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ABSTRACT

The focus of this publication is on the creation of learning facilities for two-, three-, and four-year-old children. This volume illustrates graphically (1) 11 new centers that were specifically constructed for early education, and (2) old facilities--houses, storefronts, and warehouses--that have been successfully remodeled to provide early education centers. Also described is a nonschool approach to early learning for communities where lack of finances or interest limits the development of early education centers. The structures vary widely in space usage, types of equipment, and genre of teaching aids, differences dictated by considerations of finances or space. Because some facilities designs are the results of decisions concerning the program the school is offering, these program objectives are spelled out. (Photographs may reproduce poorly.) (Author)

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Schools for Early Childhood

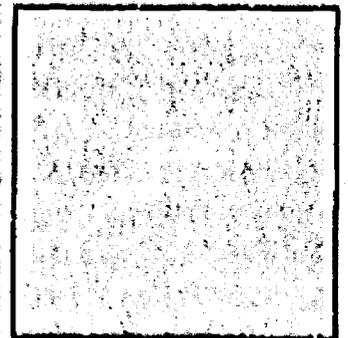
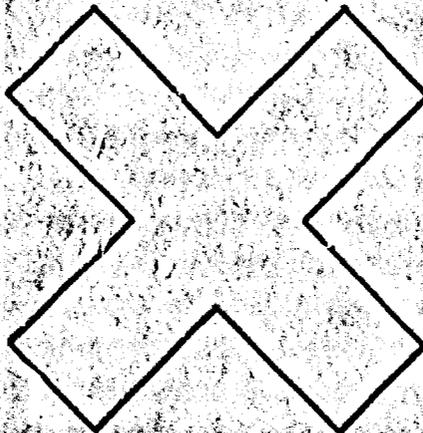
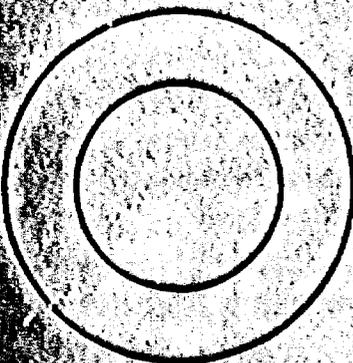
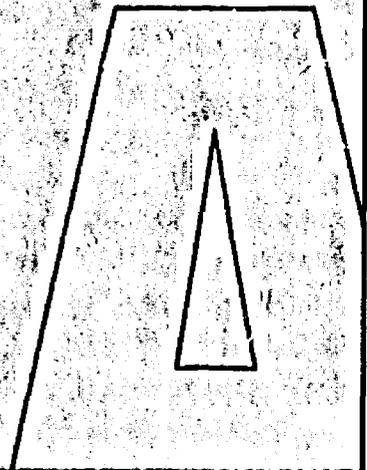
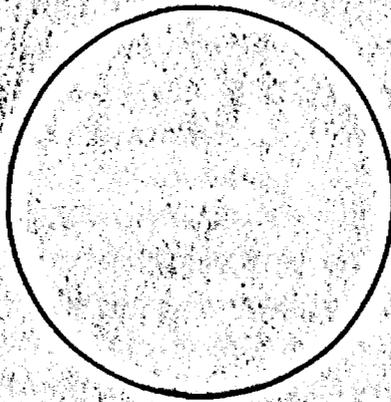
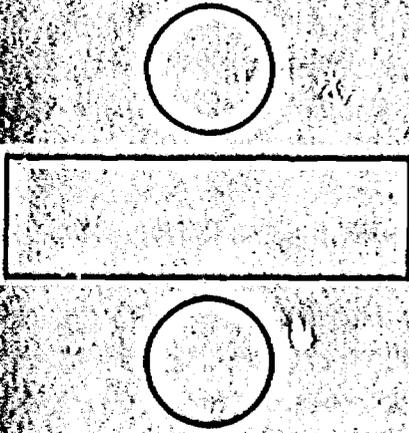
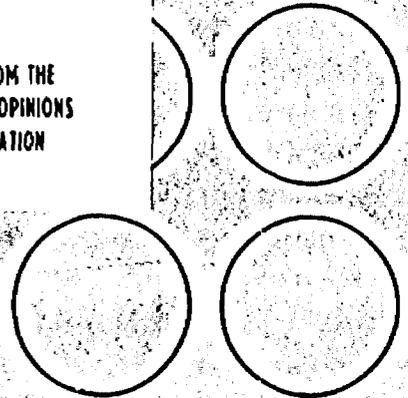
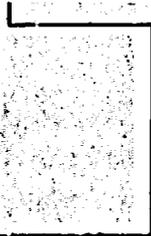
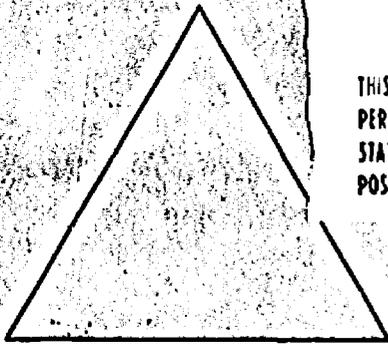
by Paul Abramson

A report from Educational Facilities Laboratories

Profiles of Significant Schools

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Introduction

For more than a century, nursery schools have generally fallen into two classifications: day care centers (not always all day) for working mothers, often associated with settlement houses or other community agencies; and private nurseries, catering basically to the needs, desires, and pocketbooks of middle-class America.

But the Elementary and Secondary Education Act of 1965, the Office of Economic Opportunity, and the studies of a number of psychologists and educators in the middle and late 1960's changed all that.

The Elementary and Secondary Education Act provided money for schools to set up programs to reach disadvantaged children. It was found that to be effective such help ought to be largely focused on the early years, and many districts set out to establish kindergarten and pre-kindergarten classes.

At the same time, money from the Office of Economic Opportunity was flowing into Head Start programs aimed at giving children from impoverished backgrounds an opportunity to start out on some equality with their more fortunate classmates when they reached the public schools. Head Start has been by far the most successful, and widespread, program of the OEO.

While this activity was taking place, psychologists and educators were confirming what leaders in the field of early education had been saying for a long time: the early years of a child's life are tremendously important in determining the child's future. Children of two, three, four, and five years, it was found, are able learners, capable of doing far more than had ever been expected when schools were set up to start teaching children at the age of six.

But, although there is virtually total agreement on the importance of early education, there is little agreement on what early education should be or how it should be carried out. There was a natural tendency, as the learning potential of young children was discovered, to suggest that reading, writing, and arithmetic be introduced much earlier. Some educators, however, looked at the creative capacity of children and stressed giving art, music, dramatics, and hand work.

Other experts looked at the deficient skills of some children—especially those from economically deprived homes—and chose to teach to

those deficiencies, stressing language development and self-image, for example. And others chose to focus on parents and on their fears for their children's futures, placing their emphasis on the competitive position children must achieve by the time they are six, if they are ever to succeed.

The truth is that there is no one answer to the problems of early education. The needs, the desires, and the attitudes of children and parents differ, and so the programs to be offered must differ. Nor is there total agreement that early education *schools* are really useful for young children. As one skeptic put it, "Unfortunately, school turns kids off. Why take turned-on three-year-olds and dump them in a school, until we have made sure that the school is going to stimulate their learning and creativity, rather than crush it?"

While this is a good question, it must be seen in context. There can be no doubt that greater learning opportunities must be offered to two- and three- and four-year-old children. And in many cases, such opportunities can best be offered in a school situation. The problem then, becomes twofold: to develop programs that will not limit children in their development, and to create facilities in which easy learning can take place.

The latter is the focus of this publication. Facilities for early education have usually existed in church basements or the downstairs rooms of two-story residences. Not many new centers have been constructed to house young children and few remodeling jobs have been done on old facilities to make them better for early education use.

This volume illustrates new centers that were specifically constructed for early education, and old facilities—houses, storefronts, and warehouses—that have been successfully remodeled to provide outstanding early education centers. Also included is a nonschool approach to early learning that may help communities where lack of finances or interest limits the development of early education centers.

The structures themselves vary widely. Some are extremely directive, others allow children to move pretty much as they will. Some place great emphasis on equipment, others are limited in what they offer. Some use lighting, carpeting, air-

Introduction

conditioning, and space dividers to create different kinds of spaces, while others eschew such devices. Some use electronic teaching aids or Montessori materials, while others restrict themselves to the more traditional blocks and paints. Some put great emphasis on outdoor activities—and some of it in semi-sheltered play space—while others provide little outside activity at all.

At times, these factors are dictated by considerations of finances or space (“We’d like carpeting,” one director said. “But it’s more than our

budget can stand.”) But often they are the result of decisions concerning the program the school is offering.

Because of this, program objectives are spelled out in each case. In this manner, the reader can relate his own early education objectives to those being successfully carried out in these varying structures and can determine for himself how much or little his own objectives would be aided by adopting ideas that others have worked out.

Two schools in one

Harold E. Jones Early Education Center

The Harold E. Jones Child Study Center in Berkeley, California, houses two back-to-back centers, with mirror-image facilities and totally different programs.

The 11-year-old building is owned by the University of California. One center is operated by the Institute of Human Development, the other by the Berkeley Public Schools which occupies the space rent free in return for training students.

Pupils at the public school pay a nominal fee of \$37 a year, and state and local funds make up the difference. Pupils at the university-run center are from middle-income families paying \$165 for a 30-week year.

The two school programs have a number of similarities. Both have a morning session for 20 to 25 three-year-olds and an afternoon session for the same number of four-year-olds. All four sessions have their own experienced head teachers. Each school is oversubscribed and subsidized by its operating agency. And, each considers the facilities almost ideal for the programs it runs.

There the similarities end. Each has a program of its own. Both use the same facilities, but use them differently and make their own special demands on their environments.

Two buildings comprise the Jones Center. One contains offices, testing rooms, and classrooms for the college students who use the center as a laboratory. The other contains the mirror-image early education facilities.

The latter building is divided by a huge double runway with one-way glass through which college students can observe classroom and play yard activities. Whole classes of adults can be accommodated at once.

Each school has two large rooms, a toilet-work space-entrance area, and a playground, part of which is given over to a semi-sheltered structure. In keeping with the California climate, sliding glass panels permit the walls to be opened up between the playground and the room fronting it.

The work space and toilet facilities are open, permitting easy supervision when they are in use. A sliding door separates the two rooms that each school occupies, making it possible to shut off one room when noisy activities are to be carried when an undisturbed atmosphere is desired.

A two-story doll's house dominates the larger of the two rooms in each school.

The toilet areas are wide-open, airy, tiled rooms equipped with three toilets, sinks, paper towel dispensers, and mirrors, all at child height. They effectively discourage the idea that using a toilet is a secret or dirty activity.

The center's interior walls are of wood, creating a soft, comfortable atmosphere. Furniture is at a minimum and consists primarily of tables and chairs, with a few wicker rocking chairs. Floors in both schools are vinyl tile, but the University School uses pieces of carpeting to mark activity areas. Thus, a rectangle of carpet in the outside play yard denotes a dancing area, while inside the block corner is defined by its carpeting. The year-round center is not airconditioned, but the climate is such that there are few days on which it would be necessary.

Outside, each school has its own semi-shelter, climbing and swinging area, and blacktopped core for bicycle riding, running, games, and other activities. Sand pits and shade trees are also a part of the common decor.

Thelma Harms, one of the University of California School head teachers, describes its program as a "divergent curriculum." "We are trying to offer each child an opportunity to learn in a variety of ways," Mrs. Harms explains. "We contrast this with the usual pattern where a group of adults creates a program which presents very well one aspect of learning—discovery learning, for example—but neglects others, such things as classification experiences, labeling experiences, puzzles, or other materials that have a built-in answer.

"Our feeling is that children learn in a vast number of ways and that our job as teachers is to create self-explanatory learning experiences for the children by presenting those experiences so that the child has all the clues about where to find the materials and how to use the materials constructively. The choice of how he learns and what he does is left up to the child."

To carry out this philosophy, every item in the school has a specific place and is there for a reason. Free choice without such organization, the school feels, would bring nothing but chaos.

The children are in school for two-and-a-half hours. During the first half-hour, children are re-

Harold E. Jones Early Education Center

quired to remain indoors to overcome the overwhelming attraction to play outside. They find activities to work at ranging from building with blocks to playing in the doll's house to reading with a teacher or dancing or singing in the school's back room. The choice is always the child's, and though teachers are available to organize an activity if so requested, no group activities are planned or demanded.

After awhile the doors to the outside are quietly opened. Children are then free to move at will between the outdoor area and the inside.

Some 30 minutes before the school day ends, teachers begin to move the children back indoors. Group activities are made available at this point (usually reading groups and quiet singing) but a child who is involved in a specific activity, or who wants to work by himself once he comes inside, is allowed to do so.

What features of the building do the teachers of the University School find most important? The open storage and the semi-sheltered play area come in for most immediate praise. The open storage shelves are particularly important to a program that asks children to select their own activities from an organized presentation.

As for the semi-sheltered area, obviously it permits children to be outside in weather that otherwise would keep them in. But the University School has also found it an excellent place for such noisy and messy activities as carpentry, use of large blocks, and painting. "By taking some of these activities outside, we create a much more relaxed atmosphere inside," Mrs. Harms explains.

Other features of the school that are particularly good or useful include the back room that can be closed off by a sliding door—and which is fairly well sealed acoustically—and the built-in doll's house, providing a great deal of privacy for the children. (It's large enough for them to stand and move around comfortably, but a teacher trying to stay in it would find it uncomfortable and cramped.) The picture windows, which allow children to see parents coming and going, and allow parents to see the children, are another useful feature. The school staff also has high praise for the wet and dry sand boxes outside, for the open, child-sized toilet area, and for the teacher work area that is situated so that a teacher can see fully every activity taking place in the school.

The building is not perfect, but, pressed to point out its failings, the staff is able to come up with only one major complaint: the entryway is far too small.

The entryway contains clothing hooks and cubbies for the children and benches for adults, but it is little more than a corridor. The result is that on rainy days the area is strewn with children and adults trying to fit on boots, rubbers, coats, and sweaters. It is virtually impossible to get in or out without stepping on somebody. "This is a serious drawback," Mrs. Harms feels. "Children are brought and taken home in car pools, which means that the entryway should be large enough to permit many children to be dressed at once. And I find that parents like to talk among themselves or with teachers while they're here. We just don't have the room to permit this."

But the entryway is a minor inconvenience in a school that, the staff will tell you, was built for the real needs of small children. "It's an excellent school for our program," says Mrs. Harms. "I'd build it again any time I had the opportunity."

If a school is so well suited to one program, what does it do for another? Must a different curriculum be placed in different facilities, or can a school that is good for one be good for all?

