PARTICIPATORY PLANNING AND DESIGN OF RECREATIONAL SPACES WITH CHILDREN

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Résumé

Donner la possibilité aux enfants de participer à la société est une priorité de moins en moins contestée. Cela a des implications importantes pour tous ceux qui font de la recherche, élaborent des projets et travaillent à des aménagements pour les enfants. Il n'est plus guère suffisant d'observer les enfants pour comprendre leurs besoins: il faut les écouter. Cet article décrit certains concepts qui guident notre groupe *The Children's Environments Research Group* dans les projets d'espaces récréatifs pour les enfants. Pour ceux qui décident d'impliquer les enfants il y a souvent une tendance à romantiser les capacités créatives des enfants et de maintenir les projets des enfants séparés de ceux des adultes. Cet article prend position en faveur d'une collaboration entre tous les âges pour le développement communautaire. Il est fait mention d'exemples de projets participatifs d'aménagement de terrains de jeux extérieurs dans la ville de New York où, à cause de l'augmentation de l'angoisse des parents pour la sécurité des enfants et à cause de problèmes de financement de la Municipalité, il y a une crise dans la création d'espaces publics.

Abstract

The growing recognition of the value of enabling children to participate in society has important implications for all of those who research, plan and design environments for children. It is no longer sufficient to observe children in order to understand their needs; one must listen to them. This essay describes some of the concepts which guide The Children's Environments Research Group in the design of children's recreational settings. For those who do involve children there is often a tendency to romanticize their creative abilities and to keep children's designs separate from those of adults. This paper argues for collaboration between all ages in community development. It uses examples of work on the participatory design of outdoor play spaces in New York City where, because of a growth in parents' fears for children's safety and municipal funding problems, there is a crisis in public space provision.

There is growing recognition of the value of enabling children to participate in society and especially in "all matters affecting the child" (United Nations Convention on the Rights of the Child, 1990). This has important implications for all of those who research, plan and design environments for children. It is no longer sufficient to observe children in order to understand their needs; one must listen to them. This essay describes some of the concepts which guide us in the design of children's recreational settings.

The methods presented here are the result of The Children's Environments Research Group's participatory work with children on the planning and design of outdoor play spaces in Harlem and the Bronx, New York City. During this decade, the collapse of public space in the USA has become so severe due to growing fears for children's safety outdoors and reductions in public park and playground staff (Hart, 1986, Gaster, 1992) that it has resulted in the rapid creation of a variety of paid private play spaces and activities for and by the middle classes. There is of course no such alternative for low-income families. This is the reason why we directed our efforts towards the development of community controlled public play and recreation spaces in low-income neighborhoods. In these inner city neighborhoods, with serious security issues, participation by children is essential. In the West Farms section of the Bronx, one of the poorest Congressional Districts in the USA, the high levels of crime and drug dealing and use creates a hostile environment not only for parents with young children but even for the teenage residents. Many vandalized and abandoned playgrounds and basketball courts in the neighborhood are the remnants of past attempts by the New York City Department of Parks and Recreation to build and maintain isolated recreational environments developed with little community participation. Numerous local play spaces are required because existing research indicates that young children and their parents have long needed play spaces very close to their homes, both because of the frequency of their desire to play and parents' busy schedules (Hart, 1986; 1987; Moore & Young, 1978). Because of the deterioration of neighborhood security, and consequent problems of safe access the need is even greater to create play places close to homes and strategically located to enable parents to manage them for their children's security. As a result of this problem, our use of participatory ideology with communities seems to have become more acceptable to local authorities. The knowledge of children, teenagers and parents is now essential for the success of children's play and recreational spaces. Furthermore, the participation by children not only results in the most appropriate location and a better finished product (Childhood City Newsletter, 1981), but participation is also likely to lead to a greater sense of local responsibility for overseeing and maintaining the site.

What kind of participation?

