

Playgardens

DESIGNING COMMUNITY SPACES
FOR YOUNG CHILDREN

by Roger Hart, Selim Iltus and Peter Beeton

Child's Play: Designing for Children in Community Gardens is a project of the Design Trust for Public Space, with the Children's Environments Research Group of the City University of New York.

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[Frontispiece]

The kind of play not found in conventional playgrounds

PREFACE AND ACKNOWLEDGMENTS

This publication introduces the benefits of building simple, easily-constructed, play areas for young children in community gardens. It is intended to serve as a useful guide for gardeners and parents interested in creating similar areas in their own communities. It is the outgrowth of a collaboration between the Children's Environments Research Group of the City University of New York (CERG) and the Design Trust for Public Space.

CERG is committed to the development of design, policy and programs that both improve the quality of environments for children and enhance children's interaction with them. Roger Hart and Selim Iltus, co-directors of CERG, have conducted extensive research on children's play. They have concluded that community gardens, particularly in low-income urban neighborhoods, are ideal places for very young children to play. In communities where public playgrounds and parks are inaccessible or dangerous, community gardens function as neighborhood "backyards," where adult gardeners can provide a safe environment for neighborhood children. Furthermore, these green places offer diverse opportunities for play and informal social and environmental learning. In 1996, CERG approached the Design Trust for assistance in its ongoing efforts to improve children's play opportunities in New York City.

The Design Trust is a private not-for-profit organization dedicated to improving the quality and understanding of the public built environment in New York City. It funds collaborations between private and public sector design professionals to explore design and development issues confronting public architecture, infrastructure and open space development. In 1997, the Design Trust awarded three fellowships, through an open competition, to design and construct demonstration children's play areas in three different New York City community gardens. The three designers, guided by CERG's principles, were asked to create simple, durable and affordable children's areas for girls and boys up to seven years of age and to include opportunities for sand and water play as well as a shelter structure.

These three demonstration projects proved that the concept of children's areas in community gardens is sound. We hope that this publication will inspire widespread development of similar spaces in community gardens throughout New York City and beyond. Community gardeners, who have demonstrated such creativity and resourcefulness in transforming abandoned lots into vital neighborhood amenities, can apply these same talents to create valuable environments for neighborhood children.

The Design Trust and CERG acknowledge the role of many individuals in realizing the accomplishments and in overcoming the obstacles inherent in this process. We recognize first and foremost the gardeners of ARROW Community Garden, Fordham/Bedford Lotbusters Garden, and the East New York Success Garden. Our esteem and thanks go to Bill and Mary Buchen, Kate Dodd and Katie Winter, Design Trust Fellows and designers of three of the demonstration play areas. The participation of the East New York Urban Youth Corp, GreenThumb (a program of the New York City Department of Parks and Recreation), the Parks Council (now New Yorkers for Parks),

and the Trust for Public Land was essential in choosing the sites and constructing the play areas. The Design Trust gratefully appreciates the critical support of the J.M. Kaplan Fund in its funding of the construction phase, and the Arthur M. Blank Family Foundation's support of the publication of Child's Play. CERG would also like to thank the Hasbro Children's Foundation for its support in enabling them to document these prototypes and other community garden experiments for children. Caitlin Cahill, Alison King, Efrat Eizenberg and Laura Madorell have also been important participants in different phases of the project.

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INTRODUCTION

There is no better environment for young children to play in than a garden.

Public playgrounds provide equipment and landscapes designed for very active play: games and sports involving running, jumping, climbing and swinging. But, particularly in their first seven or eight years, children like to do much more: build in mud and sand, dabble in water, make pretend dinners for each other with sticks and stones, observe insects, dig for treasure and so on – all carried out with such earnestness that it often looks like work. Children are so happy in this kind of imaginative, “free play” that it can absorb them for hours at a time. But much more than happiness is at stake. Free play in a natural setting offers special opportunities for children’s development: they learn resourcefulness, problem-solving, creativity, social cooperation, and an understanding and concern for the natural world.

Natural environments such as backyards and gardens, with their great variety of living form, allow young children to freely explore a range of sensory diversity and offer fertile settings for learning and development. Children in densely-packed cities need not be denied the pleasures of the backyard or access to nature if community gardens are nearby.

The first thought people may have in inviting children into gardens is to educate them about gardening. But this is only a part of what a garden can offer children. In a community garden, children can “mess about” with the stuff of the earth, engage in fantasy play alone or with others, construct things and generally go about the busy kinds of activities that the educator Maria Montessori called the “work” of the child. This book explains step by step how to create settings for free play, either inside a community garden or in other protected community space.

As part of the research for this book, we invited architects, landscape architects and artists to design demonstration children’s areas in three community gardens. However, our instructions to them were to find ways to enable children themselves to become the designers of their environments - the goal of the designer was essentially to provide the kind of simple structure or framework that would allow children to create a world of their own making.

You do not need to be a designer or expert builder to build a great children’s environment. You do not even need to build much at all. With basic building skills and the simplest of materials, you can set the stage to enable the children themselves to take delight in a small corner of the garden, and to make it their own.



Girls building dams. “Free play provides rich opportunities for cooperative play.”

WHY CHILDREN'S AREAS IN COMMUNITY GARDENS?

The Decline of Public Play in Cities

Children living in New York City in the 21st century have fewer opportunities to play outdoors than those growing up in the middle of the last century. The heyday of outdoor public play in New York City was probably during the 1940's and 50's when city-employed "parkies" lent out equipment and kept a watchful eye for crime or bullying. In addition, although traffic was always a danger, children were allowed to play on the streets of closely-knit neighborhoods without constant surveillance by their parents. Since then, with the growing restrictions on children's freedom of movement and a steady decline in public funding for park amenities, children have had less access to public space. And concerns about traffic, crime, drugs, and the "bad influences" on the streets have meant that the freedom that previous generations of children experienced in the city has been dramatically eroded.

At the same time, the role of play in public schools has diminished. Play is increasingly being squeezed out of the school schedule and many public schools no longer have recess. The failure to recognize play as an important component of child development is even reaching down to the pre-school level.

There are now a great variety of private play solutions to fill the void in publicly-sponsored play activity. These include children's museums, gym classes, weekend camps and pay-for-play spaces. But for many families these options are too expensive and too far from home. Children living in unsafe neighborhoods are trapped inside and spend hours each day watching television and playing video games, denying them the multiple benefits of outdoor play, including the building of local friendships and community trust.

The Need for "Free Play"

Child's play is spontaneous and comes naturally. While it requires the proper environment, it does not require special toys or pieces of equipment for each kind of learning. All that is required is a place that is safe, and the availability of a range of materials that invite children to explore their environment and construct their own play scenarios. We call this **free play** to clearly distinguish it from all kinds of specifically-programmed activities.

Free play is fundamental to all domains of children's development—physical, intellectual, social and emotional. Most parents can see that play benefits their child's physical growth and health and helps in the development of physical skills. Less obvious to many adults is the value of play for the development of children's perception and thinking. In free play children can pursue their own goals for learning. They exercise resourcefulness, inventiveness and creativity in facing challenges that they themselves have set. The urge young children have to explore, touch, manipulate and experiment with their world in order to understand it is the foundation of adult imagination and creativity.



No special equipment required. "Children invent their own play in the Hanaga adventure playpark in Tokyo."

Play with others, particularly with peers, is extremely important to social and emotional development.

In free play, children learn to understand others and to develop skills of cooperation, sharing and caring. Finally, free play can also offer an important means for children to establish a sense of control over difficult circumstances. This is especially true for children with special needs. And, because natural play settings do not require the exclusion or segregation of special needs children, all children benefit socially and psychologically from this type of integration.

Unfortunately, parents are now encouraged to believe that competitive schooling at a very early age is critical to their children's success. This supports the false notion that child's play is non-productive and trivial - a "waste of time." As a result, parents schedule their children's lives more, including their opportunities for play. Even after-school programs have mainly become opportunities for more schooling. And, when children are allowed to play, adults often feel the need to guide them in ways they think will advance the children's intelligence.

In fact, children need to have free, unscheduled time to play; it should not always have to fit into adult schedules or trips. A primary feature of free play is that it is voluntary. Activity that is carried out to order, or is the subject of instruction, is not play. And, if a safe setting for free play is locally accessible, it need not be scheduled or planned.

Why Community Gardens?