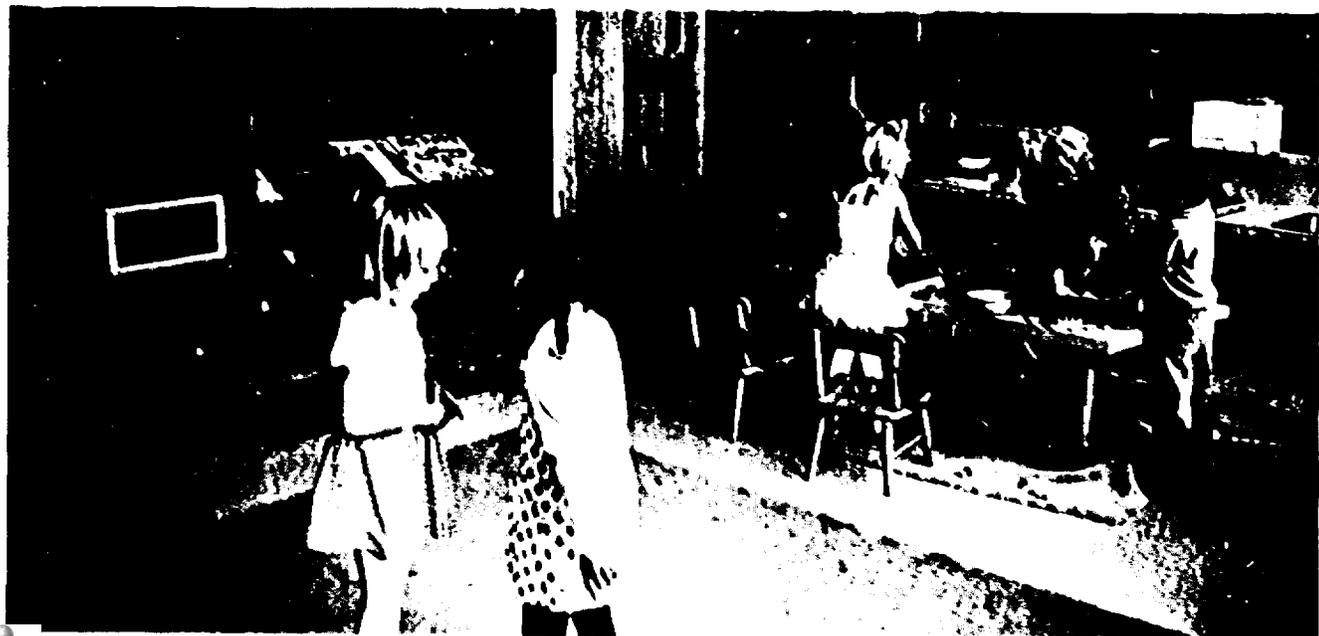
The staff of the Berkeley Public Schools Nursery, operating in facilities that are identical to those of the University School, is just as enthusiastic, despite the fact that its program is different.

Part of the difference can be found in the staffing patterns. The University School staff includes a head teacher and three graduate student assistants. All are professionals, or nearly so. The Berkeley School is operated by a professional head teacher, an untrained assistant, and parents who must guarantee a specified amount of time in the classroom.

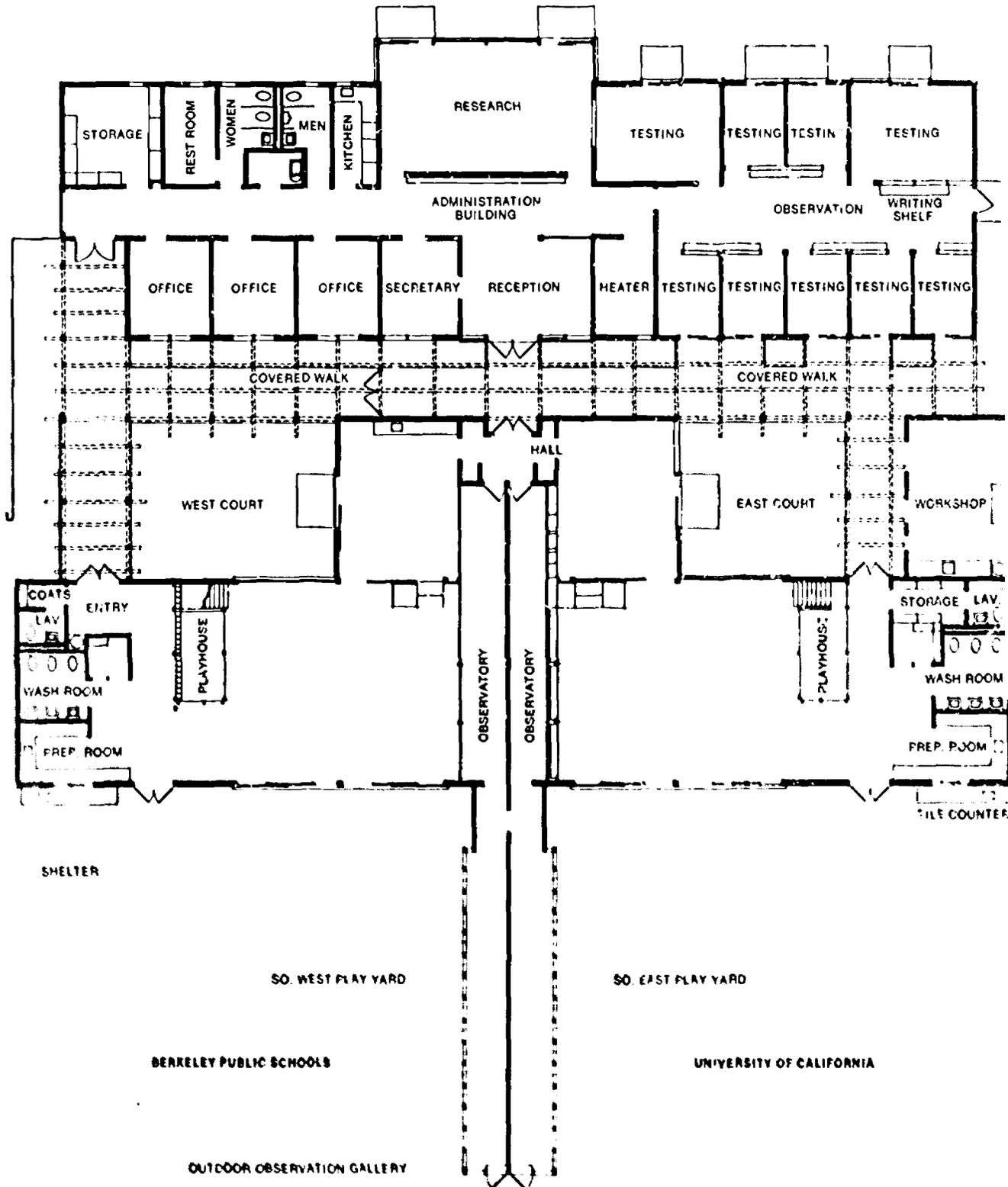
Judith Isaksen, head teacher of the four-year-old group in the Berkeley School, describes the school's program as "eclectic," which doesn't seem too different from Mrs. Harms' "divergent curriculum" since both borrow what they feel is good from a wide range of philosophies. But in practice the program is somewhat different.

The Berkeley program puts more obvious emphasis on formal learning "about reading, number skills, and ideas on how to tackle problems."

Harold E. Jones Early Education Center



Harold E. Jones Early Education Center





Harold E. Jones Early Education Center

There are many times during the day when formal groups are brought together for juice, for music, for just plain talking. All children are expected to become a part of these meetings.

The Berkeley School is also different in that it puts less emphasis on prearranged order. "I think many of the things we do," Mrs. Isaksen admits, "are controlled by our teaching staff. We have one professional, so we feel it is important to bring all the children together at times so that she has contact with all of them. And we simply do not have the time to prearrange things to the extent we might like."

A typical Berkeley School four-year-old takes his lunch to school and eats in a group with teacher and volunteers. This is a period of quiet talk and a great deal of interaction between the teacher and children. The next large block of time is set aside for free play, with children moving inside and out without restriction. The afternoon is broken midway with a juice break, which is itself preceded by a group meeting in which an attempt is made to introduce a more formal approach to learning. "We'll discuss such things as how we feel and what kinds of things we're doing and otherwise encourage conversation by the children," Mrs. Isaksen says.

Juice is followed by a music period in which children are also expected to participate. A second free-play period follows, with children once again choosing their own activities indoors and out. The teacher, assistant, and volunteers operate primarily as observers.

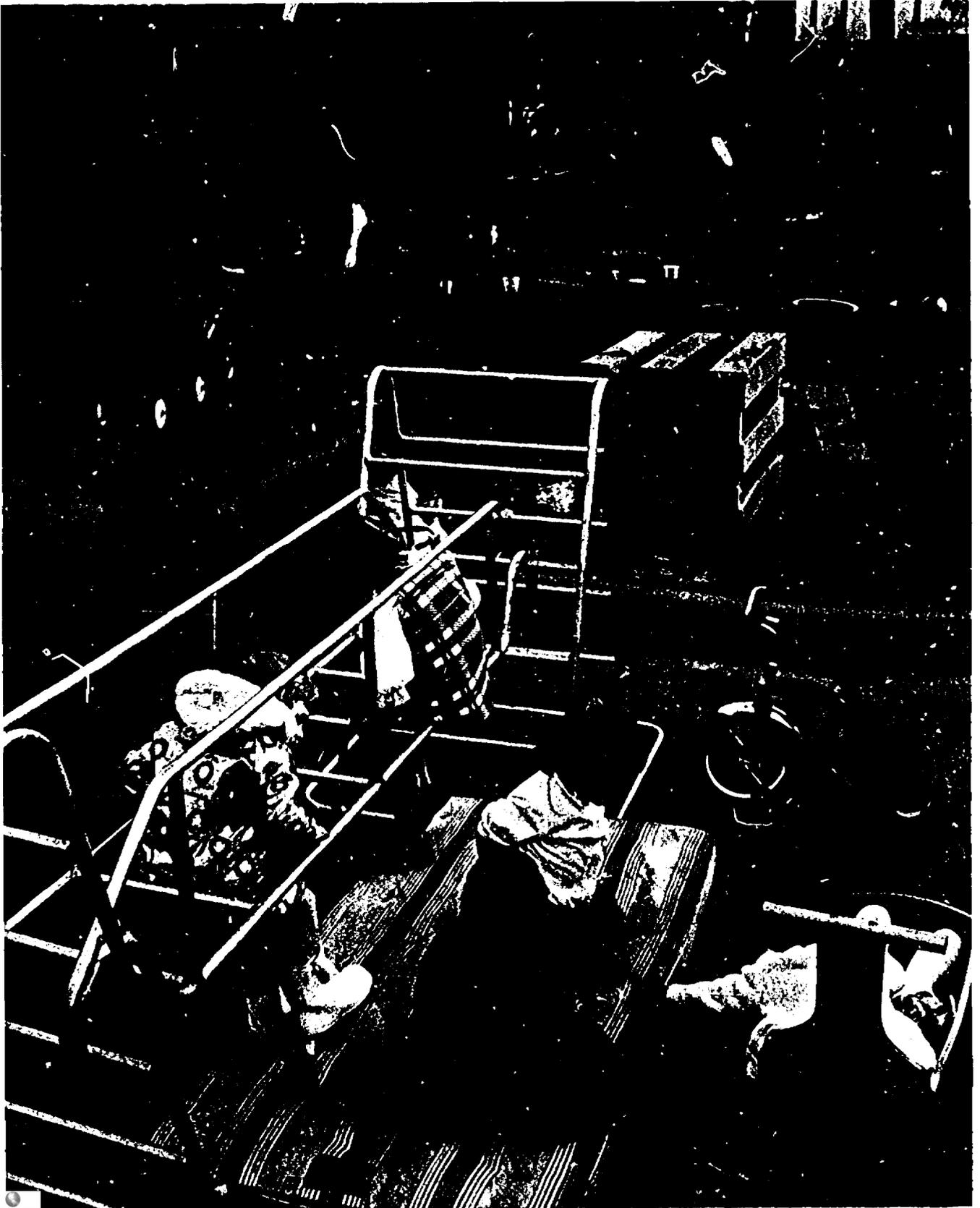
Shortly before 3:30, cleanup activities start, and then children are grouped once again for a story before they leave for the day.

The Berkeley emphasis on group activities is enhanced by the school's facilities. The two large rooms, each capable of holding the entire class, give the teachers an opportunity to vary the scene. Reading and singing are done in the back room, which is somewhat smaller, more isolated, and quieter. Children who really do not want to participate in the group can use the other room without distraction. The discussions, juice, and lunch activities are held in the larger main room. The easy access to the outside opens the program up and makes it possible to allow more free play than would be possible with 25 children indoors.

The staff of the Berkeley School is almost totally satisfied with the facilities. The storage areas, the semi-shelter, the kitchen-toilet arrangement, built-in doll's house, the easy inside-outside access, and the "private" back room all came in for praise. The staff points to the non-clinical feel of the school as being particularly important.

As for weaknesses, the lack of space for adults to congregate is cited once again as the major problem. Perhaps more important, there is no place where an adult can be alone with a single child for any length of time. "But these are minor," Mrs. Isaksen insists. "After all, the school was built for children, not adults. And it works beautifully for them."

The Harold E. Jones Early Education Center was designed by Joseph Esherick & Associates, San Francisco. It has been in operation for a full 11 years and it works. With a few minor changes, it might well serve as a prototype for a successful early education center for virtually any program. All of the people who have used it agree on that.