Participation has become a catchword in many play design projects but this usually involves only a token involvement for the children; commonly consultation through drawings, but with no feedback about the use of their ideas. We conceptualize children's participation in terms of their developing competence. A fundamental

principle is to make the planning and design process transparent to everyone and to be very clear what children can choose to be involved in deciding and acting upon and what they cannot. The problem comes when people involve children in ways which involve deception. This is often because adults grossly underestimate the competence of children. As a result children suffer what we call "manipulation", "decoration" or "tokenism"; the bottom three rungs on the *ladder of participation* (Hart, 1992). We feel that children's participation in design needs to correspond to one of the five types of participation depicted on the top five rungs of the Ladder: "assigned but informed", "consulted and informed", "adult-initiated with children's participation", "child-initiated with children's participation" and the highest rung -- "child-initiated with adult participation". Ideally, there should be opportunities for participation by any child at the highest level of their ability. It is important to recognize that not all children have the ability or desire to participate at the same level. Facilitators careful to select age-appropriate methodologies, but most of all, to offer a wide range of choice in ways of being involved from planning to design and building and through the use of a diversity of media -- verbal, written and visual.

Educating the adults

As the facilitators of the design process, we always need to work within an established context of organizations and institutions such as community groups, schools, housing projects and government agencies. These organizations, which are often governed and run by adults in relatively non-democratic, non-participatory ways, play a crucial role in the design and planning process. In order to be successful, any form of children's participation needs to be supported by and carried out with the collaboration of these adults. This means that we often have to educate the adults about the children's ability to take part and why it is important. For those adults who already support the involvement of children there is often an unfortunate tendency for them to believe in some kind of innate, greater creativity of children and the need to leave them alone to reveal this creativity. We feel that this results from adherence to a romantic notion of childhood. Certainly there is a need to allow children time alone to generate ideas but our goal is to maximize children's abilities to collaborate with people of all ages and all types. More commonly adults need to be educated early in the process about children's capacity to plan and design. This can usually be achieved, by illustrating previous children's work through slides or film to the adult audience.

The challenge for facilitators of participatory design and planning projects begins with the need to establish a forum where both children and adults from the community can share ideas by respecting each others' expertise. This process may require a lengthy phase of interactions with the adults who hold the decision-making power in their hands. In order for all the participants to stay with the project it is important for them to agree on each step of the planning and design process at the start of the project so that both adults and the children are clear about their respective roles and responsibilities. For example, in our work involving the design of public

elementary schoolyards, we have found that school principals need to know that the participatory design process does not mean that they have to surrender all of their power to veto some of the decisions (Hart, Iltus & Katz, 1991). Similarly, students, teachers and parents do not have disillusions that they can have anything they want in the final design.

In summary, most participatory design projects will need an "education" phase where on one side the adult decision-makers are educated on the importance of children's involvement and on the other side the facilitators learn about the realities of the social and physical environment of their project. Once having successfully completed this however, achieving children's participation on future projects in the same community becomes much easier.

Democratic process

A critical step is the issue of representation. It is important that the facilitators familiarize themselves with the politics of the neighborhood. As outsiders, it is important for them not only to be accepted by the community, but also to generate confidence by being seen as independent from the restrictions of local politics. The success of the designers in involving a representative population from the community can be severely restrained if they are perceived as acting for a particular interest group.

In a participatory design project it is not possible, neither is it necessary, to achieve equal representation by all children. Actually some children may not wish to participate at all. However, it is important to give equal opportunity to all children for participation. Equally important is the need to make the process visible to all the potential users of the spaces to be designed, so that each child has the opportunity to evaluate and comment on the designs generated. Various methods can be used to achieve wide scale involvement: drawing competitions, exhibitions, suggestion boxes, or organized events. It is important that these efforts include the publicizing of the project and are periodically updated to inform other children and adults about the progress of the project. During our work in the design of one schoolyard in Public School 67 in the Bronx, we achieved great visibility by displaying a large scale model of the school and the proposed schoolyard designs in the main hallway of the school. The model was accompanied by brief descriptions of the proposed designs and suggestion sheets.