Community gardens offer just such a safe setting for free play. These small semi-public areas of city blocks were once rubble and trash-strewn vacant lots. They have been rescued by local residents through voluntary activity, and transformed into green areas. Some have vegetables, some have flowers; most have both. Some are designed to produce food and some are designed more as places of beauty and relaxation, but all of them are special places where local residents enjoy working together with plants. Because community residents oversee and manage them, they are often safer than other public spaces. Many of these gardens are fenced and clean - the pride of the block.

The kind of play areas that we describe in this book could be created in other settings, such as parks or housing development common areas, but community gardens have qualities that make them especially appropriate. There are few opportunities today for city dwellers to make a creative imprint on the public realm; community gardens afford a unique opportunity to shape the local environment directly, by building and planting by hand. Moreover, community gardening is a cooperative, voluntary, civic enterprise, and children benefit by seeing adults working together in this way. A green space created by a parks department or a private play agency could not offer the special quality of community collaboration and caring embodied in these gardens.

Informal Learning in Gardens

Just as free play is of utmost value to children's development, informal learning can offer opportunities



Hovering parents. "An activity that is carried out to order, or is the subject of instruction, is not play."



Children bringing insects to show friends.

"Community gardens are excellent places for children to spontaneously develop an interest in and appreciation of the natural world." Green Oasis Garden, NYC.

that formal or school learning can never provide. Community gardens are excellent places for children to spontaneously develop an interest in and appreciation of the natural world. When children turn over a rock or poke a compost pile they uncover a host of tiny organisms that fertilize their sense of wonder. Adult gardeners serve as role models, foster values of stewardship of the natural world, and, as informal “teachers,” can be available to answer questions.

CHILDREN IN COMMUNITY GARDENS

A Children's Play Area

Sometimes when community gardeners allow children into their garden, conflicts arise. A child's idea of fun can - intentionally or unintentionally - be detrimental to the orderly growing of plants. However, with adequate planning, community gardens can provide a mutually beneficial environment for both children and adults—where children have freedom to play both without damaging plants and without constant monitoring, and adults can garden while keeping an unobtrusive watch. We therefore propose a special area just for children - their own little corner of anarchy.

The children's area of the community garden should be a mostly adult-free zone, so as to give children a sense of autonomy. Most children will appreciate the chance to be able to play with one another in a garden setting without constant adult intervention. However, while there are benefits to children having their own space and they themselves will want "secret" moments, young children do not want to be completely segregated from the adult world. In fact, this absolute separation of children and adults has been a major problem with how we have built public playgrounds. It is extremely valuable for children to be able to wander, observe, and help out in the larger garden area.

Although his book focuses on how and why to create a special children's play area, we recognize that this is just one of a variety of ways that children can participate in community gardens. Some of these other options are listed below.

Gardening opportunities for children

For children that do enjoy gardening, we recommend interspersing their plots with adults' plots rather than isolating them in a separate children's garden, because this offers greater opportunities for informal learning. Even children who do not want to garden, or who are too young to regularly manage their own plot, may enjoy specific activities like planting around the perimeter of the children's area or tree planting. The planting of a young tree can be a celebratory event that children will long remember as they observe the tree's growth over the years. We have recommended some books on the subject of gardening with children (see Section 10, Additional Resources).

Composting area

Many children enjoy the different kinds of work that take place in a garden at least as much as directly



"No Grownups Allowed." This sign was spontaneously made by Alison, age seven, during the planning for a children's area at the 6th and B Garden.



Gardening together. "Children's garden plots interspersed with adult's plots offer greater opportunities for observation and discussion."

photo: Robin Moore

tending plants. The compost area should have suitably-sized tools so that children can do composting work with adults. If possible, try to place a compost pile on the boundaries of the children's area in order to maximize opportunities to expand children's sense of wonder. There they can explore a habitat teeming with beetles, worms, spiders, and other small organisms.

A pond

A pond is a complex ecosystem and even a small one offers extraordinary opportunities for children's environmental learning. For safety reasons, it cannot be inside the children's play area. You may even want to surround the pond with a fence or wall in order to control access to it.

Gathering space

If your community garden has a gathering space for meetings, performances and demonstrations, we propose that you find ways to make the children feel that this area is equally theirs. One way to do this is to make the seating and tables of varying heights. An easily-accessible communal gathering space is a better location for staging children's events such as concerts, plays or workshops than within the small children's area. If adults start planning events in the children's area, even if they are for children, it will send the wrong message to the children about the ownership of that space.

A lawn

A lawn can be an excellent multi-purpose space for informal gatherings or for highly-active play activities that cannot take place in the children's area, like running around under a water sprinkler or playing in an inflatable paddling pool.



A pond at the Green Oasis garden. "A pond offers extraordinary opportunities for children's environmental learning."



A very small pond at the 6th and B garden. "Even a small pond offers extraordinary opportunities for environmental learning."

A gathering space. "A communal gathering space is a good location for staging children's events such as concerts, plays or workshops."

HOW TO DESIGN AND BUILD A CHILDREN'S AREA

“Undesigning” for Children

The best designs for children's areas are often the ones that appear to be the least designed. They are simple, open to many uses and adaptable to change. The goal is to design an environment that allows children to explore, manipulate and build on their own.

It may be helpful to think of the children's area as a work in progress that is never finished. What you construct is just the starting point of an ongoing process of building and rebuilding. These future changes will be of two kinds. First, the children will want to continually modify the environment, and your initial design should enable them to do so. Second, no matter how well you try to anticipate how children will use such a space, there may be a need for design corrections. For example, children may have so much access to water that the sand area is always muddy, or they may discover that the roof of the playhouse can be used for dangerous climbing. You and the children will continually need to come up with new ideas and solutions. What we describe here is a way of getting started by creating a site that has great potential for growth and change.

Although the three prototypical children's areas (see Section 8, Demonstration Projects) were created by professional designers, it is not necessary to involve one in your garden. Their designs were simply meant to lay the groundwork and provide examples for non-professionals.

Process

Different community gardens will have different ways of organizing their activities and making decisions. We have described, in the text that follows, one method of planning, designing and building a children's area. Some gardens will rely more on a small committee and others on large open meetings. Either way, everyone should be kept informed and involved – the more overall community involvement in the whole process, the greater the subsequent participation in caring for the children's area.

Step 1: Making the Decision and Organizing the Participants

Begin organizing the adults: the first meeting

The first meeting should be a festive occasion with refreshments and whatever else it takes to bring everyone out. Be sure to invite those who have children that they bring to the garden as well as those who do not and who may resent children being in the garden at all; this is a chance to begin to resolve what is sometimes a source of conflict in a community garden. Not all community gardens are equally open. For example, many are considered to be more for men than for women. If your garden needs more members, this might be a good time to bring in more people and a good time to ask, “Who is the community?” Maybe some parents with children have not even asked to join the garden because they had children! Outreach for this first meeting should therefore include a special effort to reach those parents who might otherwise feel excluded. Furthermore, remember to try to involve any parents who have children with special needs.

Until you get consensus to proceed with a children's area, it is best to meet with adults alone so you can freely discuss the pros and cons of children in the garden. If consensus for a children's area is reached, then a meeting with children should follow quickly.

This first event is an important part of establishing collective ownership of the plan for a children's area. If the big issues can be resolved at this initial event, then the group that carries out the subsequent actions will have a mandate from the larger community.

The role of children in the garden

Start with a general discussion of the role of children in the garden: how do they fit into the overall picture now and how should they fit into it. Encourage members to recollect their own favorite childhood places as a starting point. This will help them realize how important the garden could be to neighborhood children. After an open airing of the opportunities and problems suggested by bringing children into the garden, you can then present the possibility of a children's area, a separate place for free play. Make clear from the beginning that you do not wish to deny children access to other areas of the garden, but that this children's area would be a special place for the kinds of play activities that many gardeners find unacceptable in the cultivated areas of the garden. You can take the initiative by introducing some of the ideas about the general importance of play to children's development, the particular value of free play in community gardens and the opportunities for informal learning about plants and the natural world (see Section 3, Why Children's Area in Community Gardens).

Decide who will use the children's area

You should probably plan for users between 18 months and seven years. This "early childhood" period is an age range when children discover the world through exploring and manipulating materials. As they develop, children become increasingly interested in organized games. However, there is no clear line of development and, depending on what other resources are available in the neighborhood, older children may also want to use the children's area. The problem is that this older age group can easily dominate and exclude the younger ones. One solution is to make sure that there are other opportunities in the community garden for older children, such as a garden plot or even a clubroom where they can meet, play games and read.