Harold E. Jones Early Education Center



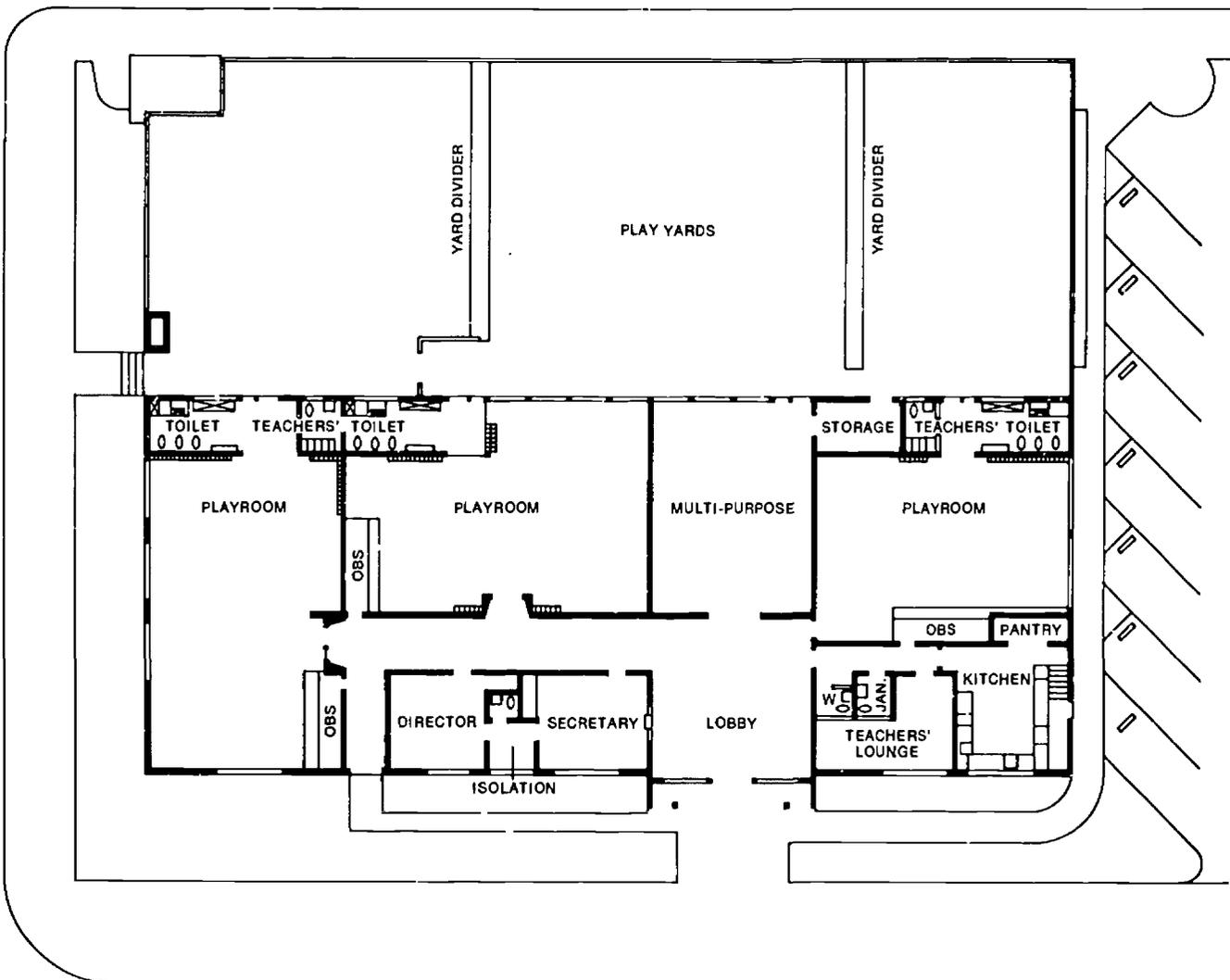
Sparsely furnished space

Phoebe Hearst Preschool Learning Center

The Phoebe Hearst Preschool Learning Center in San Francisco was designed to fit a program that relies heavily on children doing things with their hands, a program that places no stress at all on traditional forms of language and number readiness. "We don't teach children how to do a single thing here," says Mary Nordland, the school's director, who characterizes the center's preschool program as a spontaneous art-centered curriculum.

The absence of familiar nursery school wall decorations is in keeping with the program. For example, there are no charts with letters, num-

bers, and days of the week. There is no identification of objects or colors. There are few books, games, or other traditional instructional devices in evidence. "We don't want our children sitting and listening to adults or having facts poured into them," Mrs. Nordland explains. "We encourage them to work with their hands. We stress hand work because we feel that use of the hands develops the mind. Children who work during this period when the brain is developing to its utmost will have more ability to reason abstractly than children who have just had facts poured into them. They'll have a better chance of doing well than a



Phoebe Hearst Preschool Learning Center

child who has just been placed in front of a television screen or just taught numbers and letters.

The \$400,000 center was designed by architect William Fox to the specifications of Rhoda Kellogg, former executive director of the Golden Gate Kindergarten Association, which is the school's governing board. It consists of classrooms for 90 preschool children upstairs and a downstairs art center for as many as 200 neighborhood children above preschool age. Because of the configuration of the site, each floor has a street-level entrance.

Preschoolers are in three groups, aged two, three, and four. About half spend a full day at the center; the other half attend only the morning session, though some stay through lunch. The school operates 11 months of the year. About one-third of the pupils are on reduced fees which are supplemented by the Golden Gate Kindergarten Association. The school is located in a housing development, and the pupils are from all income groups. Those attending three hours a day pay \$495 a year, those on five-hour days pay \$605. The operating costs are \$112,000 annually.

Each age group has its own classroom, rather sparsely furnished rectangles with shelves bolted to the walls and no nooks, crannies, or "L"s in which children might hide away. "This whole building was designed for the eye, for esthetic pleasure," Mrs. Nordland points out. "Many people like to create divisions, small nooks for children. We don't agree. We want a great deal of open, quiet, pleasing, untrammelled space in which the children can work." The classrooms vary in size, ranging from 960 sq ft for 20 two-year-olds to 1,340 sq ft for 35 four-year-olds. The only furniture in the well-lighted rooms consists of tables and chairs and a few easels. Children's art decorates the walls.

In addition to the classroom, each group of children also has immediate access to its own play yard. These roof-top playgrounds have a tremendous amount of open space for tricycle

riding and running but also provide areas for such activities as sliding and swinging and playing in sand. The triangular dividers between the playground areas also serve as nooks and crannies for the children, places where they can put themselves out of the general view.

No two classrooms or two playgrounds are alike. Each is designed for the age-group that is using it. Thus, for example, while the toilet areas are open in all of the rooms, the fixtures themselves vary from being almost flush to the floor for the two-year-olds to toilets that are almost adult height for the oldest children. Floor level sand boxes for the two-year-olds are replaced by ingeniously designed stand-up boxes for the older children. Standard slides are provided for the older children, but the youngest have specially built slides that are less steep and offer other potential attractions.

The attention to detail that is exhibited by these variations is even more noticeable when one views the center with an adult eye. For example, handles on doors leading from the rooms are 48 in. high so that children cannot leave their areas without adult supervision, but half-doors that children can easily open themselves connect the rooms to the play yards. Two small plastic baskets are high on the outside wall of each play yard. One of the baskets contains clean paper handkerchiefs, the other is for used ones. Windows that open are all above children's height, but glass panels in doors are placed so that children can see through them.

Visitors entering the school find themselves in a large, open, airy lobby, which can be constantly supervised by the school's office workers. "We've been criticized for the lobby," Mrs. Nordland admits, "because people say it's so big and cold. But it's a good place for parents to wait for their children. There's plenty of seating space, and they don't have to worry about disturbing classes. And, in addition, it enables us to see that nobody gets into the classrooms without us knowing about it."

Phoebe Hearst Preschool Learning Centre



Phoebe Hearst Preschool Learning Center



Huge building for an intimate program

Lamplighter School

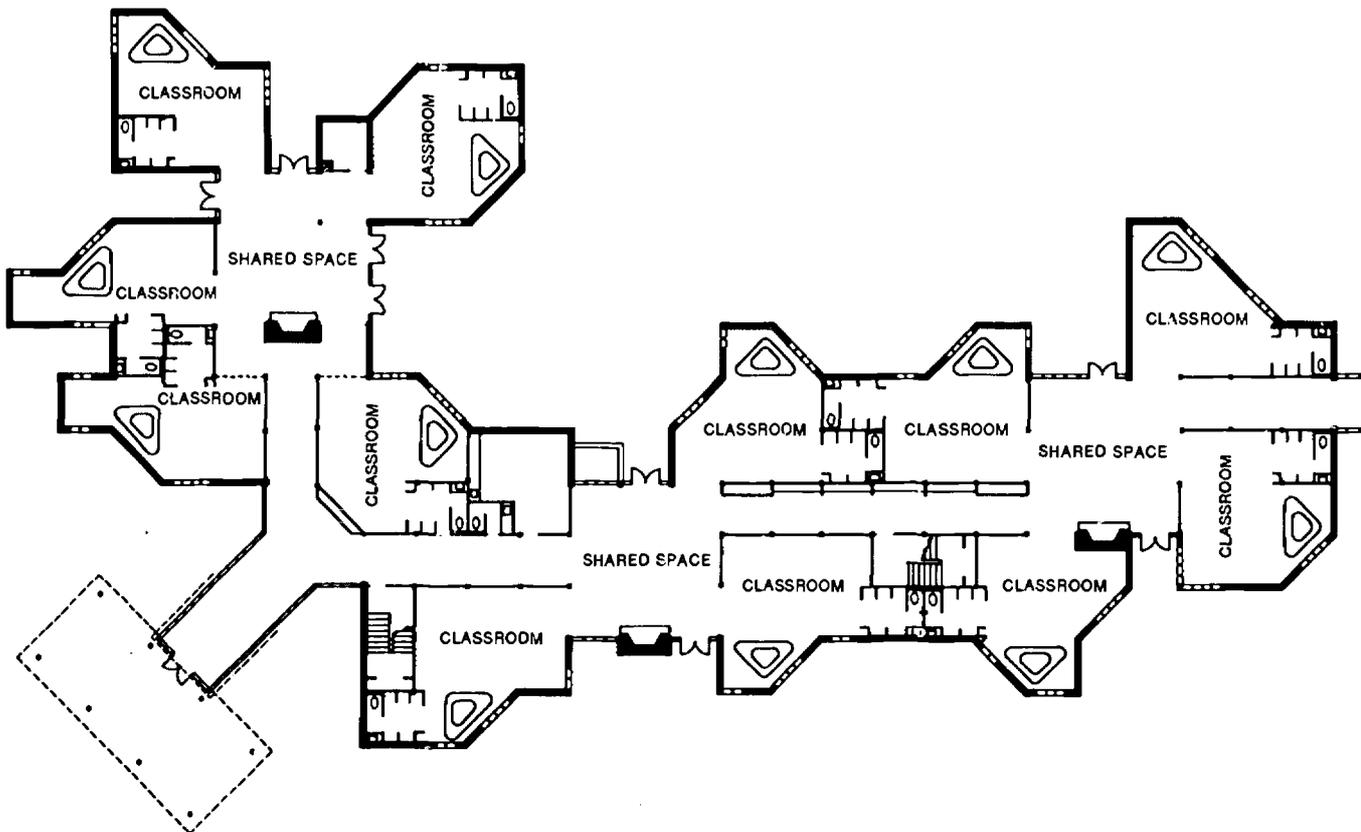
Dallas' Lamplighter School opened its present facilities in 1969, but its history began in 1953 when its two co-directors started a kindergarten-first grade school for 23 children in an old house on a spacious piece of land.

The school and its reputation grew so quickly that, by 1967, 350 children were enrolled in nursery school through fourth grade, and twice that number were on a waiting list.

During those 14 years, the former residence housing the school was redesigned, redeployed, revamped, and reworked in an effort to find room for the influx of children. Additions were added and buildings were built, until it became obvious that the structure had reached the point that it was impeding the school program.

At that time co-directors Natalie Murray and Marieta (Sandy) Swain approached EFL for a planning grant that would make it possible to try out some new ideas in classroom design and furniture. "We wanted furniture, particularly for the younger children, that would fit both children and teachers, be movable, take up little space, and not be cumbersome," says Mrs. Murray. "We didn't want traditional tables or chairs. As a matter of fact, we were pretty sure that the furniture we wanted might not be considered furniture at all."

The Lamplighter School offers children from the age of three through nine a program that Sandy Swain describes as "a learning situation in which the emphasis is put on success in academic and nonacademic areas, on feeling good about oneself."



Lamplighter School

The range of the school program can be expressed by citing two extremes. On the one hand, animals roam freely about the grounds, and children are encouraged to care for them and to play with them, with all learning being strictly informal.

On the other hand, every child in the school is introduced to French. While in the nursery it is fairly informal, at the grade levels it is a standard course. (Fourth grade students produce a play in French—and provide the English translations most of their parents need.)

Another aspect of the Lamplighter program influenced the design of the building: since the school uses no report cards and totally de-emphasizes grades and grading, it depends to a great extent on having parents observe their children in action. One of the reasons for abandoning the previous school building was the poor viewing facilities.

The new school, designed by O'Neil Ford & Associates, San Antonio, contains open classrooms that make it possible for teachers to team, to pool their strengths, but at the same time provides corners needed for intimacy. The "well" built into each of the four "preschool" classrooms focuses the group and becomes the center for much of the learning activity. The walls, sheetrock covered with washable vinyl, accept staples and thumb tacks for making displays or hanging children's art work. The carpeting creates a quiet atmosphere and defeats the potential bedlam of any preschool situation. The use of color delineates space (gold for the preschool, green for kindergarten, etc.) and at the same time creates a constantly fresh visual atmosphere. The odd shape of the rooms and judicious use of windows to bring the outside in avoid any possibility of

institutional dullness. (A visitor rounding a corner is liable to be confronted by a bevy of peacocks nestling against a story-high window.)

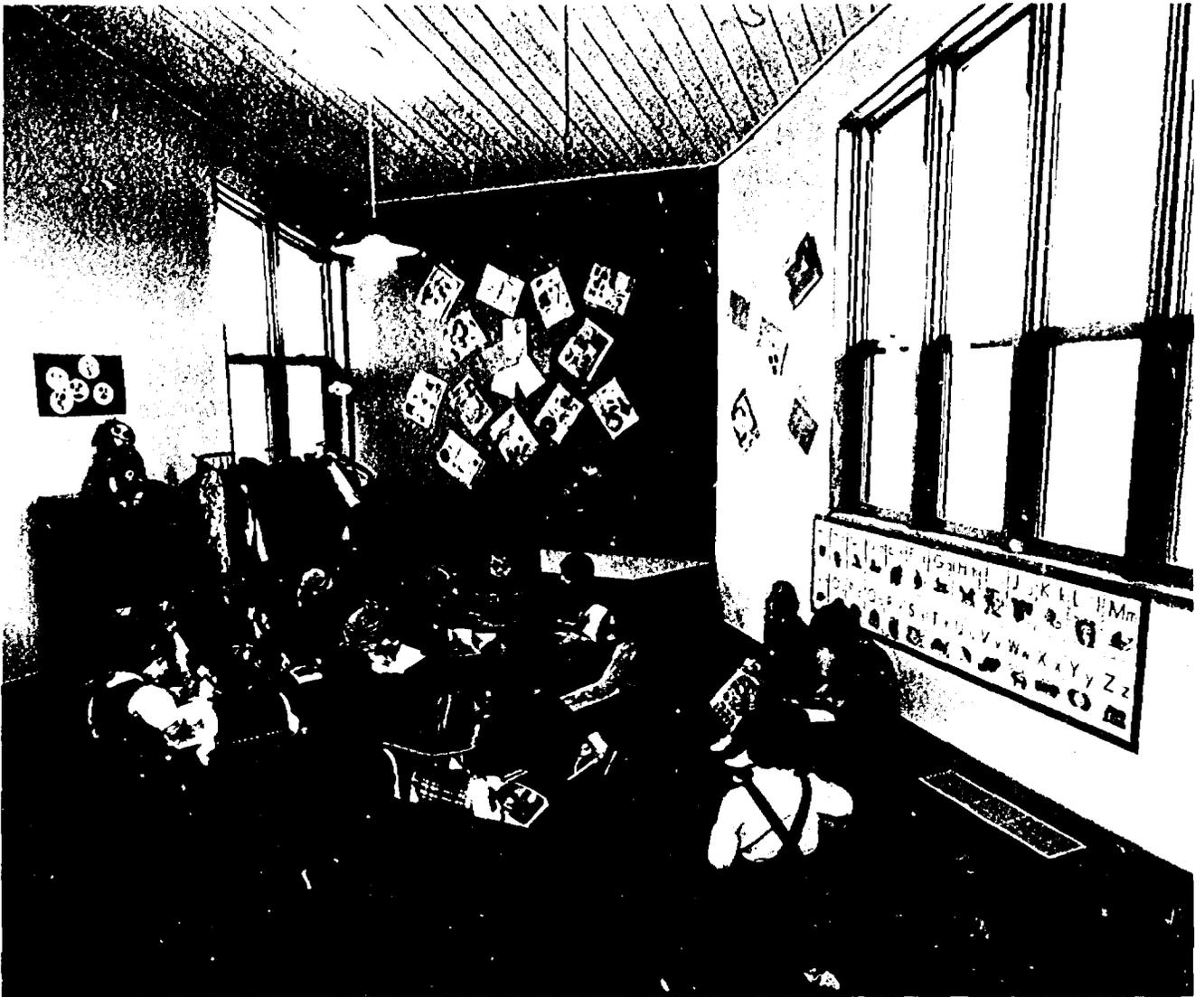
Each group of four classrooms is clustered around an open, shared space. In the preschool section, this area houses such attractions as a fireplace, player piano, library, and fish tank. Teachers use the shared space as an extension of their classrooms, and there is virtually nothing that goes on in a classroom that could not be shifted to the shared space or vice versa.