In addition to the display model, all students in the school were asked to make drawings of the issues to consider and design ideas for their new schoolyard. Even though children's drawings is the most common methodology that designers use to obtain children's ideas, it suffers from two critical drawbacks. One is the constraint of most children's limited drawing abilities and the other is that the drawings are very open to adult interpretation. We reduce this problem by annotating the drawings with the children. In designing the schoolyards in Public School 67 in the Bronx for example, teams of architectural students entered the classrooms once the drawing

exercise was completed and engaged each child in conversations regarding their drawing. During these sessions, every element on each drawing was identified and annotated by the teams and general comments by each child about his/her drawing were documented on the back of each drawing.

Deciding on who among the children will participate in the actual design process is a complex issue. Most methods of design participation, such as model building, drawings, simulations and collage require a limited number of children so that a meaningful and productive discussion, negotiation and decision making can take place in a group workshop setting. In most institutions and settings, certain children are repeatedly selected by the adults as the class representatives. These children are usually the most articulate and have past experience in playing the role of child participants. It takes time for both adults and children to come to understand that there is a role for everyone. One approach we have used in schools is to have classes democratically elect representatives to take part in school design teams. It should be understood that it is the responsibility of these elected representatives to carry the ideas of their classmates to the design meetings and report back to their group the status and progress of the design process. The role of adults in fostering this democratic process should be limited to suggesting that the children choose a person they think might best represent their ideas and be creative about this particular issue. In some instances where we have felt that teachers were not yet aware of how to foster democratic process with their children, we have designed a competition to reveal children's knowledge and interest in the phenomenon. The most obvious way to do this is to have children draw designs for a site and use a team of independent judges to select classroom representatives for the school design team. In either case it is critical that these children are reminded that they are only representatives of their peers.

Another issue involves the empowerment of sub groups. Having representatives from each age group and gender is usually not enough for achieving a balanced representation. If a project involves a wide diversity of children, there is inevitably a danger of one or two groups dominating the process. In order to avoid this it may be necessary to conduct separate workshops with children of different age groups as well as separate ones for boys and for girls. Once each group has produced their own planning and design models, they have usually achieved the necessary confidence and knowledge to negotiate with the other groups to create a final design.

Liberating exercises

One of the key issues in participatory planning and design with children is to liberate them from the constraints of their experience with traditional designs. This may require employing some "warm-up" techniques. Especially when one has a limited amount of time with a project, showing children a series of slides or a film can often be an effective way of breaking away from thinking in an orthodox way. For example, we have found that one can introduce the adventure playgrounds concept to children by simply showing a short film in which a truck unloads a lot of lumber

inside a fenced-off area leading girls and boys to begin building their own playground with support from a play leader.

The special values of modeling for design participation

There are many different methodologies that can be adopted effectively during design and planning with children. These include collective drawings (Espinosa, 1994), photo-based collage making (Childhood City Quarterly, 1982), design games (Sanoff, 1979), full-size simulations (Moore, 1979) and modeling (Hart, Iltus & Mora, 1991, Nelson 1983). For open space planning and design projects in New York, we have used a series of modeling techniques. Models are usually larger than four meters square and can be used for all manner of topics related to community development.

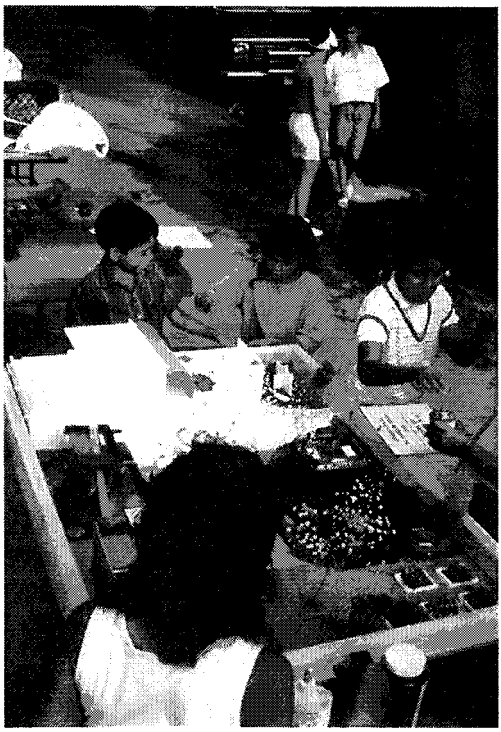

Fig.1 : Children and parents building a model on the sidewalk in east Harlem, New York