Form a Design Committee

If this first meeting produces a general agreement that there should be a children's area, the next goal should be to get some adults to volunteer to form a design committee to plan and build the area in collaboration with the children. While this smaller group will need to take the lead, it should plan ways to involve as many parents and gardeners as possible in the design of the children's area. At the very least, the design committee will need to show its plans to all interested parents and gardeners. Parents will need to feel that the space is safe and workable. Also, if parents are involved from the beginning they are more likely to volunteer to help maintain the children's area.

The Children's Meeting

The next step is to introduce the concept of a children's area to the children themselves. It is best to explain from the start that both they and their parents will make the decisions about the design of this area. Make it clear that you will use their ideas as long as their parents think they are safe and as long as they do not cost too much.

If children are already using the garden and have found their own places to play, then you should



Photographs, by children, of their favorite spaces. "If children are already using the garden and have found their own places to play, then you should begin by asking them to show these to the Design Committee."

begin by asking them to show these to the Design Committee. Adults can work with small groups of children. Let them lead you around the garden to show you each of the sites. Ideally, you should let the children take photographs. This stresses to the children the importance of getting their perspective. These photos will be an important contribution to subsequent design discussions. When adults see that the space beneath the willow tree is a special place for children, they will more easily recall similar places from their own childhoods.

Another good exercise is for children to make drawings of their ideal play spaces within the garden. For pre-school aged children whose drawings are less recognizable, an adult can draw pictures following the children's instructions. We have found that this has the advantage of stimulating discussion among children as they describe the play features. They become quite vocal in directing the artist to fulfill their dreams on paper.

Using these different methods the children can help choose a location and make suggestions about some of the qualities or specific objects, such as a valued sitting rock or an old unused wheelbarrow, that they would like to include in their new area.

Step 2: The Design Process

Design by drawing and modeling

Sketching, drawing plans and building models are tools that will help you work out your ideas for the children's area. For example, you can use simple sketches or models to visualize possible locations of the children's area within the garden or to look at a couple of different solutions to the question of what features should be included in the children's area. Remember, modeling or drawing is not about making a perfect picture, it is to help you envision various design ideas and understand their implications.

We have found that most people find it easier to visualize design ideas in three dimensions. Models allow much greater freedom for design experimentation than pencil and paper do. Moving three-dimensional materials around is much less intimidating for people without design experience, and allows children to participate more fully in the design process. You can even build a very realistic model of the children's area directly in soil using sticks, stones, moss and other organic material to



Children describing their ideal play space to an artist. "Children become quite vocal in directing the artist to fulfill their dreams on paper."



Preparing for a planning meeting. "Another good exercise is for children to make drawings of their ideal play spaces within the garden."

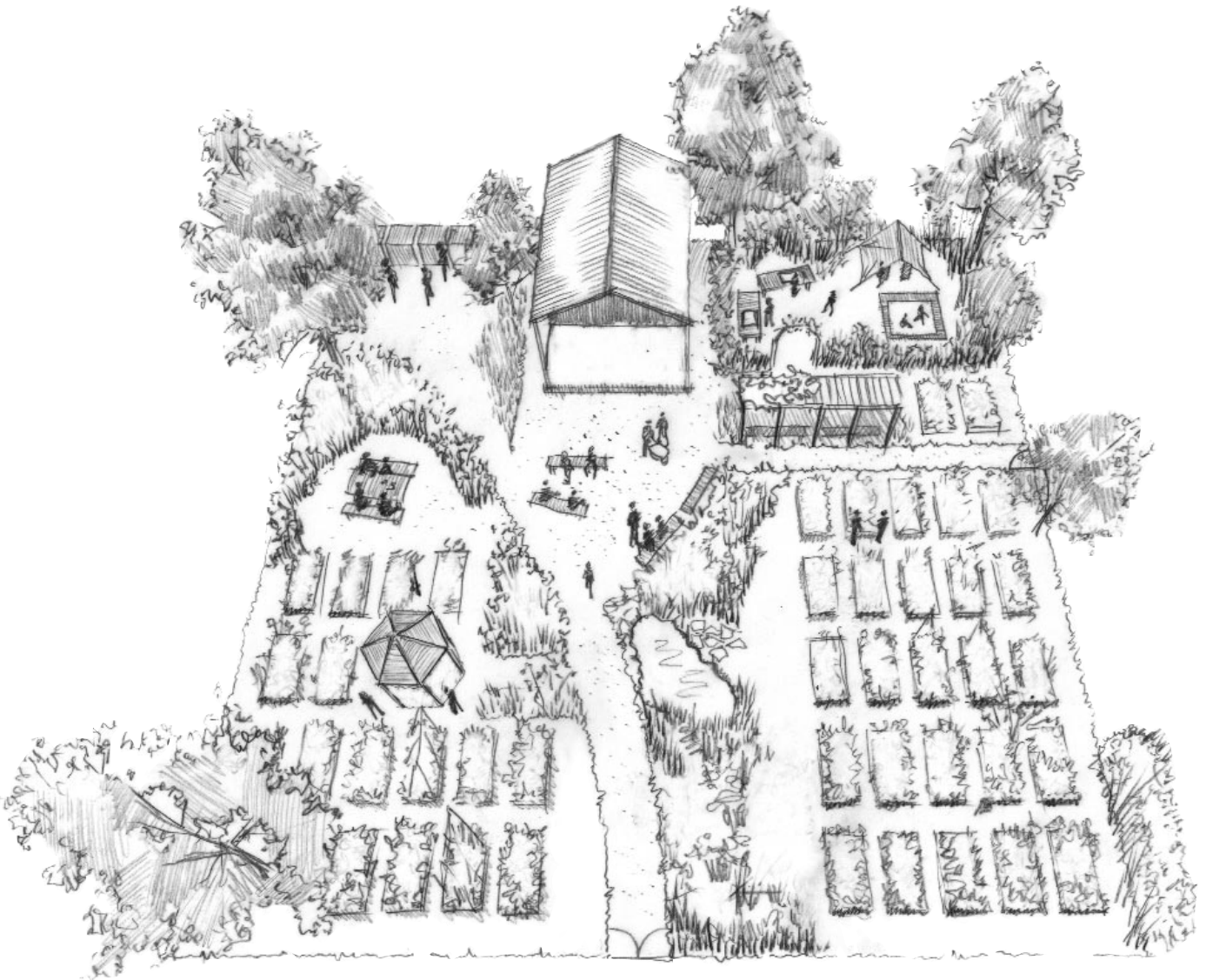


Using a model to design a children's area in Queens. "The children built this model using twigs, stones, flower petal and seeds in less than an hour."

represent different features. Representations of features that you know people will want to consider, such as small benches (made of sticks), play houses (made of blocks), and a sandbox (made of yellow card), can be prepared ahead of time for use in the model.

Make a scaled site plan

You should make your plans to scale. One option, if it is available, is to start with an existing base plan from the city. [ROGER: INFO?] You can enlarge it with a photocopy machine so that the plan can be used for group discussions. A scale of one inch to ten feet should be sufficient, but if you have a smaller garden, you could use a larger scale, perhaps one inch to every five feet. Existing structures and garden plots can be added to the sketch using different colors or shading or types of materials. Be sure to indicate what lies beyond the boundaries of the garden (i.e. a quiet or a busy street, apartments with bedroom windows, a vacant lot or an abandoned building). This scaled site plan of “existing conditions” is a good “underdrawing” over which different sketches can be superimposed.



A finished drawing of a community garden with a children's area. Working sketches and plans can be rougher.

Some of the older children may enjoy the task of adding the details of garden plots and buildings to this plan, measuring with you the distance between these features. But to be really engaging to younger children, you will need to make this plan less abstract by using picture symbols or, better yet, building a model.

Choose a location for the children's area

Finding a space in a community garden for a children's area is not always easy. Especially in small gardens, where space is at a premium, the natural tendency of gardeners is to use every available inch for their gardening work. Convincing them to give up some of this space for a children's area can be difficult. However, keep in mind that the children's area does not have to be large. Because children will still have freedom to explore the entire garden and because the children's area will not be for physically active play, an area as small as 200 square feet can work quite well. Of course a larger space is advantageous because it allows for the kinds of wild vegetation that children love.

The location of the children's area is an important decision. It should not be left up to the design committee, but should be agreed upon by all concerned and should incorporate what you have learned from the children.