In addition to the classroom areas, Lamplighter has a separate barn with a hayloft, farm animals, a "mine" to investigate, and a "mountain" to climb. Inside is a huge auditorium-stage area that swallows up the 350 children with total ease. All of these are used by preschoolers and older children alike.

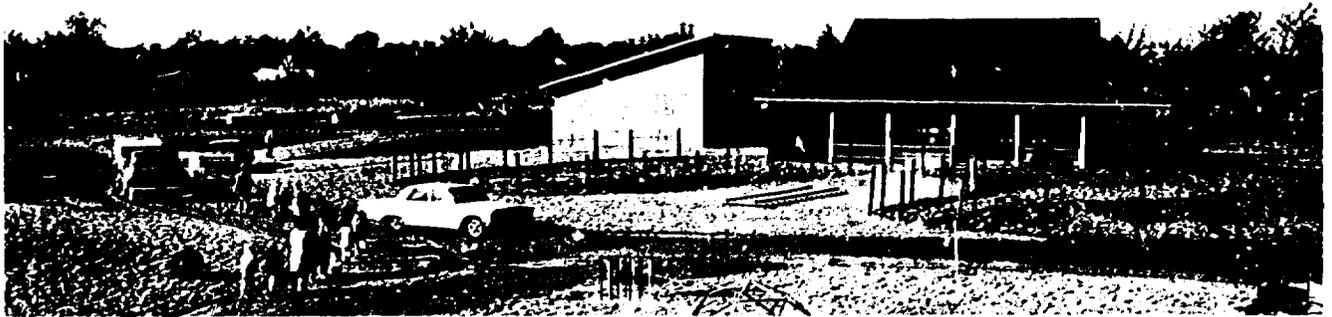
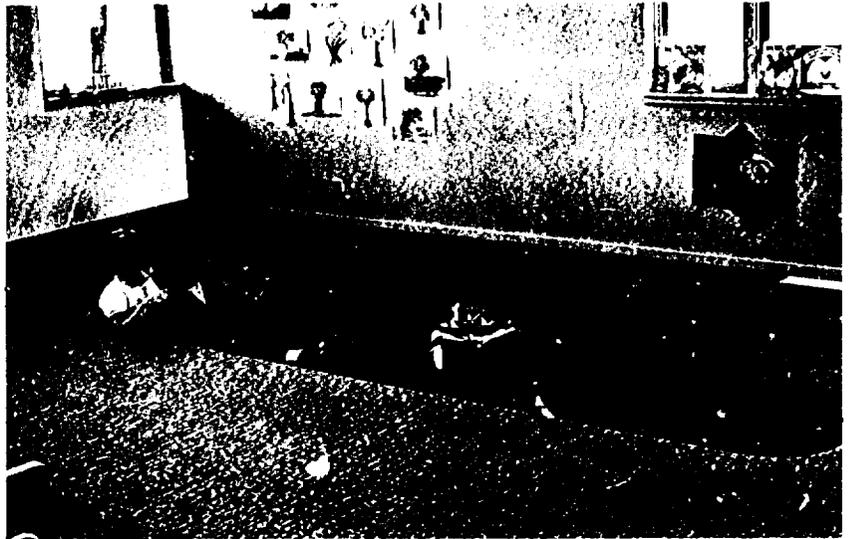
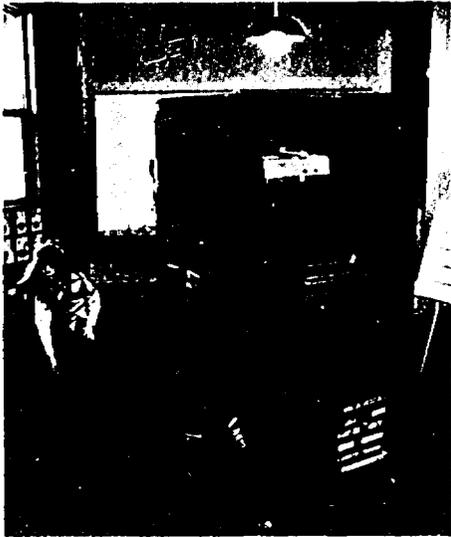
The school building is a two-level structure. Upstairs is an art room and viewing area for films and filmstrips, but its major function is to house viewing areas for parents and other visitors. Huge windows of one-way glass overlook each of the classrooms, making observation and explanation possible without disrupting the children.

As for furniture, much of it doesn't really exist. The wells provide much of the seating, and carpeting and shelves supplement this space. Chairs and tables are around but they are de-emphasized. Book display cases that are also teacher desks and seats are sprinkled throughout.

The Lamplighter School was constructed for \$1.5 million contributed largely by Dallas businessmen. It is a building that enhances a good program and makes it even better. It's hard to demand more of any structure.



Lamplighter School



The primary division of Casady School, a private institution in Oklahoma City, is housed in a rectangular building that was designed to be a prototype early education facility. "We wanted to construct a building that other early education centers could copy," says Margaret Loeffler, the division's director.

Seen from the outside, it seems unlikely that anybody would bother. Located in a corner of the prep school's 78-acre campus, it looks almost like an unwanted orphan. The building is a squat, rectangular, brick-faced structure with few windows and fewer distinguishing characteristics.

The exterior, however, is deceiving. Inside, the Casady School's primary division presents an exemplary early education facility that is fully air-conditioned, fully carpeted, fully used, and fully useful. It houses 192 early education pupils (96 at a time) along with a class of six-year-olds not quite ready for first grade work, two special education classes, and teacher and administrative work space. Fees range between \$500 and \$850 a year in the primary school.

Four major factors helped keep the 7,000 sq ft building's costs down to \$150,000 completely furnished: an exposed roof deck nailed directly to timber joists; concrete block loadbearing walls painted but not plastered on the inside of the building; a huge, open room—66 feet square—for the basic classroom area; and plumbing pavilions that group all piping in a small area and also create partial space dividers.

The roof deck was about half as expensive as normal roof construction, according to architect Stan Gralla of Benham, Blair & Affiliates. Its only drawback is that it could not be used in larger buildings because of fire code requirements. The deck consists of a 3-in. rigid insulation panel and built-up tar and gravel roofing.

Although concrete blocks saved on wall construction costs, they are difficult for hanging paintings or other exhibits. (Obviously, anything can be taped to the walls, but tape tends to tear exhibit materials.) However, specially designed furniture now under construction will line the walls to provide storage, display, and work space.

The huge, single open room cut lighting costs. "We were able to let our lighting go all the way high in the building, rather than having to do room individually," Gralla says. In addition,

the open plan solved some airconditioning problems, though this was one area where no money was saved.

"Although we were in reality conditioning one huge room," says Gralla, "teachers and children vary dramatically. One teacher's hot is another's cold. To get around this, we provided zoned air-conditioning with individual controls so that teachers can choose their own comfort range. This was expensive, but we felt that it was one area where the dollars spent would prove economical in the long run." The architects did cut costs by placing the central airconditioning unit on the roof.

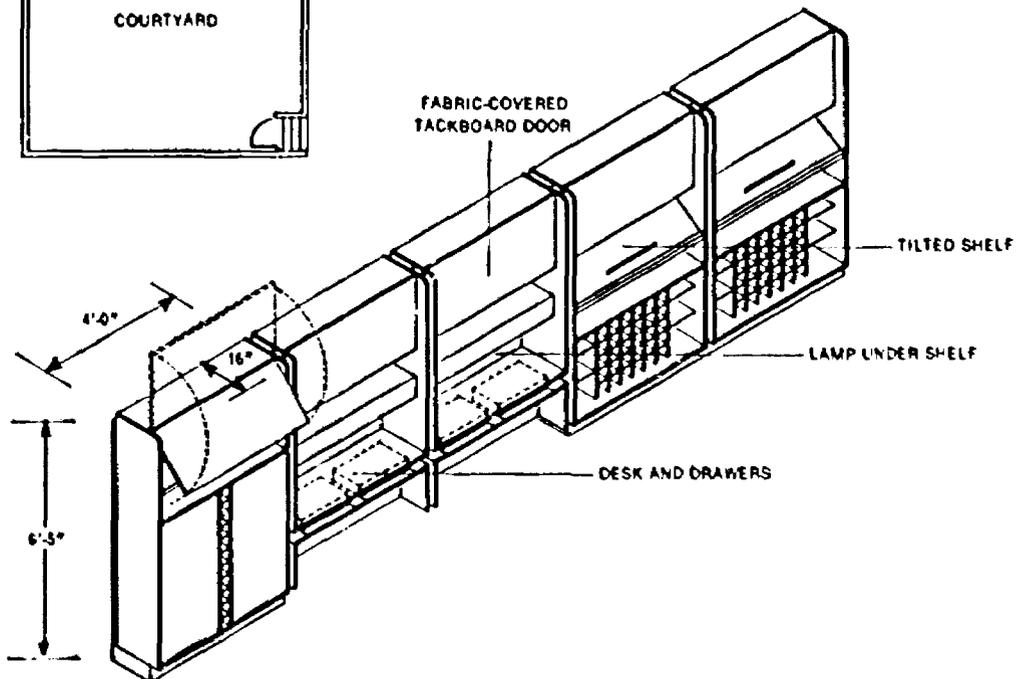
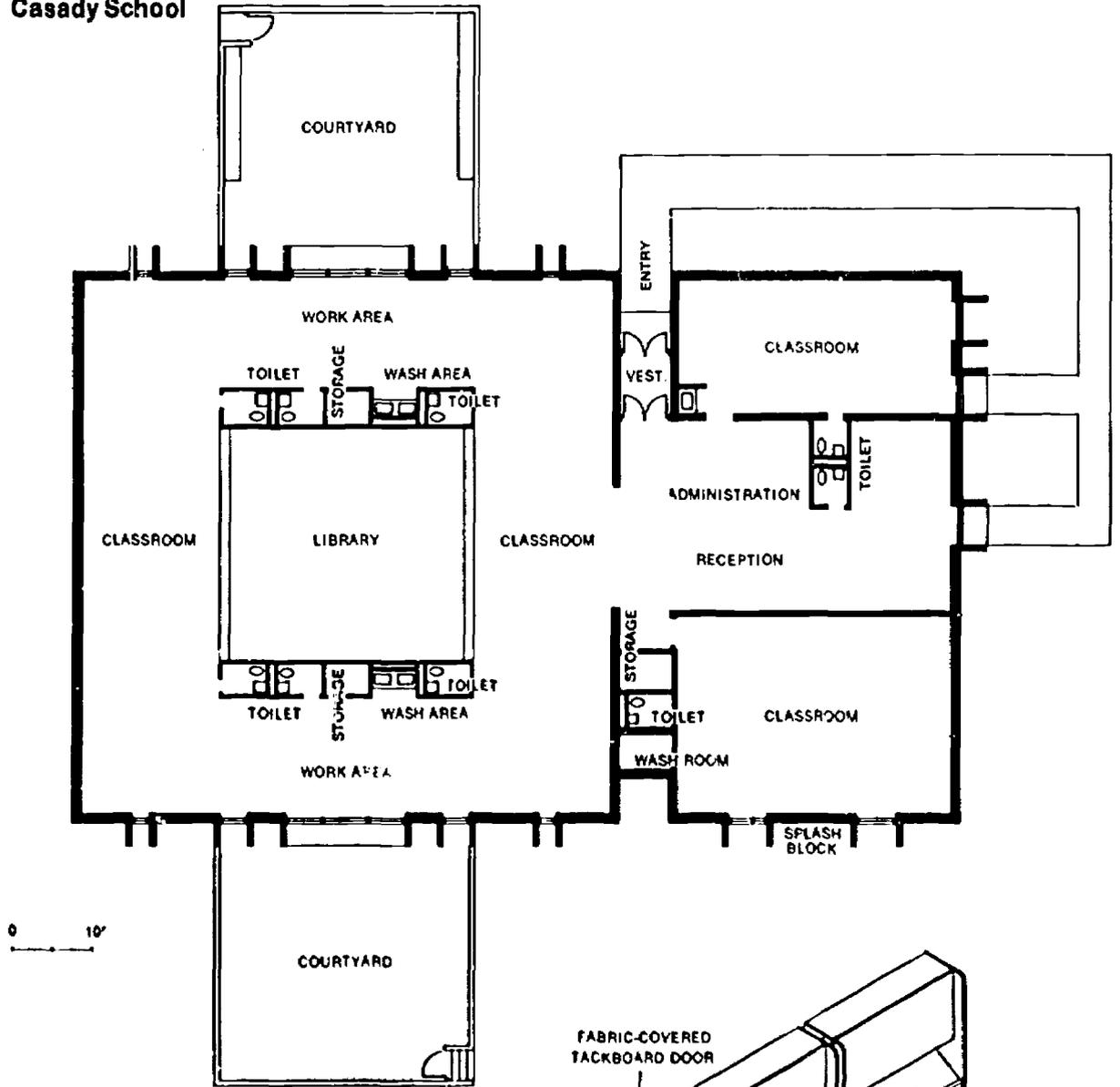
The two plumbing pavilions are concrete block structures, 30 ft long, 6 ft wide, and 8 ft high, with sloping timber roofs. Each pavilion contains three individual toilets, an open washup area, and a supply closet. By running all of the plumbing into these structures, the architects were able to economize, but more important, the structures divide the open area into three sections and provide a rough sort of organization.

The school is divided into four classes, each occupying a corner of the large area. The two classes at either end of a pavilion share the wet work area opposite the open washup sinks. They also share an outdoor play yard.

Between the two pavilions are the library and an ingenious stage created by cutting a semicircle out of the carpet, attaching it to the wall, and replacing it with a piece of contrasting color. The library provides more than books. It is the storage area for puppets, for filmstrips and tape recordings, and for other learning materials. Electrical outlets at frequent intervals around the area (and especially on the two steps down to the library) make it possible for a child to "plug in" anywhere that seems convenient. "We don't want to have to tell a child that he must work here or there," says Mrs. Loeffler. "We have sufficient outlets so that a child can use a tape recorder or other machine wherever he wants to."

