senses? (Examples include things to touch or smell. Consider whether there are colour contrasts, sounds, shade, water.)
    a. What are they?

11. Are there activities to stimulate imaginary play such as a counter, clubhouse or stage? If so, list them.
**Surfacing**

1. What are the safety surfaces under the play equipment? (I.e. sand, wood chips, rubber tiles, pea gravel, poured in place rubber, grass) Sand and pea gravel are not accessible surfaces.
   a. Under swings?
   b. At the bottom of the slide?

2. Is there wheelchair access to the area where the play equipment is located? Is there a curb cut, ramp or level access? *(If there is a raised border, or a barrier more than 1 cm high, the equipment is not accessible).*

**Play space Layout/Amenities**

1. If there are structures and play features for different age groups, are they attached in any manner or are they separate from each other? *(It is preferable to have a separate play area for younger children who have different needs)*

2. Are there quiet spaces for children who need to play quietly or observe others? *(Examples include a small play house or quiet seating area).*

3. Is there wheelchair-accessible seating, for both children and adults, out of the way but with a view of the main area of activity? *(Seating would include a space wide enough for a wheelchair located adjacent to a bench. Benches with armrests and backs are preferable)*

4. Are there shady areas to sit?

5. Are amenities including picnic tables usable by all (wheelchairs, small children?) Are they located on level firm surfaces? *(Accessible picnic tables allow for knee clearance for wheelchair users under the table)*

**Social and Natural Features**

1. What type of natural features are found on the site? *(Examples include trees, boulders, logs, plants.)* How are they used for play?

2. Is there an area where plants and other features could be placed that would enhance the play area?

3. What are some features (besides play equipment) that could be used by the school for outdoor learning? *(Examples include an outdoor classroom, vegetable garden, performance space, stormwater feature)*.