Hold design workshops

The Design Committee can hold some open design workshops with gardeners and children, to ask some basic questions and to review their design ideas. Workshops can address all of the important questions: What elements will be included? In the children's areas funded by the Design Trust, we included sand play, water play and a play shelter. Which of these are appropriate for your garden? Where will they be located? What will each of these elements look like? What about a fence or barrier of some kind? At the workshops you can share the basic design principles and concepts in this book (see Section 6 and 7, Design Principles and Design Features). The Design Committee can then take the discussions from the workshops and further develop the design details of the various elements of the children's area.

The Design Committee should be sure to bring any drawings or models it has prepared to workshops. They should also let participants see the results of any work done by the children. For example, the children's photographs and drawings will give some excellent insight into what kinds of spaces they like.

Once the workshop participants have identified what some of the major features will be, they can begin to work out, in full scale on the actual site of the children's area, where they should go. You can build a temporary boundary for the site using stakes or sticks linked with ribbon or string. Objects, like painted cardboard boxes, can be used to represent the various features, like play houses or sandboxes. You can then move these objects around to experiment with different locations. You can also tread out possible paths in the soil. Working at full scale is a useful activity for both adults and children because imagining how features will look based on a small model or drawing is difficult for everyone.

By beginning the process in a concrete way, problems and issues can be raised for discussion. This discussion is important to record and consider in your subsequent design work. For example, why were parents worried about water being used by children on the site? What was said that made them feel more comfortable about this issue?

Bill and Mary Buchen, designers of the Demonstration Project at the Fordham/Bedford Lotbusters

Garden in the South Bronx, used a combination of observing children and working directly with them to ensure an appropriate design: “In order to figure out what we were going to make we really needed to familiarize ourselves with what the children would like. So we took some cues from what we saw in the garden. We saw this old swing set that [the children] had draped blankets over...and thought maybe we could use that as a sort of inspiration, and then we did a series of workshops with them...In one we had the children make drawings of the playground they would like, and at another workshop we gave them clay and paper and cloth and sticks and asked them to make some sort of boat form, something three-dimensional they’d like to play in. And from that we got this idea to make this boat with sails, and then made some models for them and showed them how it would work, and they gave us suggestions as to what they’d like to have incorporated into it.”

The final step of the design process is to develop specific designs for each feature that you have decided to include in the children’s area. The examples featured in this book may be helpful, and you should use them as a starting point. Whatever you end up designing, it does not need to be complicated. Obviously, if you have skilled carpenters in your garden, you can take on more ambitious construction projects, but always check any fancy ideas with children and keep in mind the importance of building for ease of maintenance and repair. Also, try squatting down to a child’s height to get a better sense of scale. This might help you remember the qualities that were important to you as a child. Sketch out the designs for the children’s area and any structures and make sure that they are reviewed by as many gardeners, parents and children as possible. You should be sure to explain that the design committee will evaluate the structures after completion and will not open the children’s area until they resolve any safety issues.

Step 3: The Building Process

The more adults and children are encouraged to be involved in the creation of the children’s area, the more likely they are to continue to care for it over the years. For this reason the building process should ideally include a good-sized group of volunteers, as large as is practical. It is a good idea to make some measured drawings of each of the proposed features before you actually start building them. While it is true that much of the work involved in building a children’s area does not require a skilled crafts person and can involve both adults and children, there will still be a need for some drawings, both to help you plan how much building material you will need and to coordinate the group’s activities.

The structures should require only basic carpentry tools - nothing very elaborate or expensive. While children should not be on the site while tools are being used, it is a good idea for them to review the structures as they develop. Discussions with them as they explore and begin to use them in their own way may lead you to modify the designs completely. And remember to do a thorough safety evaluation of the children’s area once it is completed.

If your group does not have confidence in its ability to build something, you can always buy ready-made water tables, sandboxes and playhouses. However, these can be expensive, and they do not usually blend into community gardens as well as



Children building alongside adults. Much of the work involved in building a children’s area does not require a skilled crafts person and can involve both parents and children.

more rustic, self-built structures. Also, parents seem to feel less “ownership” of a site with commercial structures, and thus less need to help maintain them. Furthermore, manufactured play structures discourage the constant redesign and modification that is such a critical component of the ongoing life of a children’s area.

DESIGN PRINCIPLES

Safety first

A children's area in a community garden is not a place for active play like running, jumping, and climbing - activities best kept for the playground. Moreover, few community gardens have the financial resources for the liability insurance that is now required of active play facilities. For this reason, none of the design features in the children's area should encourage this kind of play. In addition, a sign at the entrance to the children's area should clearly display rules of use and should prohibit active physical play. But, most of all, you should encourage adequate supervision by parents and caregivers.

Of course, children will often use equipment differently than it was intended. Therefore it is essential that you design with safety and security foremost in mind. No one wants to risk any harm to a child. You should create designs that make jumping and climbing in the children's area very difficult. Avoid high surfaces like roofs that drop to the ground and the use of any ladders or horizontal bars that could invite climbing or jumping.

Because these children's areas are not for active play, there is no need for rubberized safety surface. But, of course, neither should the surface be hard and unforgiving. Dirt, when compacted by playing children, can become as hard as concrete, but you can periodically dig it up to keep it soft. You can also mix the soil if it is too clayey. Also remember to have the soil checked by the city health department [ROGER: INFO?] because younger children may well ingest it.

To maximize security, and to respond quickly in the event of a mishap, the children's area should be located where adults can easily keep a discreet watch. Any fence or shrub border should be low enough to allow adults to see over it. A single entrance makes it easier to keep track of children.

Another issue to consider is the possibility of injury to children during construction. Although building with community members is essential, the use of eager but unskilled labor increases the likelihood of accidents. Be sure that tools are kept out of the reach of young children, and that adults are instructed in their proper use and maintenance. Consider adopting a policy of having at least one additional adult present whenever anyone is using a power tool. See Section 10, More on Safety for more details on safety and a sample safety checklist.

Choose the right location

The most important factor in choosing where to locate a children's area also relates to safety and security. Parents need to feel that their children are safe from both traffic and strangers. Because of the danger of a young child straying out to the street, you should not put a children's area at the edge of the garden, next to the street or near the garden entrance. It should not be possible for a child to leave the community garden without being seen by adults. This means that the place where parents tend to gather should be between the children's area and the community garden exit. Other considerations include the impact of playtime noise on neighbors, and conversely, the impact of



Safe upper level with banisters at the 6th and B Garden playhouse. In order to prevent physical injury, it is important to discourage all jumping and climbing in the children's area.

noisy streets on children's social play.

Design for changing and flexible use

The best play features will suggest limitless possibilities for imaginative games: the more you allow for modification, the more you are improving the play value of that feature. Try to avoid designing structures that dictate specific activities. Kate Dodd, designer of the Demonstration Project at the East New York Success Garden in Brooklyn, put it this way: "With city play structures, how many times can you run up and down the same set of steps and run back and forth?" Ideally, garden members, working with the children, will re-consider and change some details of the children's area every year.

Facilitate circulation within the children's area

The children's area will be small, so there will not be a lot of opportunities for a complex set of pathways. However, you should strive to create a design that allows movement around the site, rather than one that only has dead-ends. Children like making trips, and if they have wagons or small vehicle of any kind, then pathways around the site become even more important. Try to design pathways that meander and offer surprise and potentials for hiding. Kate Dodd used travel and circulation as a central element of her design: "I made a number of pathways that wrapped around and moved in the kinds of directions that weren't typical of the city grid. And places where you could get up high and places where you could be down low and where there was just this continuous [path], almost like a Mobius strip." If you do build pathways, make them wide and smooth enough for a child in a wheel chair to use.

Use appropriate building materials

Wood is the best material for structures in children's areas. It is warm and child-friendly. It is durable, inexpensive and easy to work with. Beware though: much of the wood sold for use outdoors is now pressure-treated, which means that it has arsenic in it and is poisonous. Children must not come into direct contact with it. It can only be used if it is properly coated with a non-toxic sealant or paint. Unfortunately, the safer alternatives to pressure-treated wood, like cedar and plastic lumber, are much more expensive.

Katie Winter, designer of the children's area at ARROW Community Garden in Queens, selected lumber and plywood because she needed a relatively light material for her mobile carts. She compensated for small defects in workmanship with paint, which also added bright color and prevented children from touching the wood directly. It worked well but needed at least three coats in order to get a good surface.

Plant for diversity and for practicality

Landscape designers for children's play areas in public parks often do not use plants at all, or use plants like juniper or bayberry that discourage contact because they are hard or spiky. In contrast, we strongly recommend that a great diversity of plants be planted around, and even within, the children's area (see Section 10, Additional Resources, particularly [Plants for Play](#) by Robin Moore). You can use raised beds or fences to protect more fragile plantings like perennial flowers and shrubs. In this way children can pick flowers and seeds, but the plants will be protected from trampling. If you plant freestanding shrubs in the children's' area, you will need to tie them with rubber to heavy wooden steaks to ensure their survival.