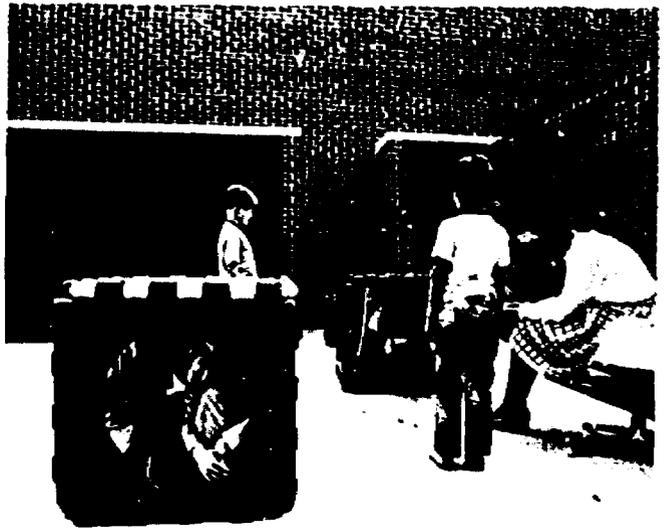
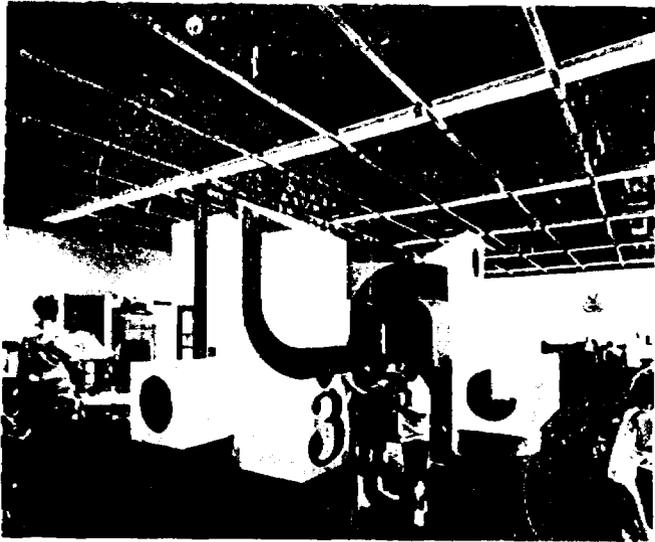
The use of six individual toilets has proven an unmixed blessing. "It has created a situation where every child feels free to use a toilet without having to ask permission or be taken somewhere," Mrs. Loeffler states. "The toilets are available wherever the child is." Each toilet has a door for children who want privacy, but it cannot be locked.

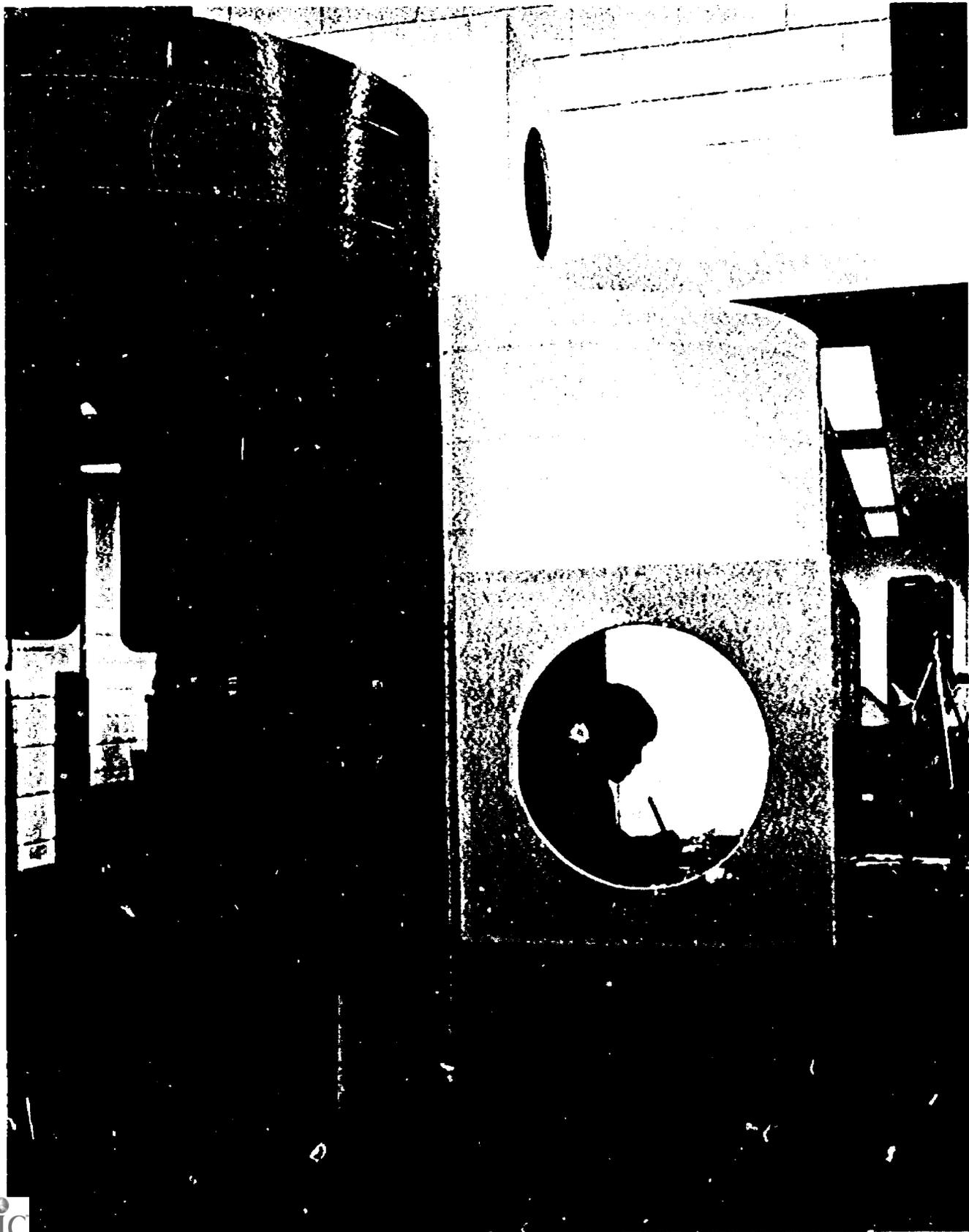
Casady School



ERIC n types of storage units, display and work surfaces for children are available in the wall units.

Top cupboards, which are out of children's reach, also serve as display boards.





According to the school's literature, the Casady School primary division is "Montessori based." As Mrs. Loeffler explains, "We have taken Maria Montessori's basic idea of a prepared learning environment and made it a very contemporary one. We use many of the Montessori tools and methods but have dropped some of the rigid structure that we feel is not suited to these youngsters."

The Casady School is manned by just 4 teachers, 4 assistants, and a librarian—9 relaxed adults working with 96 children. "This is a rather low ratio for preschool," Mrs. Loeffler points out. "But it is made possible by our open space and program."

The morning program is for three- and four-year-olds, the afternoon for four- and five-year-olds. On arrival, each child proceeds to the corner of the room where his class meets and stays there during the early part of the session, making occasional forays into the library. Later, a "free play" light flashes on, signaling that children are free to move around at will. "We do this to give some organization to the day," Mrs. Loeffler says, "to give children some feeling of belonging, and to keep the open area from becoming just a wild traffic center."

Most of the movement appears to be to and from the library, and it is noticeable that at almost no time is the movement purposeless. Despite the openness of the school plan, there is no running around or roughhousing; the emphasis in the school is on learning. (To encourage this, Mrs. Loeffler has a group of five-year-olds attending the morning program not as students, but as teachers. Each of them is a reader, and each spends his mornings reading to one of the younger children. "We find that this helps both youngsters," Mrs. Loeffler says. "The little ones are encouraged to learn to read, and also get some individual attention we couldn't otherwise afford. The older ones, of course, improve their skills greatly.")

The Casady School has proven remarkably easy to maintain. "We thought we might have some problems with the carpet," Mrs. Loeffler

says, "but we haven't. The carpet is easy to clean. We vacuum it every night with a heavy-duty machine. We've had everything happen to this carpet, from paint spills to a burst pipe, without having it stain or in any way deteriorate."

Far more of a problem than maintenance is noise. "The open area is a little noisy," Mrs. Loeffler admits. "We noticed it at the beginning, but it's no longer bothersome. It might, however, bother an outsider. We're going to try a sensor system that will cause lights to flicker when noise rises above a certain level. That will remind children—and teachers—to lower their voices a little. It should keep it somewhat quieter."

For the child who wants a bit of privacy and quiet, the school has created a "dual individual learning module." As Mrs. Loeffler puts it, "It has all the words in it, but it doesn't mean a thing."

It may not mean a thing, but it's the name given for an ingenious sculptured structure that dominates the entrance to the classroom area. The learning module was constructed by Stan Gralla and one of the school's teachers, because they could not get a manufacturer to do the job. It is basically a heavy cardboard tube, used in construction for forming concrete columns, split in half. Windows have been cut into the tube, a platform attached to connect the two halves, carpeting used to line the inside, and a shelf and electrical outlet and light provided for study. The result is two very private study carrels, each with a window on the world of the classroom outside: a dual individual learning module.

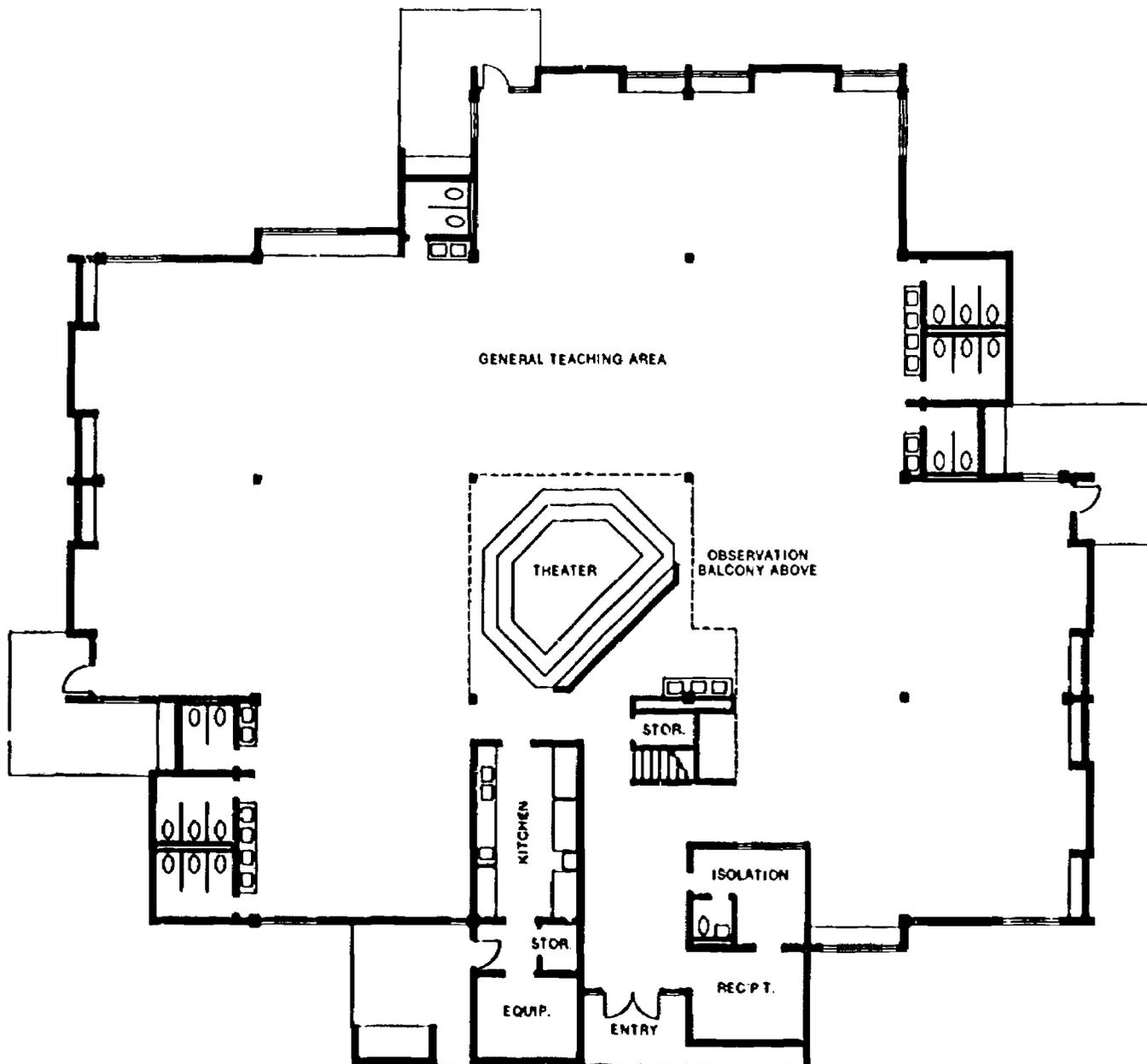
"We believe we have created an inexpensive early education center that would work with virtually any program," says Mrs. Loeffler. "It provides open space for movement, delineated class areas, places where wet work can be carried on (these areas are tiled, not carpeted), sufficient toilets to meet the needs of this kind of a school without an organized toileting program, private outside play yards, and administrative space. Moreover, it can be supervised by a smaller staff than would normally be needed. All in all, we find it a design we can truly recommend."

Prototype for franchising

American Child Centers, Inc. with headquarters in Nashville, Tennessee, is one of the many commercial companies entering or preparing to enter the early childhood education field. The business grew out of a survey of the desire for

child care facilities in the southern states, a survey that indicated both a great need and a great demand for early education.

ACCI's first school is located in Nashville, in a building expected to serve as the basic design



for future centers the company will build throughout the United States. The contract with the architectural firm of Yearwood & Johnson of Nashville calls for several stages of work, the last of which involves modifying the basic plan as a result of experience with the present structure. It is designed as a basic module to accommodate 107 children and administrative and support facilities, with an expansion module for an additional 20 children. With modules added on three sides, 167 children can be taught in the largest center presently conceived.

The open-plan schools provide maximum flexibility. The space can be arranged and rearranged as teachers and curriculum demand. Separation is made with movable space dividers and furniture. There are no interior walls.

Carpeted classroom space, an office, kitchen, banks of toilets and sinks, and a built-in, carpeted little theater occupy the first floor. A balcony housing the director's office, a conference room, reception room, and a fairly large observation balcony, also serves as work space for teachers and parents.

One major goal of the architects was to reduce nonteaching space, such as corridors, to a minimum. They also sought to simplify climate control and lighting, since these drive up the cost of most projects and economy was constantly sought.

Other design requirements included easy, unobtrusive, observation of children in various learning situations; spaces for a curriculum that encourages team teaching; use of various learning media such as tape recorders, television, and filmstrips, and free movement of children.

