all the rooms should be private with bathrooms. I would like to have intercoms and TV games in each room. Each room should have comfortable chairs for parents and a small table, too.

The halls should be colorful, with murals, and it would be nice to have the nurses' station in the center of the hall with the rooms all around it. When you have to go to the surgery room, it would be less frightening if that room were colorful, too, not dull.

Also, the nurses should use the smallest needles possible, and the doctors should smile.

I think the people designing a new hospital should talk to kids first.



These essays were written by children at Rhode Island Hospital in connection with the "Museum on Rounds" program, a collaborative project of the Museum of Art, Rhode Island School of Design and Rhode Island Hospital. Coordinators of this program are Carole DiSandro and Paula Most.

Each week staff and students from the Rhode Island School of Design come to the hospital for three hours to work with children on various types of creative projects, including making puppets, painting, printmaking, ceramics, and weaving. Most projects relate to works of art in the museum's collection.

Several projects have focused on planning for the new Hasbro Children's Hospital at Rhode Island Hospital. The children's essays highlight that color is an important but subjective issue. Giving children choices and enabling them to add color by selecting posters or prints for their room will give them a sense of control in an environment where they often feel powerless.



Children's Participation in Health Care Facility Design

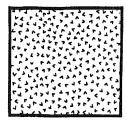
Roger Hart

Health care facility planners and designers, like professionals in many other fields have not often recognized the valuable contributions children can make to their work (Hart, 1987). There

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are, however, some special reasons that make child participation in health facility design particularly important. First, child health care facilities are, even more than many other environments, adult-controlled. The child is the passive recipient of care—often painful and unpleasant. It is necessarily so. Because of this, it is all the more important to maximize a child's control over whatever parts of the environment and experience need not be regulated for medical reasons. Second, hospitals





serve for a period of time as home for many children. The qualities of "homeness" cannot be designed for one person by another. All hospitals should therefore provide opportunities for children to establish a meaningful base for themselves.

Making the Bedside a "Home" Space

The space immediately surrounding the child's bed is probably the easiest and most obvious place to begin to improve the quality of design. Bulletin boards, with a shallow shelf running along the bottom of them, for displaying personal items, are a must. In addition, hooks in the ceiling will enable children to hang their favorite toy animals, airplanes, or collages. These simple design opportunities speak more clearly than can any verbal encouragements that children should feel free to make the hospital temporarily their "home."

Children's Participation in On-going Design Committees

Beyond the bedside, children should participate in aesthetic choices made throughout the facility. As an environmental psychologist, I am constantly asked by architects and interior designers to name the best color to use for children. My response is simply that they involve children in selecting the mix of colors. This answer is usually met with astonishment. Designers evidently believe children are seriously influenced by colors, but that they are incapable of articulating any of their preferences! This pervasive view of using the designed environment as a means of manipulating human behavior needs to be replaced by one that is liberating for hospital patients and staff alike. Aesthetic decisions should be made by those who live in an institution, with artists and architects serving as consultants and respondents rather than directors. For this reason, I

propose that children and youth representing the entire range of ages served by an institution be involved in art selection committees. If children were involved, I believe we would see fewer "super-graphics" with anthropomorphic animals in bizarre colors painted on walls, less reliance on primary colors for large surfaces, and more sophisticated, complex art and photography, even for young children. If children were members of such committees, art might even be displayed at a height which young children could see!

Video Tours and 3-D Models: Two Ways to Involve Children in Design Projects

The most common, and almost exclusive, method through which designers have obtained children's ideas has been the use of children's drawings. Although these are easy to collect, they present many problems. Most notably, children's limited drawing abilities may affect what they feel competent to draw. Such drawings, moreover, are subject to a wide degree of adult interpretation. Finally, the absence of any interaction between the children and the designers is not only a methodological weakness, but also has ethical implications, if children do not understand how their ideas may be used (Hart, 1992).

There are numerous effective ways of involving children and youth of all ages in the evaluation of an existing facility (Hart, 1992, 1987, Iltus, 1992). Many of these same methods are also appropriate for helping a design team generate a more complete architectural program for the design of a new space. Two of the most effective methods are: child-lead video tours and 3-D modeling.

Video Tours. Video tours are a simple method of evaluating an existing space

or of generating information for the design of a new space. Children (ideally of a range of ages and both genders) should lead designers through the space, pointing out, and even demonstrating, its problems and positive features. The entire tour should be videotaped, in order to make it clear to the children that this is a serious enterprise requiring them to fully express their concerns and to record completely and in context their comments. Subsequently, teenagers and even older preadolescents if they feel comfortable, should join representatives of varied medical and service departments for similar tours. These diverse teams are particularly valuable, because the different perspectives and views that are revealed during the tours are highly informative. Unfortunately, most children under ten do not have the necessary social skills of group interaction required for this method.

An especially valuable variant of the video tour is to have a child recreate, with a video an event with important design implications. For instance, a child might focus on the experience of first entering a hospital. The person filming can document the child's verbal recounting of the experience while approaching and entering the hospital, or the child can do the filming. The latter technique can be best accomplished if the child sits in a wheelchair and tells the person pushing where to go. If the video camera lens is permanently set on a wide angle, the result can be a smooth report that offers valuable insights.

This technique was used effectively in another context to capture the impact of the school environment on a young boy. He climbed what appeared to be endless, steep steps with the large school building looming beyond. He panted while he talked about his disorientation and fears when entering this school for the first time. The videotape had particular intensity because of the boy's direct involvement in its production and narration.

3-D Modeling. A second method, one that requires more preparation by the designer, is to build scale models with movable parts of an existing space. This allows children to manipulate the parts to express problems and possibilities. This method can be very effective with young children, especially when used with dolls of the same scale, for it enables them to reconstruct experiences in the facility. Special care must be taken when dealing with particularly painful experiences, such as serious operations or the death of a friend. The assistance of a clinical psychologist is recommended for such sessions.

Children's participation in design is a little-explored area with great promise for improving the design of children's health care facilities. In the spirit of improving the fund of knowledge, the author would greatly appreciate hearing of any experiences with these or alternative methods.

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