In choosing plants to surround the children's area you might want to consult one of the books on plantings that encourage butterfly and bird life (see Section 10, Additional Resources). You can also place some nesting boxes or bird feeders of different sizes in the trees surrounding the site to

encourage birds to make their homes near the children's area.

Create places that enable cooperative use by children

Some developmental psychologists argue that preschool children engage in parallel play rather than cooperative play, but with the right kind of play features and materials, children will interact and cooperate. They often begin to work together without even realizing it. Katie Winter incorporated this principle into her designs at the ARROW Garden: "I was trying to come up with ways that would encourage toddlers to interact...so every piece I designed has two different areas and usually two different heights, so that it would encourage older and younger children to work together."

Cooperative Play.



A solitary retreat. Young children all over the world enjoy crawling into small niches.

Create places that can be used for solitary retreat

Children sometimes like to retreat into quiet places by themselves. As many observers of children's play have noted, children all over the world seem to enjoy crawling into small niches. Sometimes they like to be alone in these places and at other times they will squeeze into them in pairs and play games that contrast the scary outside with the safe inside. Plantings and shrubs and small trees can be a good way of providing small spaces for this kind of play.

Design for children with special needs

If your garden has done a good job of inviting all children from the surrounding community, the play area will inevitably be used by some children who have special needs. It is not difficult to cater to these children since the area is small and is not designed for physically active play. Nevertheless it is important to make sure that children who are in wheelchairs or wearing braces feel welcome by being able to gain access to the area. The paths and entrance need to be wide enough (at least 44") and the primary surface area needs to be flat and firm. We have suggested compacted earth. It is also important to design the basic structures so that a child in a wheelchair can interact with other children playing in these settings. We have recommended a few books on the subject of designing for children with special needs (see Section 10, Additional Resources).

Provide tools, toys and other "loose parts" for children

An abundance and variety of materials and tools will encourage both creative and cooperative play. Children will use tools and natural materials in ways of their own choosing, including as props for fantasy play or to develop joint plans for action. Unlike most

Tools and loose parts. "An abundance of materials support children's creative and cooperative play."

playgrounds, which include only fixed equipment, gardens can provide a stimulating diversity of “loose parts,” things like sticks, branches, leaves and pebbles.

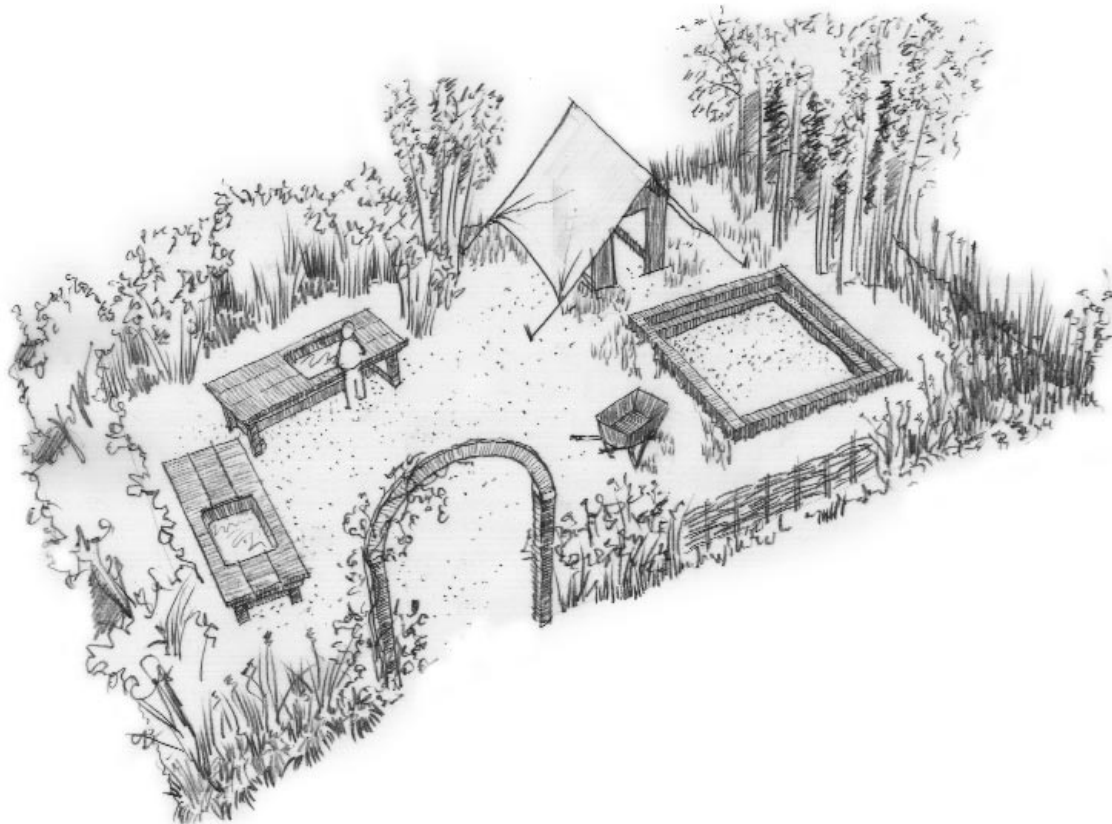
The most obvious tools are those that enable a child to imitate many of the activities that are taking place in the rest of the garden: toy spades, trowels, wheelbarrows and trailers. Special toys or equipment are not necessary. Stones, leaves and sticks, for example, become the ingredients for meals. Even recycled domestic items like pots, pans and boxes can be valuable toys. Children will probably supplement all of these with such obvious toys as diggers and tractors.

Katie Winter thought these materials so important that she built them into her designs at the ARROW Garden: “I incorporated ready-made pieces into the design that could be interchangeable. There are sieves and bowls and off the shelf items that fit in so that if you were a gardener you could have a whole set of these, and you could select different pieces that you wanted to put in, like interchangeable parts.”

Design for ease of maintenance

No matter how interesting or beautiful your design for a children’s area, if it is not carefully maintained it will quickly become unusable or unsafe. As you are designing the children’s area and the various play features keep in mind the maintenance and repair that will be required. Simple, low-cost features are often better and sturdier than fancy, over-designed equipment.

DESIGN FEATURES



An example of a children's area layout. **Sand, water** and **shelter** play features surrounded by an **enclosure** that provides a clear sense of territory for 'pride of place,' and a single **entrance** for additional security.

Sign boards

A simple, sturdy sign can highlight the entrance to the children's area, provide information and list the rules that will ensure the safe enjoyment of the area.

Information: The sign should clearly identify the children's area and any hours or days of use. It should state the garden is not liable for any injuries that may occur and should include the names and contact information of the children's area committee members.

Rules: Rules for the children's area should be developed through discussion between parents and children. The more children feel that they understand the rules and were involved in making them, the more likely they are to monitor themselves. The use of symbols accompanying any written text will help the youngest to understand. Keep these rules to a minimum so as not to undermine the idea that the children's area is a place for free play. You can put a chalkboard next to the permanent sign so that children and parents can add to the rules.

Stated rules might include:

- The area is for use by children under a certain age (say nine).
- Children using the area must have an accompanying adult in the garden.
- The area is only for "for such activities as digging, sand play, house play and so on and strictly not for active play like running, climbing and jumping."

Parent's sitting Area

Many parents will want to be able to watch their children while they play. The best way to enable this without having them hover over the children is to create a pleasant, shaded, seating area overlooking the children's area.

Entrances and fences

There are at least two reasons that a fence or other enclosure is a valuable addition to the children's area. First, we have found that children themselves like the distinction of having a place clearly identified as their own. Second, a fence helps keep children inside the play area, which both helps parents keep track of their children and reduces accidental damage to gardeners' planting beds.

Both the entrance and the fence can easily be built with children. It may only take a beginning demonstration and a clarification of the boundary line. Some of the simplest and most beautiful fence designs in the world use plant materials such as willow. Planting willow sticks in the autumn will produce a green fence in the spring that can then be trained to grow back into itself. Willow can take a great deal of abuse and is a wonderful play material for children. Alternatively, you can build a simple wooden fence and plant it with vines. Many of these "living fences" will need periodic reconstruction, but this offers a genuine opportunity for collaboration between adults and children. Other options include wooden or wire fences planted with shrubs. Berry bushes, with their thorny brambles, can also be a superb and hardy natural boundary for a children's area.