The use of one large room without interior walls, and the provision of a balcony overlooking the entire classroom area were key factors in meeting all of the client's specifications. The interior provides spatial variety (high and low places, big and little places, light and dark places, open and confined places) and with bright colors and interesting forms and textures makes the building a stimulating experience. A huge, free-form outdoor play area provides useful extra space for active play.

At present, the building is open from 7 a.m. to 6 p.m. and accommodates three groups of children. The first is an all-day group, usually the

children of working mothers. A second group attends only in the morning (when formal learning is stressed) and stays through lunch. A third, smaller group, comprises first and second grade children who use the center in the afternoon to wait for working parents. The cost to parents for full-day service in Nashville is \$21.75 per week. This would vary, of course, depending on competitive costs, staff salaries, and construction costs in other areas of the nation.

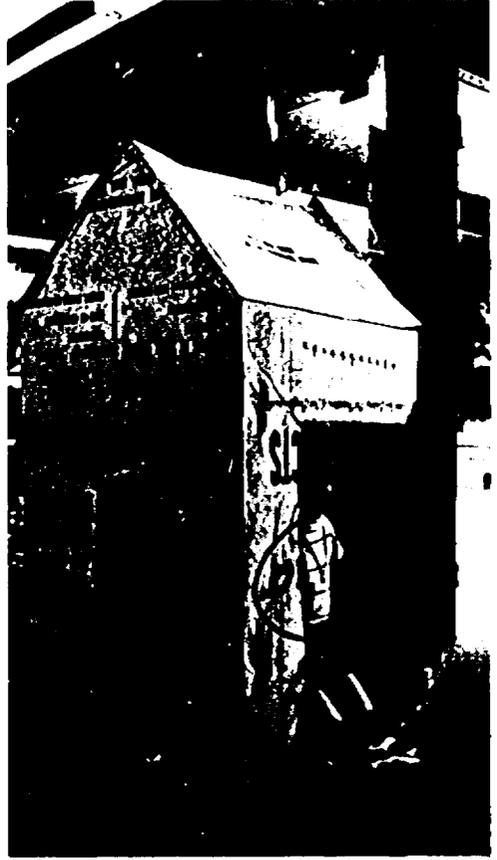
The school is staffed in an unusual manner. The program of the ACCI school emphasizes formal learning in the morning, and a play program in the afternoon. As a result, teachers and assistant teachers work four hours a day. The rest of the time, the director is aided by a group of helpers who usually are not trained in child care work or college educated. By dividing the staff in this way, program costs are held down. In Nashville, for example, teachers are paid up to \$2.75 an hour, and helpers get as little as \$1.60. Teachers who work all day are paid at one rate in the morning and at a lower rate in the afternoon.

The flexibility of the open school plan is among the building's strong points. Price is another strong point—the design that will be built nationally is expected to be about \$14.50 per sq ft fully furnished in Nashville, somewhat more (or less) in other areas depending on labor costs. A single-story model without the balcony is expected to cost between \$10 and \$11 per sq ft. (For comparison, an elementary school in Nashville today costs about \$15 per sq ft, plus land and furnishings.)

Weaknesses discovered in the pilot Nashville project are expected to be remedied in the final franchise plan. They include the scattered location of the toilets, which will be grouped; lack of storage space; and the need for space for teachers to get away from children. Commercial room dividers have also proven inadequate and have been replaced by boxes and cartons that also serve for playing.

"The strengths far outweigh the problems," says Joseph Lane, vice president of the corporation. "This plan, especially as it will be modified, provides an economical, flexible facility that can be used anywhere in the United States. It puts virtually no limitations on the program that can be provided."





New school in an old house

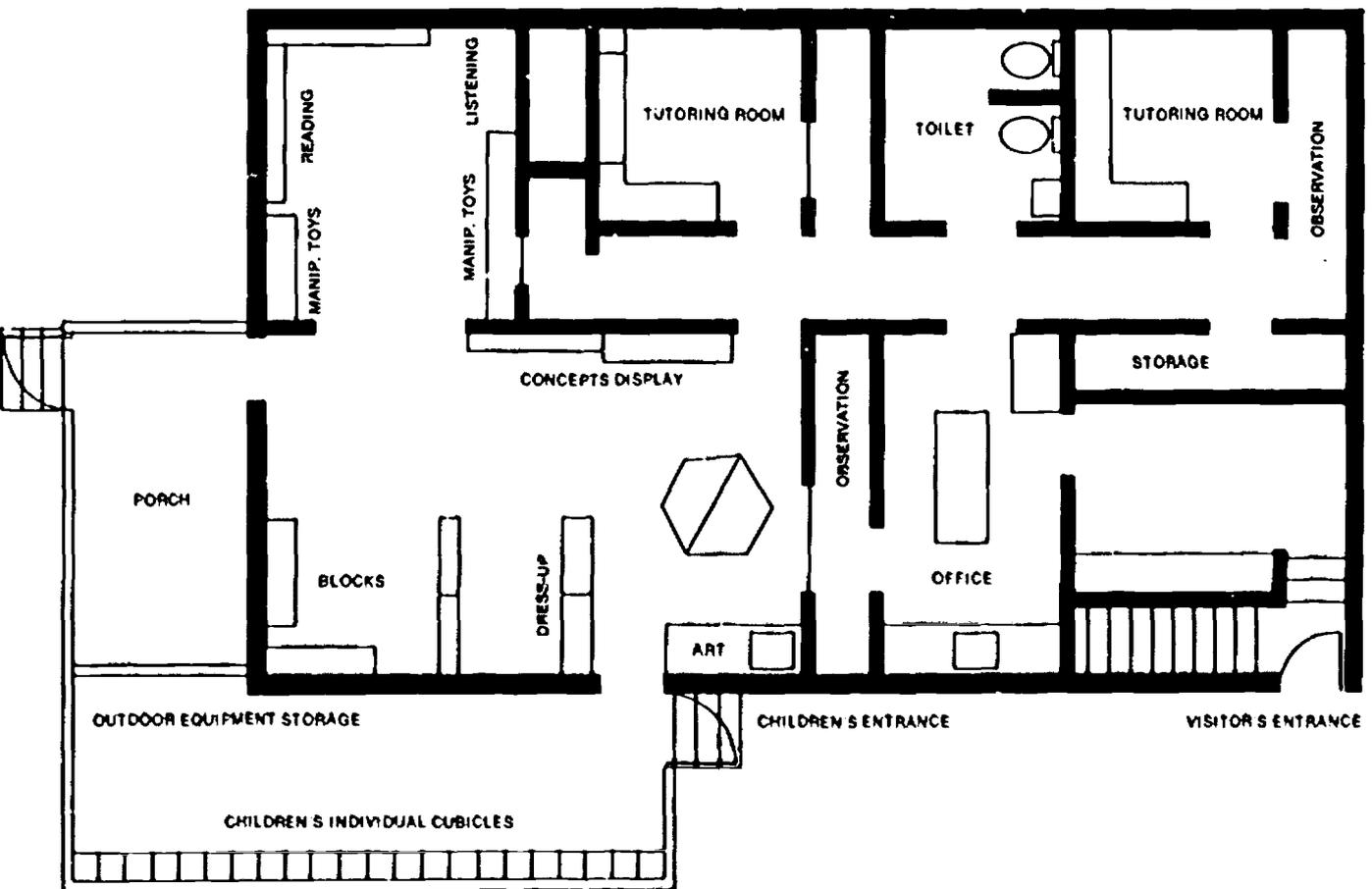
The New Nursery in Greeley, Colorado is small—an L-shaped room and small support areas in an old house in a residential part of town—but the variety of activities carried on, and the speed with which the room changes, show what can be done with a tremendously dedicated staff, a little money, and an old building.

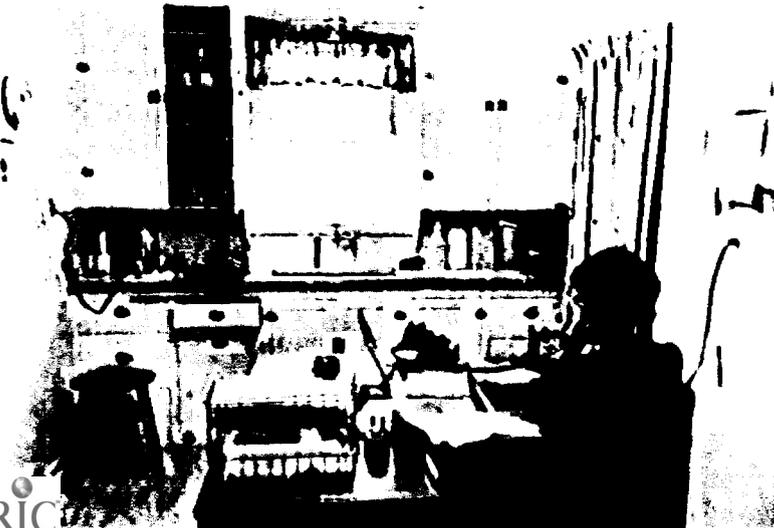
Altogether 30 children use the New Nursery, 15 in a morning program that ends with lunch, 15 in the afternoon, starting with lunch. The school is sponsored jointly by the Office of Economic Opportunity and Colorado State College, for which it serves as an early education laboratory.

Most of the children are from Mexican or In-

dian backgrounds. They arrive at the school with a legacy of deep poverty, and without any medical or dental care. They speak inadequate English, little Spanish.

Although almost any kind of school program would be of some help to these children, the New Nursery far exceeds minimum requirements by providing a vital, highly directive program. It prepares its students to succeed in the middle-class elementary school program into which they will graduate. The school offers children a wide range of experiences that constantly push them into new, unfamiliar areas, while at the same time encouraging them to understand and appreciate their rich cultural heritage.





The New Nursery School



The New Nursery School

In addition to the L-shaped classroom, there are a toilet, two typing and testing rooms, two tiny viewing areas, an entrance porch where coats and boots can be stored, and a small office. Outside is a play yard. The old house was converted into a school by the staff and volunteer help.

Although the basic classroom is only 480 sq ft, an amazing amount of work takes place in that limited area. This is largely because no part of the New Nursery retains its identity for very long. During the course of a morning, a dress-up corner will become a listening area; a block corner becomes a doll's house; a reading corner, a games corner; a story-telling area is transformed into a resting place, a dance hall, a restaurant; the staff moves ahead of the children, anticipating their direction, suggesting activities, providing tools, and constantly removing those materials that no longer command interest and that therefore cannot be allowed to consume space.

The two testing and typing rooms are a direct outgrowth of the emphasis put on language development. Special typing teachers take children out of the regular classrooms for individual work. "This is a real advantage," says Oralie McAfee, the school's director. "These children seldom have the opportunity to be alone with an adult for any length of time. We could add to our classroom area by eliminating the private rooms, but that would be a serious mistake."

Why typing rooms? Simply because the typewriter is an easy tool for helping children to learn to express themselves, whether it be for learning letters or words, learning numbers, or even writing stories. "This isn't a talking typewriter," Mrs. McAfee points out. "It's a simple tool that encourages a child to learn in his own manner. We've found it very effective."

The office once was a kitchen, and it maintains some of the kitchen fixtures and decor. Mothers, the staff has found, are not put off by coming into someone's kitchen and sitting and having a cup of coffee. So, though it might be more convenient from other points of view to put the office elsewhere, it remains in the kitchen of the house, where it serves as a comfortable point of contact between school and parents.

The New Nursery's viewing areas are too small to be really useful for teachers and others who sit to observe the program. (One-way mirrors

were inexpensively created by sandwiching a sheet of metallized Mylar between two panes of glass.) They do help in special situations, however, offering an opportunity for quiet observation of a child or children in the playrooms. Parents often use them to familiarize themselves with the school and to be sure that their children will be safe there.

"We find the viewing areas particularly good for the children themselves," Mrs. McAfee says. "We make no secret of their existence—as a matter of fact we tell the children when their parents or others are there. But I often use them with children who are having difficulty in school and who need to be reassured. I can take them behind the glass and let them watch what their friends and brothers and sisters are doing and kindle in them a better feeling towards the school and towards themselves."

The play yard is interesting primarily because nearly all the equipment is demountable. The staff is quite insistent that playground equipment not be of the fancy, stationary type. "We want equipment that is sturdy and durable, but that we can use in different ways at different times. We have neither the space nor the money to erect edifices that go unused," says Mrs. McAfee.

The New Nursery is small for the number of children in it, but Mrs. McAfee feels that 15 is the ideal size for a preschool class, so she puts up with a little crowding to maintain the group dynamics. In addition, the toilet facilities are inadequate, at best. Children must leave the room to reach the single adult-size toilet, taking them beyond the supervision of teachers, and often causing accidents. The new wall covering will be to correct this. Better acoustical and maintenance-free wall coverings will be installed if money can be found to redesign the remodeled house.

The advantages of the old house, however, outweigh the disadvantages, according to Mrs. McAfee. "Because it is an old house, rather than an imposing structure," she points out, "nobody is overawed by the school. Another advantage is the L-shaped room. You can't create the same effect, I suppose, with other dividers in a rectangular room. It really makes each space feel different. Considering how small the space is, we get a tremendous amount of visual and acoustical separation."

Selling early education to the community

Early education is being merchandised to its community by the Hilltop Center in Dorchester, Massachusetts. It is being done through the judicious use of the center's major physical asset: large display windows in its storefront location.

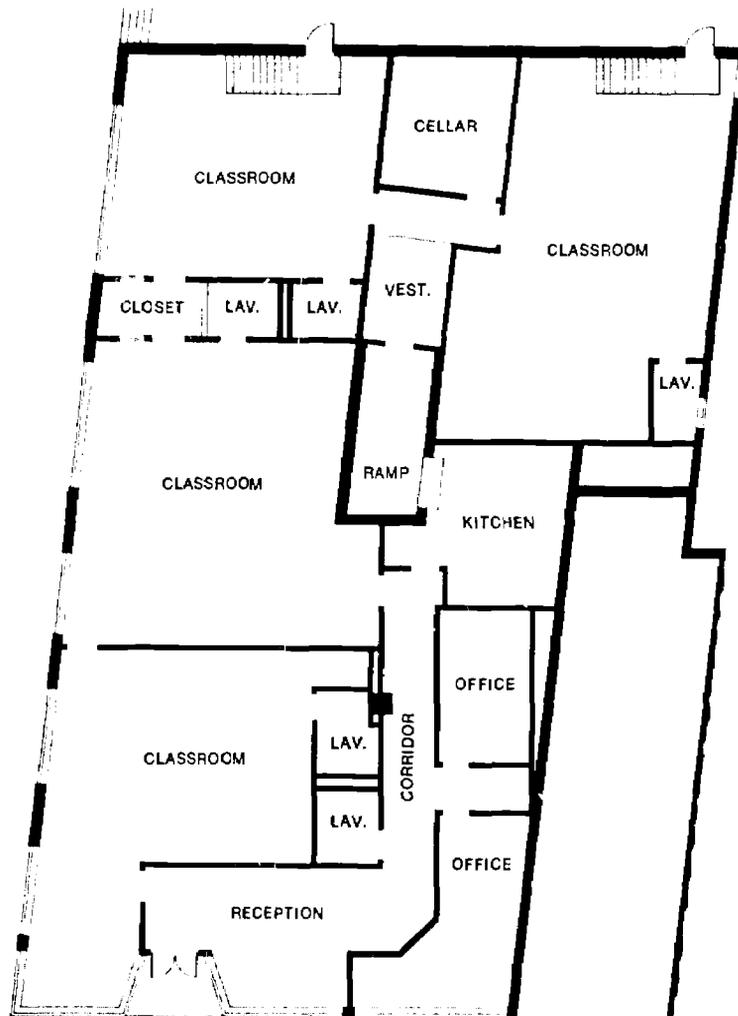
"So often storefront operations try to disguise their front windows, try to create privacy for the activities inside," says Dolores Palge, director of the Hilltop Center. "We'd rather use the window to let the community know what we are doing in here—and to let the community know how important we think that activity is.