Our reasons for choosing modeling as our primary methodology are numerous. First, modeling is a very flexible methodology where by changing the materials used, it can be adapted to a range of age groups from young children to adults. For example, in the design of schoolyards we use plasticine with children in grades pre-kindergarten to first grade (5 to 7 years old), and materials such as wood, paper and wire for grades 2 through 6 (8 yrs to 12 yrs). In designing gardens with children it is ideal to work outside on the site using natural materials -- stones, twigs and flowers collected by the children. With models it is possible to engage every age group in the school in the design process. Furthermore, those parents and teachers who might have otherwise resisted this activity because of its childish nature, actively participate in the design workshops, when, instead of three dimensional building materials, they are given architecturally correct templates from acetate and cardboard that represent various design elements such as play equipment, trees, benches and basketball courts. Finally, by arranging all of these elements on the same base models, it is possible to integrate the ideas of all age groups.

Photo 2 : Caption. Elementary school students describing the type and location of their activities on a model of their Bronx Schoolyard.

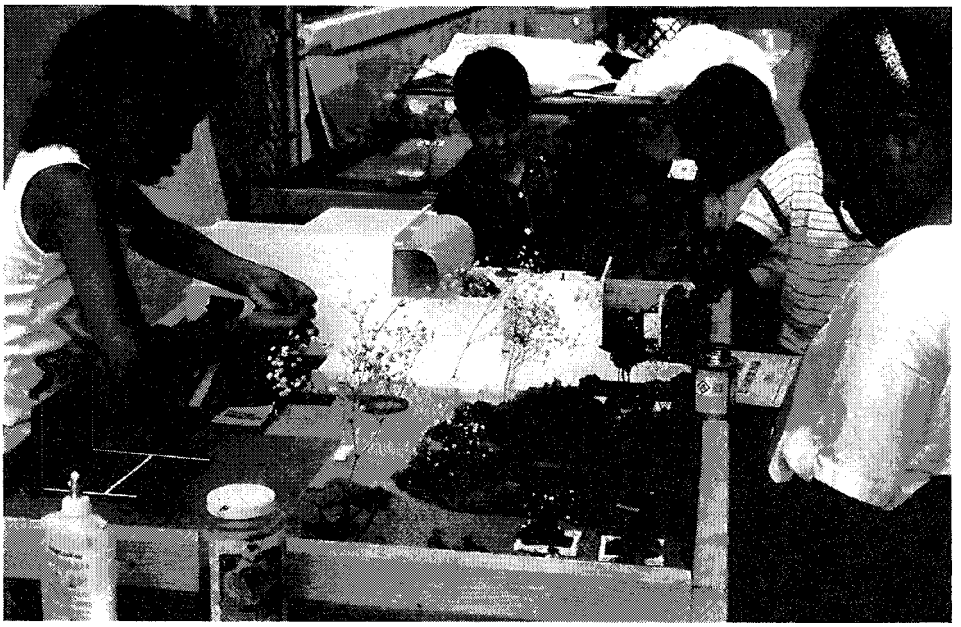

Photo 3 : Children in Harlem building a model of their community park on the street.

Modeling is less intimidating than drawing for most people feel their drawing skills are inadequate. Another major value of modeling is that it offers the greatest degree of control for the participants, allowing them to cooperatively add, manipulate and delete elements of the design. Models also help all participants to comprehend specific design ideas. For children and individuals who are not trained as designers, models solve the problem of miscommunication and allow all the parties to be able to visualize the proposed product more clearly.

Finally, a model is usually a significant product to display as the result of a participatory design project. This enables those who have taken part to see the fruits of their work and the compromises that had to be made. It also provides the means for non-participants to understand the final design and see the high degree of participation through which it was achieved.