Entrances offer an exciting opportunity for children to celebrate having their own space. Designing and building the entrance should be a child-controlled affair, but there is no reason why adults should not offer suggestions.

Surfaces

Diversity should be a key principle, but compacted soil is the best overall surface. "Dirt play" is a favorite activity for children in their early years. It also allows for wheelchairs to enter the site and for the children to use simple wheelbarrows and trolleys in their "work." Soil in areas other than paths and entries should be kept loose and soft. Sand is a very forgiving surface and a wonderful play material, but it



Parents seating area at 6th And B garden. "The best way to enable this without having them hover over the children is to create a pleasant, shaded, seating area overlooking the children's area."



Weaving a willow fence at the 6th and B Garden. "Planting willow sticks in the autumn will produce a green fence in the spring that can then be trained to grow back into itself."



Entrance to the play area at the Brookfield Zoo, Chicago. "Entrances offer an exciting opportunity for children to celebrate having their own space."

needs to be covered and protected from animals. Wood chips are less desirable than either sand or soil because children cannot build or mold shapes as easily. Also, they make access by wheelchairs difficult. Very hard surfaces like concrete are not recommended.

You should also keep in mind that young children will play anywhere. If they discover that water creates great mud in a certain area, they will flood it. If they find an area of hardened earth that is good for making roads for their toy cars, they will use it. For this reason all of the surfaces in the children's area should be cleared of broken glass and the city health department should check the toxicity of the soils [ROGER: INFO?].



Playing on compacted soil. "Dirt play' is a favorite activity for children in their early years."

Trees, shrubs and other plants

In choosing plants for the children's area it is important to remember that the primary goal is to create a space for what might be called "messing about." Appropriate plants will therefore be very different from what we would consider for gardens where children are involved in gardening. The plants need to be able to withstand the hiding and picking activities of young children. Obviously, avoid toxic plants. There are over 700 plants in North America that are known to be poisonous to humans or animals (see *Plants for Play* by Robin Moore for a partial list and *The American Medical Association Handbook of Poisonous and Injurious Plants* by Kenneth Lampe for a more comprehensive treatment of this subject).

Plants for eating

It is a good idea to try to include edible plants around the play garden but these must necessarily be selected to withstand heavy trampling and rough treatment. Children find great pleasure in "discovering" berries for eating and berry bushes are particularly valuable because they are commonly thorny shrubs that must be approached carefully. In fact, the challenge of reaching for the berries through a spiny thicket is a large part of the pleasure of gathering these treasures. They require quite a lot of pruning work to keep them in check, but they will be greatly valued.

Children can be periodically shown which parts of plants are safe to eat and told that some plants outside of the children's area are poisonous. This information will readily become part of child culture as long as it is refreshed periodically by adult gardeners.

Plants for hiding and making shelters

Some plants are extremely resilient and will keep regenerating no matter what happens to them. The willow, previously recommended as a natural fencing material, is one such plant. It can also be bent into large tunnels, which then turn green with the change of season. Willow canes can be planted in one part of the communal garden and then, once they are tough enough, they can be moved into the children's area. Children also like lilac bushes and bamboo groves for exploring and hiding games, although bamboo is hard and spiky and so not particularly comfortable.

Plants as sources of building and play material

Children are likely to use whatever is around in their play. Seeds, acorns, leaves, branches and flowers all become potential play materials. Some adults may be horrified to learn that children are pick-

ing flowers and then planting them into their own miniature play gardens, but as long as they use the flowers from their own area it should be seen in a positive light – as an example of the spontaneous development of an aesthetic sensitivity. Bamboo and willow are top contenders for providing children with a source of building materials, but children should be allowed to experiment with whatever your garden has available; for example, freshly-mown grass is often valued by children.

Storage for tools and materials

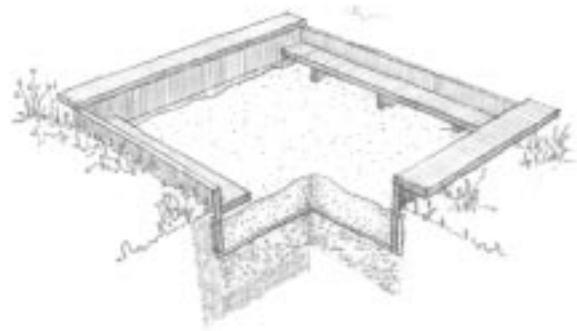
Simple tools like buckets, play spades, trowels, rakes and wheelbarrows will need to be stored safely at night. If a storage bin or shed is well designed, many children will enjoy taking items out of the shed and putting them back. The interior of the storage shed needs to be visually accessible when the doors are open, to have the storage at a height suitable for young children and to include compartments and hooks that make it obvious where different items belong. Drawings of the items in the compartments and next to each hook can make it even easier for children. You might also want to create a place for children to keep useful “loose parts” like branches or straw.



A storage bin at the Brookfield Zoo, Chicago. “You might also want to create a place for children to keep useful ‘loose parts’ like branches or straw.”

Sand for Play

Children love playing in sand and we recommend including sand play as a central element of the children’s area. Certainly earth can be an important play material and children sometimes prefer a good clayey soil, especially when wet, to sand. But soil can become compacted and difficult to dig. Sand has the advantage of always being soft and easily moved around. The easiest way to build a sandbox is to dig a pit in the ground. However, because this does not provide easy access to wheelchairs, you may consider a table for sand play, like the water tables shown in the next section.



A simple Sand Play feature. “Children love playing in sand and we recommend including sand play as a central element of the children’s area.”

It is easy to clean a sandbox if it is kept covered and protected from animals. While sandboxes can become litter boxes, a simple cover placed over the sand box each night will solve this problem. Even a wire mesh cover will do, since animals will not defecate on it. Hosing the sand down with water periodically and washing it with a solution of chlorine [ROGER: add ratio of chlorine to water] once a year should be sufficient to keep it hygienic.

The sand area should:

- Be of sufficient size to allow children to work together in small groups.
- Be well drained.



Train with sand wagon in a garden in West Farms, the Bronx. “Creative community gardeners designed their own unique way of providing for sand play.”

- Have a simple cover for daily use by garden managers to guarantee that pets or rodents do not defecate in the area (this cover should be attached to the sand feature so that it will not disappear or be used for other purposes).
- Be at least partly shaded.
- Have a flat shelf that can be used either as a seat or as a place for making things.



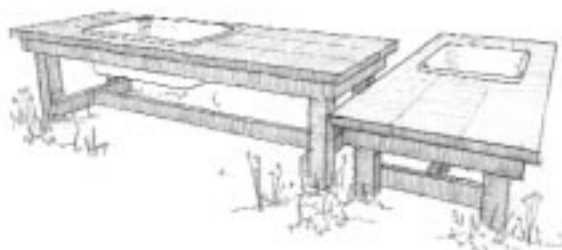
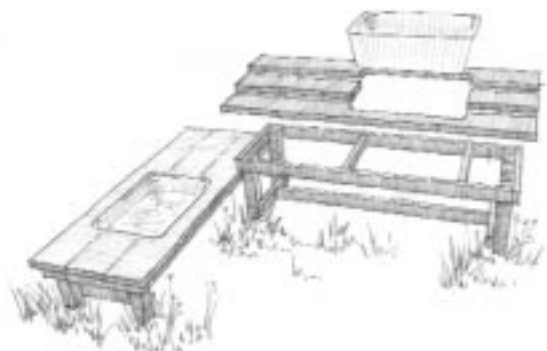
Digging in the mud pond at the 6th and B garden. Dabbling about in water is one of the activities young children value the most and one that is commonly denied to city children in their own homes.”



Playing with mobile water cart at the ARROW garden. “Water need not be supplied in large quantities for it to be fun, simply fill a large container and allow children to collect small quantities of water from it using pans or cups.”

Water and Mud for Play

Dabbling about in water is one of the activities young children value the most and one that is commonly denied to city children in their own homes. However, water from a faucet can easily get out of hand, with young children ending up like Mickey in “The Sorcerer’s Apprentice” sequence in Fantasia. To avoid flooding problems it is best not to have a faucet, or automatic water pump. If a faucet is used, it must have an automatic cut-off and a real drain. A hand operated water pump is a feature that children greatly enjoy, but should only be considered if a proper drain can be constructed. Ideally you would create opportunities with moving water for channeling and damming, but this is not usually possible without considerable work to create a drainage system. But water need not be supplied in large quantities for it to be fun. Simply fill a container and allow children to collect small quantities of water from it using pans or cups. Remember to keep the water container clean and covered when not in use.