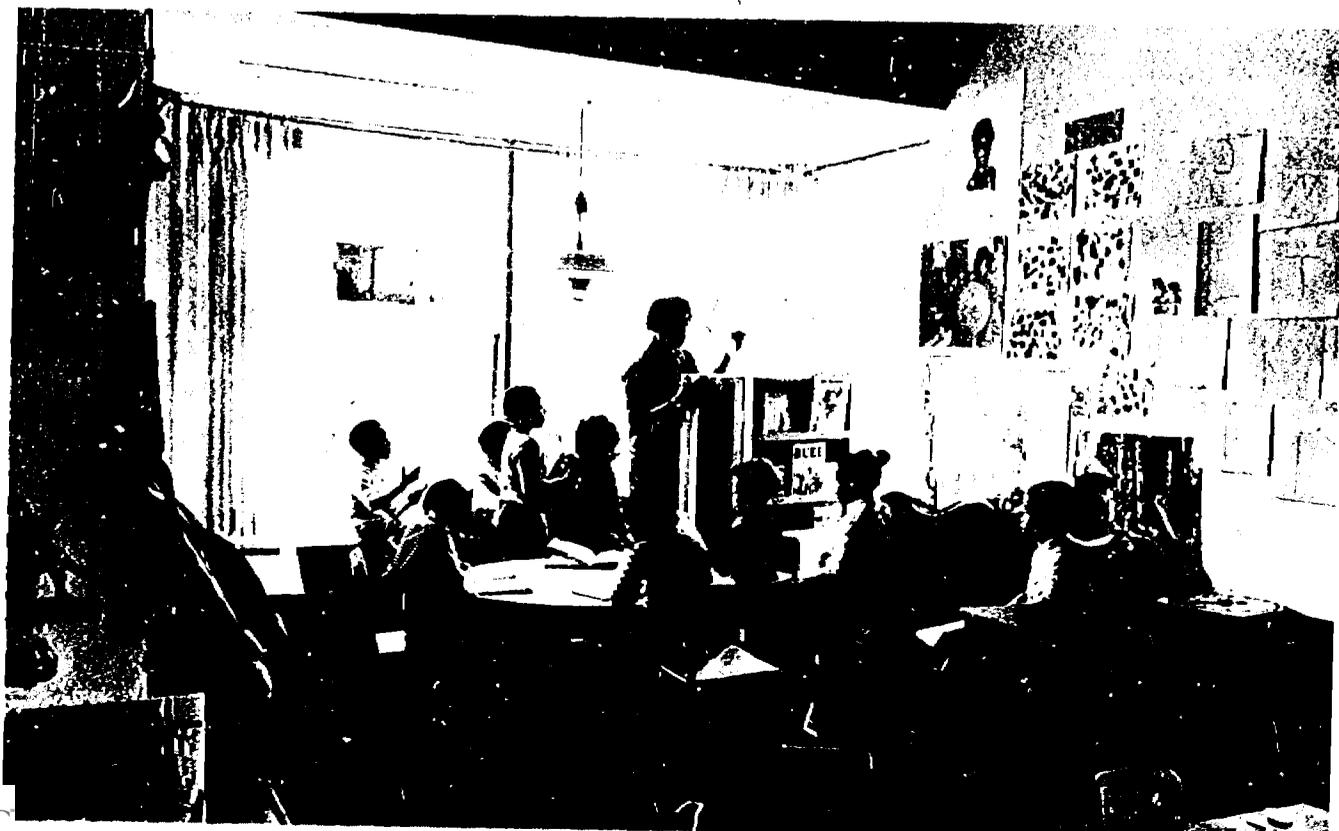
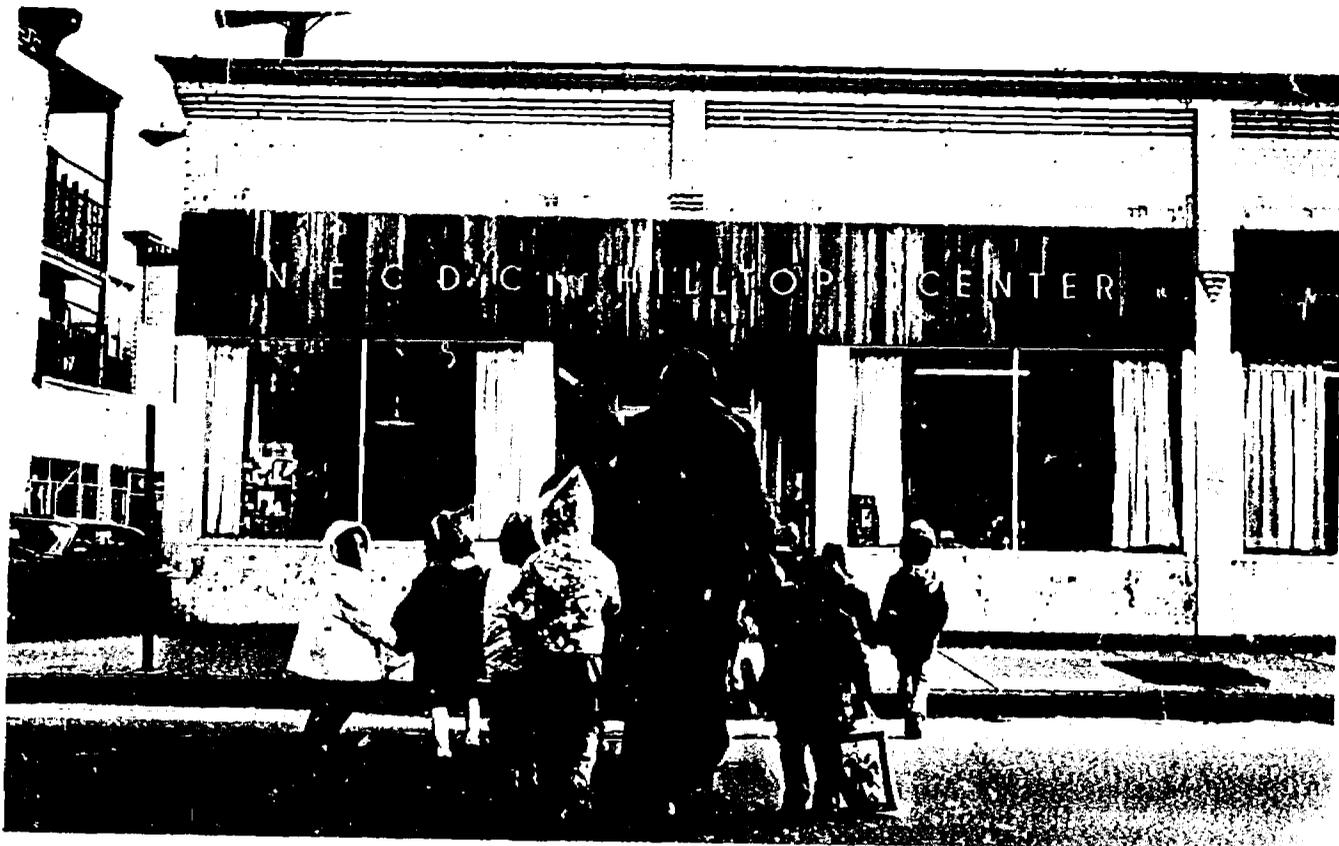
"To do this, we have taken one of our store windows and made it a part of a classroom, a sort of a special reading corner with a comfortable bright red couch and some carpeting and chairs that children can sit on. Sometimes the children just sit and look out at the street. At other times, however, they listen to stories, or talk to their

teachers or each other, and the people on the street look in on them and begin to understand what an early education center can do for their children."

The Hilltop Center, a Head Start project now in its fifth year of operation, serves 90 children, three to five years old. About 30 of the children are in two full-day programs; the remainder are in four half-day classes.

Searching for a location that would provide an educational and community service center within the community to be served, directors of the Hilltop Center chose an abandoned supermarket to convert into their headquarters. The conversion left the social services part of the operation with just a single small room, but provided a school with four large classrooms, a kitchen, an office, a waiting room, rest rooms, and the picture window on the world.





Hilltop Center



The educational objectives of the Hilltop early education program include "giving the children an edge—preparing them to cope with the classroom situation and helping them to survive in school and society."

To carry out these objectives, a program with a strong emphasis on reading readiness and number concepts has been developed by Dorothy Latham, the center's educational director. "We want to bring these children real security," Mrs. Latham says. "We want them to get over their fear of looking at the world. More important, perhaps, we want them to realize that it is all right to be what they are, to look as they look. We want to build their self-image."

Every class makes a weekly trip to the public library to select books. "It's not important whether the children are reading or not. Our objective is to expose them to books," Mrs. Latham says. "Middle-class children get this exposure constantly in their homes and develop an appreciation for books. Our children do not unless we provide it here." Other trips will take children to a rubble-strewn playground that is used fairly regularly; to local stores, homes, and factories; or to downtown Boston, sometimes just for the experience of the train or bus ride, sometimes for a special event, such as a visit to Santa Claus.

Each trip is followed by discussions, by a story written by the children, by dramatic play, by role playing. "We use every opportunity we can to develop language, to increase vocabulary and fluency," Mrs. Latham stresses. For the same reason, a television set has been put into one classroom so that the children can watch *Sesame Street* if they choose. "I saw a school where all the children were called together and *told* to watch the program," Mrs. Latham says. "That seems self-defeating to me. We turn it on and let those who want to, watch whatever interests them. Most of our children wander in and out of the program. They watch for awhile, then stop and do something else. That's fine. That's just the way it should be used."

The Hilltop Center still bears many of the signs of being an old supermarket. The lighting, the floors, even the walls bear evidence of former use. But the great advantages of the location, and the equal advantage of being offered a great deal

of open indoor space that could be divided as desired, outweighed any particular distaste for the storefront location. "Actually, we've found this an excellent location from the point of view of visibility," says Mrs. Paige. "People walk along and see the children sitting on a red velvet couch in the window and that really brings them up short. Quite a few have come in just to find out what we're doing and why. And a few of those have ended up joining our program or contributing to it." (As a Head Start program, the center must provide a 10 percent local contribution to help in its own support. Virtually all of that is in the form of contributed time and labor.)

What needs to be done to convert a supermarket into a super school? Sam Mintz, the architect in charge of the project for PARD-Team, a Boston architectural and planning firm, said, "This is no seminal project in nursery school design, but a very low-budget job, done for \$50,000. We would have needed two or three times that amount to really make waves.

"The store we took over had been a neighborhood supermarket. It was two big open spaces with a bearing wall separating them. The outside was bricked in except in the front, so we had to open windows all along one side, where the major classrooms are. In addition, on the outside, we redid the front of the building to make it look more attractive and patched the cracks in the roof.

"Inside, we took out everything except the old ceiling of embossed sheet metal. We put in new plumbing, revamped the heating plant, and rewired the whole place. Walls were patched and painted, and openings made in the bearing wall to join the two spaces.

"The locations of partitions to separate classrooms, toilets, kitchen, and an office were specified by the educational staff. The result was a center that won't win any architectural prizes, but certainly works as an early education project, and after all, that was what we wanted to accomplish."

Hilltop's storefront early education center may not be architecturally significant, but it does demonstrate how such centers can be developed if there is available neighborhood space. It also demonstrates how an ingenious staff can make use of the facility's strong points, in this case a display window, to make early education important to the community it serves.

Remodeling a refrigerator warehouse

A warehouse-factory area filled with trucks, train tracks, and smoke seems an unlikely place for a child care center. But the KLH Child Development Center is located in an industrial section of Cambridge, Massachusetts, for good reason. The center is part of a federally sponsored experiment to find out whether industry can successfully support and operate a day care center for the preschool children of its employees. Federal funds helped KLH develop its program and are used for research and evaluation of progress.

If the experiment is successful, it is hoped that the way will be pointed for a whole new attack on the problem of providing low-cost day care for children of families that otherwise would have to subsist at a poverty level.

The center, which opened in temporary quarters in July, 1968, moved to its present location—a former refrigerator warehouse next to the KLH factory—in the spring of 1969.

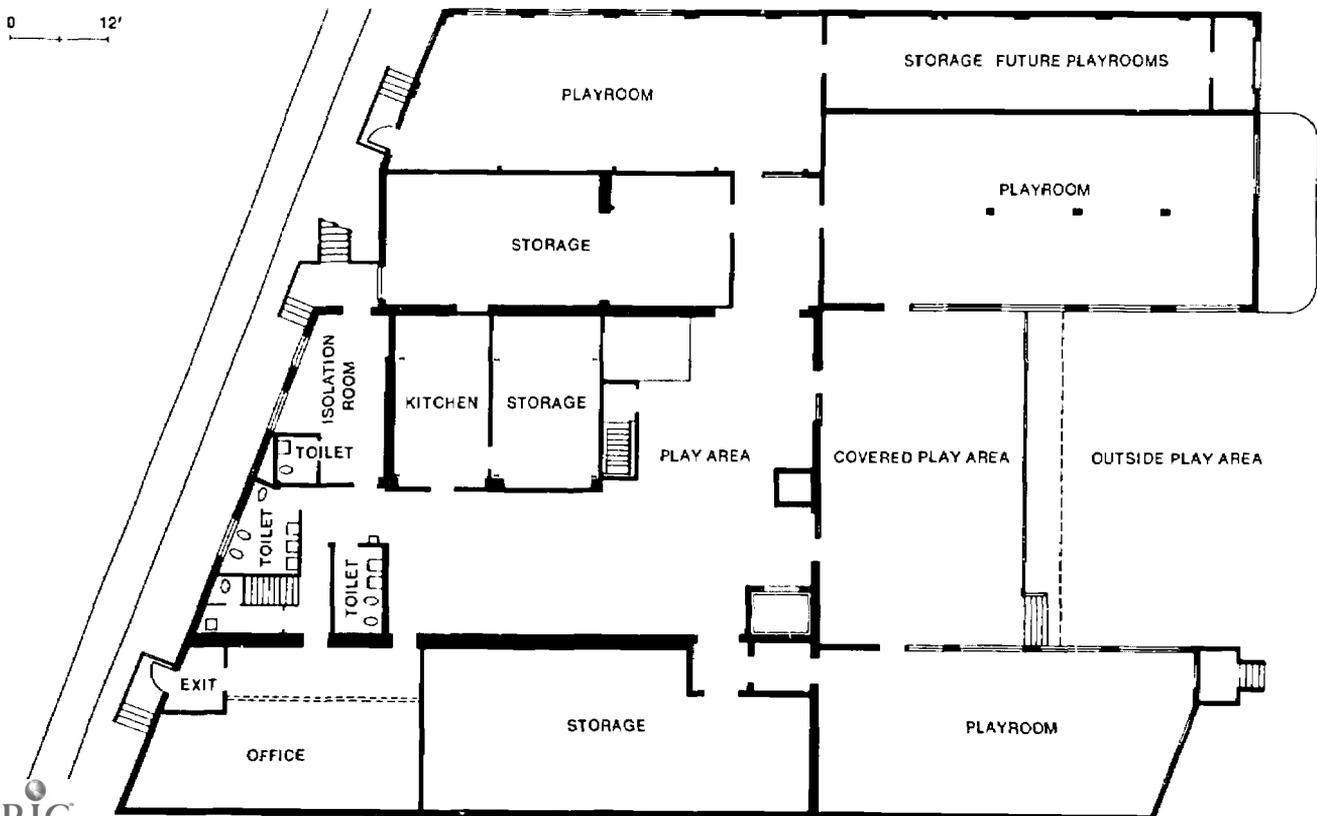
The center is open from 6:45 a.m. to 5:30 p.m. five days a week, 50 weeks a year. (The plant shuts down for two weeks each year.) Its hours

are set to make it possible for assembly line workers, as well as office workers, to use its facilities. The center has staff and room for 70 children. Day care costs are \$37.50 a week but most of the children attending are subsidized by KLH, other employers, or the State Welfare Department.

