

The Physical Setting Conducive to Learning

HELEN HEFFERNAN

Can a child's school surroundings furnish the key to a full and creative life? This article defines some issues involved in efforts of school and community people to provide a physical setting that will achieve more adequately their highest educational purposes.

IN HER memoirs, a young scientist tells that her dream began

"... one autumn morning in New York, when I was nine years old.

"It was a Saturday and so there was no school. My mother took me downtown with her on her way to work and deposited me in a large building at Battery Park. 'Amuse yourself until I'm through,' she said. 'Then we'll go have lunch.'

"So casually, so by chance, I entered the world of water. For this was the Old Aquarium that used to stand at the tip of Manhattan. All about me were glass tanks with moving creatures in them. At the back was a tank larger than the others, and the water in it was less clear, more mysterious. It was pale green and, a few feet from the glass wall that I looked through, it grew misty, as if there were no farther wall and the water went on and on. Leaning over the brass railing, I brought my face as close as possible to the glass and pretended I was walking on the bottom of the sea.

"I went to the Aquarium again the next Saturday. And the next. And all the Saturdays that followed. . . ."¹

¹Eugenie Clark, *Lady with a Spear*. New York: Harper and Brothers, 1953. p. 3-4.

And so it was that Eugenie Clark began a life of adventure which led to the exploration of underwater life in three oceans and established Eugenie herself as an authority in the field of ichthyology.

The story goes on to relate how the small apartment "turned into a menagerie." The child's weekly allowance went into the hobby. Eugenie's mother was "coaxed . . . into buying . . . a fifteen gallon aquarium" for Eugenie's Christmas present. Mother and little girl soon became absorbed in a shared and continuing interest. Their relationship was immeasurably enriched and strengthened in the fascinating process of pursuing knowledge together.

As the school worker reads this story of a life devoted to the search for rare and bizarre fish in tropical waters, he is led to muse on what might have happened to Eugenie had her mother chosen another way to care for her little daughter while she fared forth on Saturday mornings to earn the living for both. Suppose Eugenie had been left with a neighbor whose restricted interests magnified the importance of small domestic tasks. Eugenie might have acquired some skills in dusting a chair and in sew-

ing a fine seam. With no intention to deprecate these household chores which must be done, the educator wonders if this would have been the best and wisest use to make of the time of an insatiably curious seeker after knowledge. The household tasks could be quickly learned by a child of Eugenie's capacity and their repetition Saturday after Saturday might have been stultifying to the development of her latent intellectual powers.

Or perhaps, there might have been no dull well-meaning neighbor to "keep an eye" on Eugenie. Her mother, fearful about this unsupervised period for which there was no alternative, might have weighed down the mind of the little girl with fear-inspiring admonitions designed to limit her freedom of movement. Only part of these admonitions would probably have been remembered by a child so full of zest for living through the long lonely mornings. The influences of the street and the neighborhood would have a better than even chance to be negative if not destructive of the child's developing personality.

But neither of these grim alternatives really happened. Like all good teachers, Eugenie's mother sought an environment favorable to learning—an environment that would stimulate interest and arouse curiosity. As Eugenie Clark records so well in *Lady with a Spear*, the rich environment of the Old Aquarium helped her to develop an integrated personality. Through her childhood experience she was able to co-ordinate her goals into a consistent and well-balanced life pattern.

In considering the physical setting for learning, school workers and com-

munity people alike are inclined to focus attention on the school building itself. This interest has led to many innovations in school buildings based on sound research in lighting, heating, acoustical treatment, provision for storage space. The intensive study of color has banished the "schoolroom brown" which was standard décor in the first part of the century. Research in school plant arrangement, site utilization, multipurpose rooms, self-contained classrooms, outdoor classroom areas, was quickly expressed in objective form in the frantic effort of communities everywhere to meet the needs of an expanding school population.

All these changes came about rapidly because avenues of communication provided for a free flow of ideas among school architects. Professional magazines widely circulated among school administrators throughout the country promptly made available over-all plans of buildings showing the relationship of various units, detailed drawings of classrooms, lunchrooms, health units, administrative units, plans for site utilization, pictures of partially-completed and completed construction. The creative efforts of lay boards of education, professional school personnel and architects were registered in these valuable descriptions of accomplishment. The Office of Education, state departments of education, professional organizations and leaders in school administration quickly drew together "best practices" in school construction and made them available in a creditable professional literature. Characteristic of this growing body of published material is the recognition of the principle of design in relation to the growth needs of chil-

dren and youth and the objectives of an educational program planned to prepare for active participation in a complex democratic society.

A Better Environment

Many changes in lighting, heating, acoustics, floor covering, sanitary facilities, chalkboard, display areas have come in the past decade or two. Commercial companies, of necessity, have kept abreast of the findings of research and have even initiated research to improve their products. Equipment and materials have been produced which would stand the severe test of competition. No alert governing board of a school district working with the counsel of a competent school administrator could go far wrong in setting up the specifications for materials and equipment for a modern school plant. Obsolete equipment is simply not available on the market.