A simple Water Play feature. “The removable tubs are easy to empty out on a daily basis and easy to clean.”

Whatever you plan, young children will find a way to create mud! If you want to control this somewhat you might want to create a mud or water table. A water table will allow children to splash around in water with their hands. Such a table need not be complex. We have shown a water table with removable rubber tubs. These inexpensive tubs are easy to empty out on a daily basis and easy to clean.

In the spirit of discouraging active play in the children's area, we do not recommend sprinklers or paddling pools. Of course, some community gardens, especially those with lawns, will occasionally turn on a faucet or put out an inflatable pool for play. Children love this and as long as there is good adult guidance there is nothing wrong with it. But if you do allow this kind of activity, you should be aware that you might be changing the image of the children's area. This may introduce difficulties in the future regarding children's expectations and create difficult issues surrounding liability for accidents. Therefore it is best to keep such special water activities out of the children's area so as not to send the wrong message to children or their parents.

Play shelters and niches

Children like to play in different size spaces. Some of the best of these are not built by anyone, but "found" by children in trees and shrubs. Consider using trees and shrubs or woven branches to create spaces for children to discover and occupy. Making the natural building materials from the garden available to the children is a good idea – in particular, recently cut tree branches can be useful for building or for weaving small structures. If you want to build a more substantial "playhouse" that can be permanently available, try to create a multi-purpose structure that the children can add to and modify.

Be sure to keep the size of children aged seven and under in mind when you are building the play shelter. Building small is also a powerful reminder for older children that this area is for younger children. That being said, the play shelter needs to be large enough for children to carry out activities with one or two friends. It is a good idea to build a



A water table at the Brookfield Zoo, Chicago. "A water table can also be used for sand or mud play and is more easily accessible to children in wheelchairs."



A playhouse in a Bronx garden that was occupied even before it was finished. "Building small is a powerful reminder for older children that this area is for younger children."



A simple playhouse feature. This simple playhouse, built out of standard lumber and plywood, can be extended by the use of colorful tenting.

structure that can be used in a variety of ways and that has more than one entrance. The “house” should enable a wide range of possible uses in socio-dramatic play, such as playing “house”, “shopping” or “school.” For example, an opening in the side of a playhouse might be used as a window or, if it has a ledge on it, the children might use it as a storefront or as a work table. At least one part of the structure should be enclosed so that simple furnishings can be kept there, out of the rain. We have drawn an example of a simple playhouse that can be built entirely with plywood and two-inch by four-inch timber using simple tools.



A simple play shelter woven out of branches. “Making the natural building materials from the garden available to the children is a good idea – in particular, recently cut tree branches can be useful for building or weaving small structures.”

Budget

CUT-LIST AND BUDGET FOR EACH SKETCH.

Furthermore we want to stress that it is easy to create very inexpensive children’s areas. A valuable imaginative play area can even be created at absolutely minimal cost by simply marking out an area in a garden with good soil and filling it with a diversity of natural materials.



Playhouse at the 6th and B Garden. “...continually modified and ornamented by children and gardeners over time.”

DESIGN EXPERIMENTS

In this section we describe briefly the three gardens that were designed by the Design Trust competition winners. These examples, by three different designers, illustrate that there are many ways to build a children's area. The designers' stories and design experiments are intended to inspire your group to create something unique, suited to your group's taste, budget and purpose.

The Design Trust and the Children's Environments Research Group (CERG) worked with Green Thumb to find three appropriate sites for the project. The gardens that were selected all had easy access to water and electricity. They had a strong and democratic leadership in place. Finally, the gardens were all open to children and had a good spot for a children's area.

Designing and building each of these children's areas was a fully participatory process. The designers (funded as Fellows by the Design Trust) worked with the gardeners and children to select the site within the garden, do the design and, with the help of volunteers, build the structure. After introducing themselves to the gardeners and learning about the specific issues for each garden, fellows conducted workshops with garden managers and children to brainstorm and develop design ideas.

Each design aimed to 1) be popular with children, 2) encourage imaginative play, and 3) inspire similar efforts in other community gardens around the city. The three resulting play spaces were very different from one another, due to the variations in the location and size of the gardens as well as basic approaches among designers. When evaluated in context, the finished structures each have successful elements as well as aspects that fell short of expectations.

ARROW Garden

Astoria, Queens

Designer Katie Winter

Astoria Residents Reclaiming Our World (ARROW), a Queens community group, founded their garden in an old storage yard in an ethnically mixed industrial/residential neighborhood with very little existing open space. In addition to garden plots, the site has an old garage with high ceilings and big bay doors running across the rear. The Borough President and local Council member allocated funds to renovate the site, including the big garage, which ARROW planned to turn into a community center with children's art studios. This garden is a City-owned park managed by local community groups, significant for its unusual architectural characteristics, its multitude of non-traditional uses (park, community garden, and community center all rolled into one), and its special focus on children (garden plots for kids, a children's play area, and children's art studios). Because of the imminent plans to completely renovate the site, designer Katie Winter faced a logistical challenge: how could she design a children's play area that would not be destroyed during renovations? Her solution was to build a portable children's area on wheels that could be easily moved out of the construction zone. These are also valuable prototypes for any community garden group that feels they cannot leave anything on a site due to fears of vandalism, or wishes to remove the children's play equipment during winter months.

Katie designed a sand cart, a water cart, and a playhouse/stage on wheels that children can use as separate elements or link together in a number of different ways, an activity that in and of itself affords the children a rich spatial experience. In addition, these mobile elements can be stored in the rear garage, preventing unsupervised play or vandalism at nighttime. They can also be used inside the art studio during cold or wet weather and, on pleasant days, easily moved outside and wheeled to wherever parents are working or hanging out. The carts are made of brightly--painted marine-grade plywood and use very simple construction techniques to make them easy for gardeners to replicate. Katie topped one of the carts with an arrow-shaped weathervane to link it to the identity of the garden. The portability of these designs would allow them to be arranged in different locations and configurations in any garden.

The dedication of the new children's play area at Arrow Garden in Queens by Parks' Commissioner Henry Stern.

Katie's intention had been to stimulate the children's curiosity about physics and mechanics and on the day of opening that is exactly what the sand and water carts did. On the water cart, the kids poured water back and forth, using the various tubes, pumps, funnels and containers. On the sand cart, they pushed sand around, modeling it into shapes and experimenting with the different chutes, buckets and sieves. Meanwhile, in the mobile playhouse, children gathered, talked, play-acted, and made the little clubhouse their own.

East New York Success Garden

East New York, Brooklyn

Designer Kate Dodd

The Parks Council (now New Yorkers for Parks) working with a local partner, the East New York Urban Youth Corps, founded one of their Success Gardens in East New York. Several adjacent empty blocks were developed as Nehemiah Housing, and the Parks Council and Urban Youth Corps was determined to make their garden, which is immediately adjacent to an elementary school, the center of the newly redeveloped residential neighborhood. Until recently, the garden was surrounded by block after block of vacant lots (now filled with new 2 and 3 story multifamily housing), and the sky was absolutely expansive. Like the ARROW garden, it is actually a real New York City Park under the management of a not-for-profit organization, in this case the Parks Council.

The Parks Council had already developed a master plan for the East New York Success Garden, which is located on a large, L-shaped plot at Alabama and Livonia Avenues in East New York, Brooklyn. A large pond/natural area was already built on one the arms of the “L” and a stage/picnic area on the other. The community garden and the children’s area were to be in the middle, in the joint of the “L.”

East New York Success Garden Plan and drawings
of the Children’s Area

Designer Kate Dodd had the most spacious site, and her children’s area is very ambitious. Her design is a combination of landscaped slopes, small hills, and circuitous pathways. It contains many intriguing elements, including a maze for water, fossils buried under the sand, sifters and funnels rotating around a pole, grade changes, and a children’s garden. She

put in the foundations late in the fall of 1997 and worked in the woodshop with local school children during the winter of the same year. Construction was carried out over the summer but sadly the management of the site ran into serious problems and the community garden had to be closed. We have included the design in this publication anyway because of its innovative features.