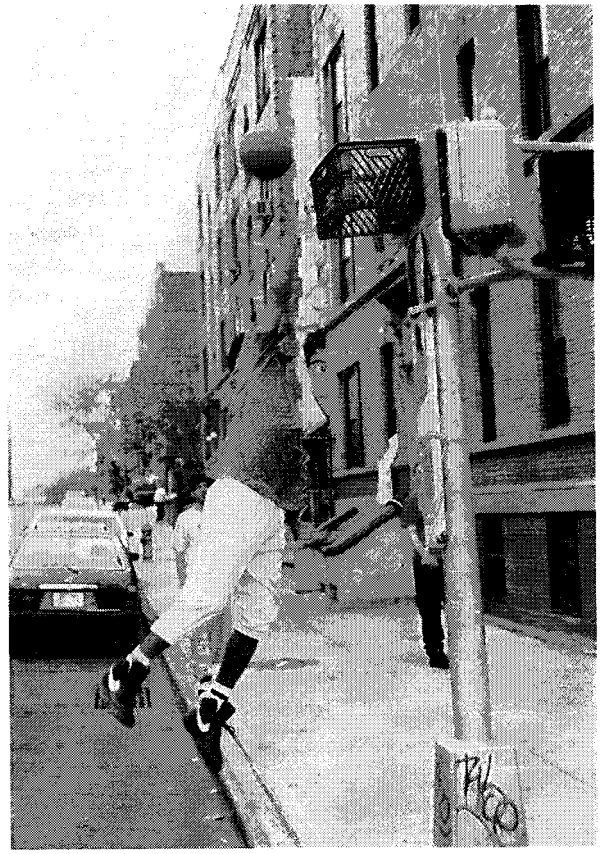

Fig.1 : Teanagers playing basketball on a Bronx street with a makeshift basketball hoop made from a plastic crate

Modeling as a planning research technique

Modeling can also be used as an effective research and data collecting tool. For example during the evaluation of the play and recreation opportunities in West Farms, children, teens and parents identified the places they visited and used and they pinpointed the dangerous areas in their neighborhood by simply arranging a variety of small templates on a large scale plan of their neighborhood. As a result of this process, different groups produced a series of maps reflecting their own mental mapping of their neighborhood. It is important to videotape the discussions so that annotations to the map can capture not only the agreements but also the differences in opinion. These maps are as important as a foundation for community planning and design as are the land-use, land ownership and physical structure maps which are traditionally used in making community open space decisions.

Negotiations among the children

The key to the success of the participatory planning and design process lies in the creative negotiation process among the children and between different groups (Francis, 1993). If the base models and all the design templates and elements are to scale, children quickly realize that it is not possible to accommodate all of their ideas within a limited space. Children also have to agree on where to locate different design elements on the site. Again, the children are encouraged to reveal the reasons behind their suggestions. For example a group of girls may insist that they have to locate the area for skipping rope in a relatively isolated part of the site, in order to prevent interference from the boys' running games. This leads to a negotiation process where children learn to trade their ideas for the benefit of the group. This consensus building process is greatly aided by the flexibility of the modeling materials but it also requires skillful mediation by a facilitator so that no children walk away from the process feeling that their design was rejected.

Conclusion

It has been argued that participatory planning and design with children enables the design of more successful play areas in cities. It also helps generate new approaches and initiatives. For example as a result of our work with children and parents in West Farms, the Bronx, New York new initiatives have been developed. Perhaps the most interesting is the emergence of community gardens as sites for young children's play. By providing play houses, sandboxes, water tables, planting beds and a wide range of tools in one of the only types of safe places where adults are gathered outdoors, a new kind of play environment has been created in New York which greatly extends the narrow repertoire of play behaviors found on public city playgrounds.

It is difficult for us to conceive how the demise of public space and the loss of "community" in the USA can be corrected without engaging in community development with community residents. We hope this paper will encourage others to recognize the importance of involving children in these community efforts and the wisdom of the U.N. Convention on the Rights of the Child:

> *States Parties shall assure to the child who is capable of forming his or her own views the right to express those views freely in all matters affecting the child, the views of the child being given due weight in accordance with the age and maturity of the child.*

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