To be sure, thousands of American school children are going to schools that are entirely inadequate to meet the demands of an educational program designed to promote child growth and development. No doubt drab, dreary, uninspiring classrooms are driving many teachers out of the profession and are thus adding to the acute shortage of teachers, a problem which constitutes one of America's most critical concerns. School districts are exerting tremendous effort to meet the needs due to rapid growth in population, but equally important are continuing studies directed toward modernizing the existing school plant.

Recently, a leader in parent-teacher association work asked, "What do you think would be the most fruitful ac-

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tivity in which a local parent-teacher association could engage?" The question is a provocative one. So frequently studies are undertaken by the local PTA which lead only to feelings of frustration. Here is a PTA undertaking a study of the causes of juvenile delinquency; in another community the group is studying what schools are doing for gifted children; another group is concerned with education for moral and spiritual values. All of these are important considerations and their study will without doubt generate important ideas in the minds of the participants but they are unlikely to lead to any satisfying program of action.

Many local PTA's could study the problem, "Does the school environment in which our children are receiving their education provide for their best living and learning?" School people should not be afraid to tackle such a question with their PTA even though they know in advance that the answer on many issues involved will be negative or unsatisfactory. Only by facing the needs of the school squarely are parents prepared to give intelligent support to questions involving bond issues and increased tax rates.

School people have pursued a public relations program designed to reassure parents that all was well with the school. Schools dressed up bravely for Education Week and other occasions when they were "on parade" and concealed inadequacies of library, audio-visual equipment and material, play

facilities, school lunch service, and essential instructional equipment and supplies by just not mentioning these lacks. These occasions of public observation were hardly over before teachers were deep in discussions of how improvements in the school environment would pay great dividends in child behavior and growth. The more courageous spoke out frankly but with limited understanding in criticism of what they thought was the board's neglect in maintenance and repair of buildings and parsimonious policies on essential instructional equipment and supplies.

Purposes and Achievement

The new words in public relations are *involvement* and *participation*. Forward-looking school systems are involving parents, teachers, children, socially minded citizens generally in the functional planning of school facilities. Why should parents not know the truth about facilities which have been long in use and are currently used by their children? Only the truth will set teachers free from the impossible task of providing a modern education in an outmoded, poorly equipped school plant in which the most meager of instructional supplies are provided.

It is a futile business to make "the board" or "the superintendent" the scapegoat for conditions which are below reasonable standards. The schools belong to the people. The people will maintain the quality of schools they wish to maintain for their children. Schools will probably never be superior to the enlightenment of the broad community they serve. Although this is true, educational leadership in every

school should be guiding the neighborhood served to an understanding of what better schools can mean to children.

Space does not permit spelling out in detail how the principal and teachers in a school can lift the sights of parents and other community members. It is evident, however, that school-by-school, parents and school workers should be in the process of arriving at a clearly stated answer to the question: What are the purposes of the educational program for the children in this school? When a definite answer to this question is developed by parents and school people working together in the true meaning of an association of parents and teachers, then the group is ready to take a look at the school and attack the second question: Does this school provide the physical setting necessary to achieve these purposes?

Then, every classroom can be critically evaluated in terms of adequacy of size, lighting, heating and ventilation, sound control, storage space, floor covering, decoration and color, furniture, equipment. The availability of a sufficient supply of books, audio-visual aids to instruction, playground space and equipment, lunchroom equipment and service, sanitary facilities can be studied objectively.

A neighborhood group with a definite understanding of the school's needs is in a position to work co-operatively with other neighborhoods in the community to develop practical plans for the improvement of the schools. In the process, parents come to a more realistic understanding of the wide variety of activities the school provides to meet the needs of children at each maturity

level and the equipment and supplies which must be readily accessible to the teacher if these activities are to be carried on effectively in the school.

Across the land, records of parents who have come together to improve the environment for their children are available. In one kindergarten play yard, the parents worked Saturday after Saturday to build a tree house in a spreading sycamore. Their reward is the unending joy of children who gravitate toward it for all types of activity.

A considerable gap seems to exist between the provision of new buildings and the provision of adequately equipped classrooms in which teachers can carry on effective guidance of learning activities. Enthusiasm and energy required to construct the new building do not always seem to be in sufficient supply to finish the job with well-equipped classrooms. Perhaps the financial effort to get the building leaves no margin to equip the building for the very purpose for which it was constructed. Economies at this critical point may defeat the major objective of all administrative effort; namely, the creation of an effective learning environment.

The Office of Education has rendered school systems throughout the country an outstanding service in the publication of a special bulletin, titled *Designing Elementary Classrooms*,² which is available from the Superintendent of Documents, United States Government Printing Office, Washington, for 35

² *Designing Elementary Classrooms*, U. S. Department of Health, Education and Welfare, Office of Education, Washington, 1953.

cents. This bulletin was produced by the joint effort of the School Housing Section and the Elementary Schools Section of the Division of State and Local School Systems. Because of the urgency of need for elementary school classrooms throughout the country, this bulletin was published first in a series in preparation on various elements of school plants.