The Lotbusters Garden

Fordham/Bedford, The Bronx, New York
Designers Bill and Mary Buchen)

The Lotbusters garden is located at the corner of Bainbridge Avenue and East 193rd Street in the Bronx. This is a heavily residential area right off the Grand Concourse. This traditional community garden is run under the auspices of Operation GreenThumb on city-owned land. Located in a heavily built-up residential neighborhood right off the Grand Concourse and East Fordham Road commercial district, the garden is fairly small and very beautiful, with a wild and romantic look. It is run by two committed local women, both of whom have children. This garden's shoestring nature makes it more typical of New York City community gardens than the ARROW garden and East New York Success Garden, which both have much more sophisticated organizations behind them, and makes it especially useful as we try understand obstacles to the creation of children's areas in gardens across the City.

A tent-like structure, previously built spontaneously by the children, was an inspiration for the design

After first observing how the children currently used the garden, Bill and Mary Buchen worked very closely with them, leading drawing and model-building classes on the site. A boat emerged as the unifying theme but they were determined not to give it a literal boat form, but instead allow for the structure to take on several forms (depending on the deployment of various sheets of fabric and fold-out gangways). The three prototypical elements are housed in three separate wooden boxes/low platforms (a larger central rectangle and two triangles, one on either end of the rectangle) and two "masts" with whirly-gigs on top of them. The tops of the boxes fold out. The central rectangle holds a sand box and containers for storing tools and toys. One of the triangles contains a host of colorful sheets that can be attached in unending combinations to the boxes, masts, and nearby hooks using bungee cords. The last triangle holds a water play area. When the tops are folded-out, the three boxes can all be connected to form a large platform/stage, and when folded-in, they look like covered gardening beds. Overall it is an easily constructed and successful design. The ship, which is made out of wood, has two masts where fabric sails can be

Completed design of the sailboat play structure at the Lotbusters garden

attached in different configurations. Several flaps open up to reveal the sand play area and storage compartments. The flaps also create small ramps that enable children to climb on the ship.

MANAGEMENT AND MAINTENANCE

The greatest factor influencing the success of a children's area is not its design but its management, maintenance and upkeep. Because a children's area is never really finished, management is also in many ways a continuation of the design process. Weather, use and age will take a toll on the sturdiest of structures. If the area and its structures are not managed and maintained by someone, they will become unsafe and unclean and parents will prevent their children from using them. It is therefore essential to form a management committee of adults. If this committee ceases to be functional or effective, the children's area will gradually, but surely, fall into disrepair and children will no longer use it.

The management committee will need to develop a maintenance checklist, which might include, in addition to seasonal planting, repainting, and winterizing, the following regular activities:

- Check for broken glass, animal waste, trash, toxic plants or plant debris, damage by vandals, displaced surfacing, broken equipment, chipping paint, puddles of water and insect hazards.
- Check that all hardware fasteners, permanent coverings, or connecting devices are tight and cannot be removed without tools.
- Rake the sand and check it for cleanliness. Send sand samples to the local health department when in doubt about its cleanliness.
- Soak the sand area periodically at night before covering it in order to clean it and to make it more valuable as a play material.
- Cover sand area every night to protect it from animal defecation.
- Drain water from water tables or other containers each night to maintain hygiene.
- Sweep or rake the open areas of the site to remove any sharp objects
- Observe changes made by the children to the site. Try to think of ways to improve the area based on these changes (for example, if children have been removing stakes from garden plots in order to build things, then make a pile of wood for them to use inside their area).

MORE ON SAFETY

Throughout the United States, public play facilities for children are constrained by the fear of lawsuits. For this reason we have strongly recommended that the children's areas of community gardens forbid physically active play and not include play equipment designed for it. While your area will not include standard play equipment (swings, slides and climbing frames), you could even consider not using the word "play" to describe these new kinds of spaces. The word "play" is often narrowly conceived as running, jumping, climbing and swinging. The use of this word could be construed as allowing or condoning this type of activity. Whatever you decide to call the area, it is very important that you have a sign at the entrance to the children's area which strongly and clearly reminds parents and children that it is not a place for physically active play. Supervision is even more important. A policy of requiring that a supervising adult be in the garden while children use the children's area should be clearly stated and enforced.

The U.S. Consumer Product Safety Commission has established voluntary guidelines for equipment and surfaces of play areas. Even if not designated a "play area" your children's area should comply with the recognized standards for children aged 18 months and older and with the relevant sections of the "Handbook for Public Playground Safety" by the U.S. Consumer product Safety Commission (www.cpsc.gov/cpsc/pub/pubs). If you want further information you can probably find it via the National Recreation and Parks Association (www.cprs.org/pdf/NRPAPPlaygroundSafetyPublications) and the National Program for Playground Safety (www.uni.edu/playground).

A Sample Safety Checklist for a Children's Area

This checklist has been extracted from a variety of sources and the authors' experience. The authors cannot accept any liability associated with the assessment of your particular children's area. A committee of responsible adults needs to inspect and maintain the children's area on a regular basis. One of this management committee's primary responsibilities will be to ensure that children do not start using the area for active play. Safety checks need be done at least once a month. Ideally, different people would do the safety checks every time because multiple eyes are more likely to spot hazards. If you ever feel that the children's area committee is no longer taking the management and maintenance of the area seriously, we strongly recommend that you find a way either to change this or to formally close the children's area.

- Inspect all free play features and other constructions for dangerous or run down conditions.

- Look for splinters, sharp edges, pinch points, peeling paint, loose pieces and other dangers.
 - Look for exposed bolts, nails and hooks.
 - Make sure that surfaces are smooth, corners are rounded, spaces cannot trap fingers or heads.
 - Check that any hinges or joints are covered (to prevent pinched fingers)
 - Check that all structures are still sturdy
 - Check that any pressure-treated wood is adequately covered with non-toxic paint or varnish.
 - Make sure there is nothing in the area that allows a child to climb to a dangerous height.
 - Check that sand, water, and other “play” materials are clean.
 - Make sure that any sand is covered and protected from animals when not in use.
 - Check that guardrails or protective barriers are used to prevent falls off elevated platforms (for preschool children, elevated surfaces more than 20 inches high should have a guardrail; those more than 30 inches high need a totally enclosed protective barrier)
- Inspect all toys or tools to make sure they are safe and clean.
 - Remove any plastic bags, balloons, or similar items.
 - Make sure infants or toddlers are not exposed to choking or drowning hazards (like buckets or small toys).
 - Make sure that rugs, curtains, pillows, blankets and other similar items are flame-resistant.
 - Check that any storage chest or bin either has air holes or no lid.
- Inspect the entire children’s area thoroughly for dangerous or unclean conditions
 - Make sure the area is free of litter and hazardous items (like toxic plants or cat feces).
 - Check that the fence and enclosure are in good repair.

ADDITIONAL RESOURCES

Internet

Community Gardens, Children and Free Play

American Community Gardening Association: www.communitygarden.org

Children's Environments Research Group: www.cerg1.org

Green Thumb, The Department of Parks and Recreation, New York City: www.greenthumbnyc.org

Children, Youth, Environments (free electronic journal): www.cye.colorado.edu

Natural learning: www.naturalearning.org

The International Play Association/USA - www.ipausa.org

Learning through Landscapes Trust – www.ltl.org.uk

The National Association for the Education of Young Children – www.naeyc.org

Natural Learning Inc. www.naturalearning.org

U.S. Consumer product Safety Commission – www.cpsc.gov/cpsc/pub/pubs

Designing for children with special needs:

Plae Inc., Berkeley, California: www.migcom.com

Boundless playgrounds – www.boundlessplaygrounds.org

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HOW ABOUT D A GREAT INSPIRATIONAL QUOTE OR SOME TYPE OF BY-LINE LIKE: “HAVE FUN, BE SAFE, LOVE NATURE” HOPEFULLY WE CAN COME UP WITH SOMETHING MUCH BETTER!

The Design Trust for Public Space

The Design Trust for Public Space is a private nonprofit organization dedicated to improving the quality and understanding of the public built environment in New York City. The Design Trust funds collaborations between private and public sector design professionals to explore design and development issues confronting public architecture, infrastructure and open space development. www.design-trust.org

Children’s Environments Research Group (CERG)

The Children’s Environments Research Group (CERG) of the City University of New York Graduate Center is concerned with the critical analysis of children’s relationship to the physical environment. CERG assists in the development of new approaches to environmental planning, design and policy and strives to encourage programs that foster more dynamic and empowering relationships between children and their environment. CERG supports those policies and programs that improve social and environmental justice for young people and to that end conducts much of its work with low-income communities in the United States and overseas. CERG’S training and professional expertise extends from psychology and the social sciences to environmental education, architecture, landscape design, and urban planning.

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