The services of the two Sections are evident throughout the publication and illustrate a relationship which should be developed in every school system designing new school facilities. The material presented could well serve as a guide, however, to individual school administrators in considering the adequacy of equipment and supplies provided to facilitate carrying on the desirable activities of an elementary school. The bulletin devotes almost half of its space to a description of typical activities, an illustration of each activity, and a list of equipment and supplies essential to carry them out in a school. These activities are based upon the growth characteristics of most children at the age levels served by the elementary school. The staff has given effective leadership in the development of concepts concerning a classroom which is healthful and safe, functionally designed, flexible, attractive and economical.

Laboratories for Learning

Many of our professional books for teachers far too casually dispose of this problem of providing the physical setting for learning. A recent book advises the teacher to examine the classroom carefully and plan to make the best use possible of what he has. This

seems a bit of belaboring the obvious. The author goes on to advise the teacher not to blame the board of education or the superintendent or school architect for conditions which exist. This seems politic but not very helpful to the teacher who may have heard in his professional education that learning results from the interaction of the learner with his environment. The teacher with ingenuity and great devotion may create an environment favorable to learning by exploring the neighborhood for usable materials but perhaps his energy could be conserved for more important service to children if the necessary equipment and supplies were readily available for the teacher's use.

The director of curriculum in a small city system described a procedure which seemed promising. If every classroom is a laboratory for learning, the teacher should be assured that the necessary materials will be at hand. To utilize all the resources in the school system, committees were organized at each grade level from kindergarten through grade six. Each committee had, in its membership, teachers, principals, a representative of the parent-teacher association, and a curriculum consultant from the central office. The committees were asked to take as their assignment: What equipment and supplies should ——— grade classrooms contain? What equipment and materials should be available to the teacher in the building or from a central depository? An entire year was devoted to a careful study by each committee. Equipment and supplies were evaluated. Books for children were read, films were viewed. Toward the end of the year one classroom

at each grade level was equipped according to the committee's recommendations and all teachers at that level were invited to attend a meeting in this classroom, at which time the recommendations were thoroughly discussed.

The committees recommended carts to facilitate school-wide use of audio-visual equipment, woodworking tools, science equipment, sewing equipment and cooking equipment. The committees recommended the development of an instructional materials center housing library, audio-visual materials and the portable equipment on carts, and further recommended that a full-time employee, preferably a teacher, be assigned responsibility for the instructional materials center and for helping teachers find all the resources available for any specific curriculum unit to be undertaken. Although the schools in this city seemed reasonably well equipped at the beginning of the intensive studies, it was evident that all of the recommendations could not be immediately financed. Committees were asked to assign a priority to each recommendation with the assurance that the board and the superintendent would undertake to budget in such a way that the entire program would be in operation in three years.

The success of the study not only as a means of improving the physical setting for learning, but as a significant technique in continuous professional education of the school personnel led to the establishment of similar committees of junior and senior high school staffs. The elementary school committees were continued to evaluate the success of the innovations, to revise proposals in the light of new materials constantly being

made available, and to provide a channel through which suggestions from other teachers could receive careful consideration. One teacher who had worked zealously on a committee said, "It doesn't make much difference what you start to work on in education, you soon find yourself involved in the whole problem. In trying to find out what equipment and supplies would be of most help to a teacher and children in the fifth grade, I have had to think about the objectives of education, the characteristics of children ten and eleven years old, methods of teaching and methods of individual guidance."

In this school system as in many others, teachers were learning about the importance of creating an environment favorable to learning. But they were receiving the full support of under-

standing colleagues who recognized that the creation of the physical setting for learning is a responsibility shared by teachers, administrators, curriculum and guidance specialists. The community at large also has responsibility through its official representatives on the board of education and its unofficial representatives the parents of children enrolled in the schools.

The past decades have witnessed great attention to the studies of the growth and development of children. The best records of optimum development come from situations which provide an environment favorable to learning. The good gardener makes the soil right and leaves the plant to grow with such protection, nurture and guidance as is necessary for it to reach full fruition.

A Classroom for Living

LUCY NULTON

What teacher has not longed for a pleasanter, more effective classroom? This article suggests a practical, yet exciting, approach to improvement of the school setting for learning—and living.

WHAT can we do in a situation which is, in any way, poor for children?

Know in *what* ways we would like it to be better and *why* we consider these ways better for children and learning.

Make the most of what we have.

Hold to the dream of what and why.

Know where and how to seek help in making the most of what we now have and in achieving realization of the dream.

Each of these is a challenge! Each is exciting! Each is exploration!

The room is small, dank and crowded with dark desks or possibly dark tables and chairs. The woodwork may once have been varnished a glowing mahogany, but now it is encrusted with cracking or greasy dull brown paint of the cheapest kind. The floor reeks of generations of floor oil and dust down. (No child or teacher dare sit there. Be careful not to drop your handkerchief or a paper you want to keep

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