While the location was perfect, it took considerable creativity and \$64,000 to turn it into a school. It was necessary to provide windows in exterior walls; to clean, patch, and paint the interior (many of the walls were lined with cork); to install new lighting; and to carpet some floors.

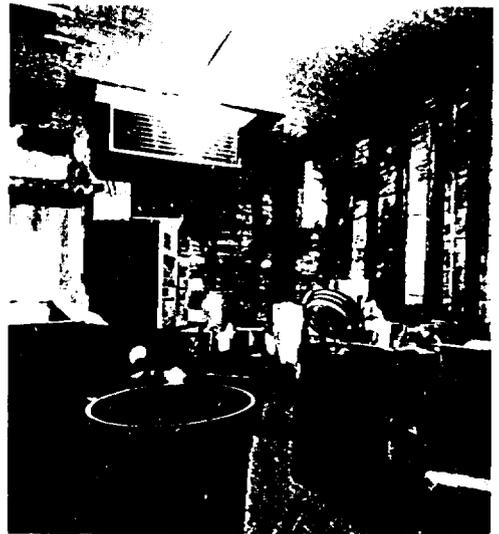
The former truck delivery area provides room for an excellent play yard and the loading platform forms a natural semi-sheltered play area that can be used in all but the coldest weather.

On the ground floor, the KLH Center has three large classrooms, a huge entryway that is often used for tumbling, running, and other physical activities, an office that can be turned into a fourth classroom when needed, a small director's office and health room, and a well-equipped kitchen. A





KLH Child Development Center



second floor can also be opened to classroom use in the future.

Altogether, about 12,000 sq ft can be made usable. The huge area of the school—which is accentuated by ceilings as high as 14 ft—could be out of scale with child-dimension space, but careful use of colors, space dividers, and lighting seems to overcome problems.

And the feeling of spaciousness that the school provides allows children a freedom not usually found inside a building. "You must remember that these children spend a very long day with us," Kate Bull: Lafayette, the center's director says. "If we didn't have a great deal of space, the children would have to be held in check all day long. It would be a very undesirable program."

Not all of the rooms are huge. One area, in particular, extending between two rooms, has ceilings less than 8 ft high. The area has been carpeted and outfitted with bookracks, tables, and chairs; the staff hoped to encourage children to use it for quiet activities, a respite from the open areas of the rest of the building. But children, being children, have found that its low ceilings, close walls, and open ends make a beautiful sound tunnel, and more often than not it becomes a dance hall, with music reverberating off the walls. The children love it.

The center is now operating at capacity, but for its first several months it had space to spare. Just 25 children were enrolled. This was a result of three problems associated with the Center as it was originally conceived:

1. Although the school houses preschool age children of working parents, state law prevents it from accepting youngsters before they are two-and-a-half years old. On the other hand, it has no facilities for children of kindergarten age or older. As a result, mothers who would like to work for KLH, and take advantage of the center, cannot because they need other kinds of care for older and younger children.

2. Transportation is a problem. Most of the KLH employees do not live in Cambridge, and the great majority must use public transportation. The difficulties of traveling with three- and four-year-old children on crowded and erratic bus lines deters many potential users.

3. The child care center was seen originally both a lure to potential employees and as a method of holding good employees who other-

wise might quit in order to remain at home and care for their youngsters. To a certain extent it has worked—Mrs. Lafayette reports receiving at least one call a day from people interested in working for KLH so that they can use the child care facilities. But the current—and hopefully temporary—state of the general economy has worked against the experiment. At the present time, KLH is not hiring, and so that potential is not being given a fair chance.

Some steps have been taken to overcome these problems. The center has been opened to employees of other factories and colleges in the area. The employers, in effect, guarantee a certain number of children and subsidize the program to that extent. In addition the State Welfare Department has placed a large number of children in the facility. This has filled the center.

On a longer range basis, Mrs. Lafayette speaks hopefully of setting up a program where the KLH Center would take in some preschool children from Cambridge, in exchange for opening up some seats in the Cambridge Public Schools for children of KLH employees who live outside the city. If that can be arranged, a mother with children of preschool and school age could bring all her offspring to the center in the morning. The children would receive breakfast at the center, and then the school-age youngsters would be bused to nearby schools. After school they could be returned to the center for an afternoon program. They would then return home with their parents at the end of the working day.

"This kind of a program would solve many of our present problems," Mrs. Lafayette believes. "It would help our employees greatly and would also mean that KLH was providing a service to the area in which its factory is located. And it would mean, too, that we could provide youngsters with a continuing program from the time they entered our school until perhaps the end of the sixth grade."

The KLH experiment has yet to be fully evaluated in terms of the ability of industry to provide day care service for its employees. But one thing has been proven already: even the most rundown building in an industrial area can be transformed into an early education facility. It opens up a whole new range of possibilities that cities and corporations should consider.

Territorial boundaries

The design of the Child Minders School in Greenwich, Connecticut, is an integral part of a program that clearly directs children from one activity to another, that delineates the activities that can be carried on in a specific area, and that allows children great freedom to find their own way in whatever they are doing.

The center is run by Nancy McCormick Rambusch who in 1960 helped organize, and became the first president of, the American Montessori Society. Her new school, which is not Montessori-based, is located in an old nursing home converted to her specifications by architect Raymond F. Pavia of New York City. Apart from the basic rooms, the fire sprinkler system, and a large kitchen, the early education facility retains few nursing home features.

The center is made up of a series of rooms designed to accommodate between 10 and 12 children. "We have provided open space although we are operating in a series of small rooms," says Nancy Rambusch. "It's like the difference between the football field and the maze strategy.

"In the football field, you provide a huge open space for children to roam around in. In the maze strategy, the open space is broken down and specific opportunities are offered in specific places. Children can see and move into other areas, but they are always within an enclosed space. Within that space there are further enclosures where they can find real visual and acoustical privacy."

As many as 100 children are expected to use Child Minders at any one time. Mothers may send their children to the privately owned center for half days or full days, for two, three, or five days a week. The center is open all year round, though it is not airconditioned. It contains more than 3,500 sq ft for children on two floors (only one is currently in use), ample office areas, and the large kitchen. Cost of remodeling the building, including design fees and furnishings, was about \$20 per sq ft.

Children enter Child Minders and go directly to a cloakroom where space is provided for coats and completed projects. The walls of the cloakroom are lined with chrome Mylar which creates a distorted reflection of the children. "It's better than a mirror," says Mrs. Rambusch. "Each child involves himself in the image, making himself look different and act different. It's fun."

From the cloakroom, children can move into a wet and dry area or into two separate play areas. One of the play areas is a small, carpeted room with a large play pit built into one corner. The play pit is lined with carpet and foam rubber and filled with dozens of small, foam-filled pillows to create a swimming pool without water. Children remove their shoes (one of the center's safety rules) and jump into the pit, learning to take turns, diving for different or similar colored pillows.

Beyond the play pit lies an old screened porch, now a carpeted semi-shelter for physical activities.

Children entering the porch from the play pit room can leave it through another room given over to blocks and other construction materials. This area, too, is carpeted, but its major feature is two play pits right in the middle of the room. These are shallow areas, defined by carpeted plywood frames that can be sat upon or built upon as a child wishes, but their basic function is to define territory. "One of the great problems in working with blocks," Mrs. Rambusch says, "is that almost invariably the structures get out into traffic areas and are destroyed by other children. We have created instant territoriality. A child goes into one of the block pits and it is his as long as he is using it. He can build his construction in total confidence that when it comes down it will be by his own hand."

Moving out of the block room, a child enters an indoor playroom, dominated by a series of modular "play bays." These play bays are defined by four-foot walls that give adults the feeling of a maze, but which provide total privacy for a child. (A board across the top of each bay entrance effectively keeps adults out.) The individual bays are outfitted as a store, post office, kitchen, and living room, along with a chrome Mylar-lined dance hall for dress-up activities. The bays can change character at the will of the children.

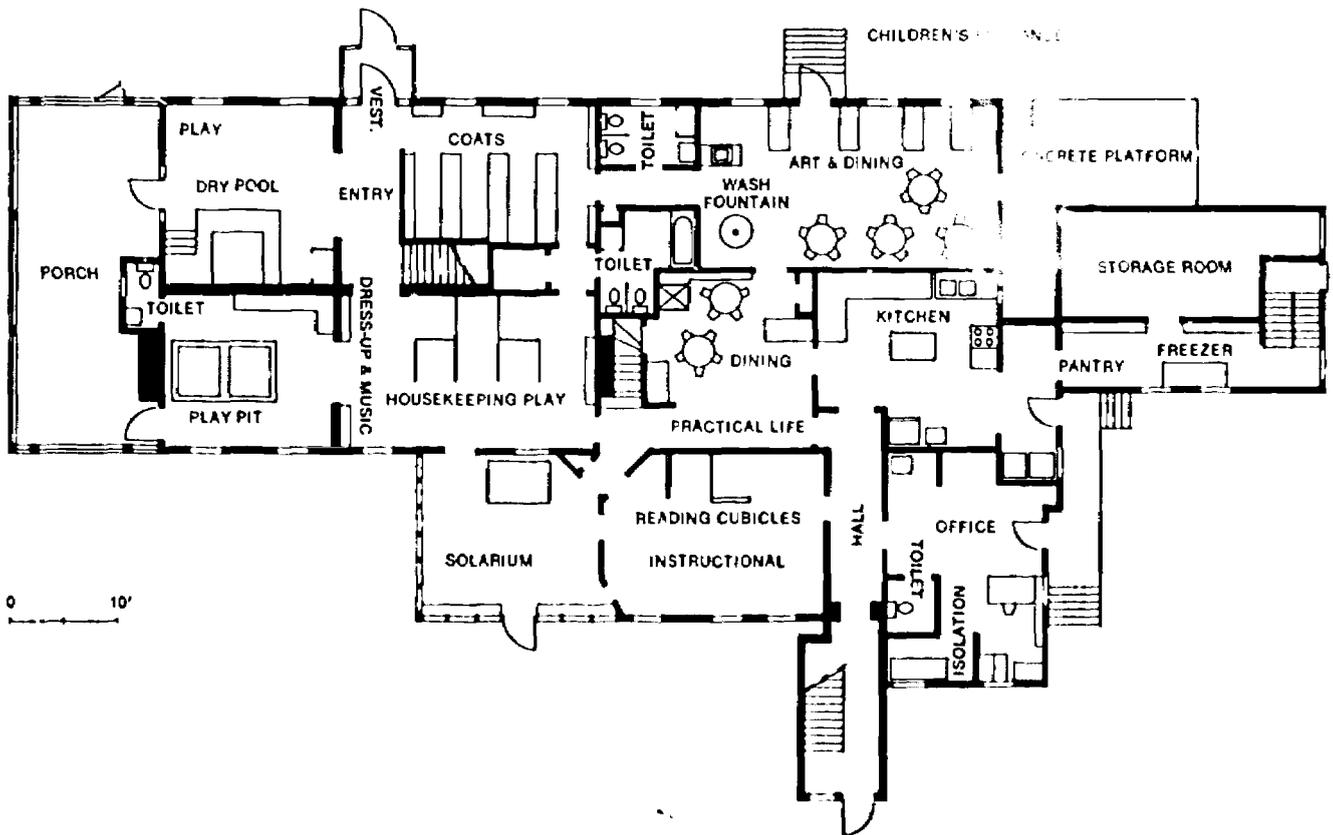
If science and growing things attract the youngster, the green growing area is where he would move next. This is a converted sun porch which houses plants, an ant colony, a number of magnifying glasses, and such occasional pets as turtles, hamsters, and rabbits.

Beyond the green growing area is the school's lone formal study room, a carpeted area loaded with learning materials such as counting beads, shape boards, books, audio-visual learning tools,



Child Minders School





and the like. Two pillow-lined learning bays are available for children who want to read to themselves, be read to, or simply get out of the main traffic of the center.

A "real life" room is next to the kitchen for such activities as shoe polishing and tying, sweeping and dusting, setting tables, and cooking.

The wet and dry area is the largest single room in the school. It contains stand-up sand pits and water basins, surfaces for clay and painting, and a large pane of vertical, shatterproof glass for finger painting.

The painting tables are designed for children to sit on opposite sides instead of side by side. But children are not confined to the tables for their painting. "They can work standing, sitting, kneeling, or sitting on the floor," Mrs. Rambusch says. "We make no restrictions on how they must work, nor does the facility. The floors are com-

pletely washable. Children are free to use the facility as it suits them, not as it suits adults."

The center will be manned by 1 adult for every 10 children when it is operating at full capacity (it opened in June, 1970). After being introduced to the various activities in which they can participate, the children will move freely among the various areas, while the adults will assume somewhat stationary supervisory posts. "They'll be able to see what children are doing, to move in when they are needed, without intruding on the children's activities," says Mrs. Rambusch. "Because of the four-foot walls on the play bays and the open doors between rooms, a comparatively small number of adults will be able to supervise the total center. And then, when the children and the facility determine what is done, rather than adults—we'll have created the type of center that Child Minders is meant to be."

School by the sea

The Montessori School on Hilton Head Island, South Carolina, is traditional American Montessori, from its neatly arranged counting beads to its multitude of buttoning frames. Fifty children attend daily; 25 in a morning program (8:30 to 11:20) and 25 more in the afternoon (12 to 2:50). It has three employees, a head teacher who also serves as director, an assistant teacher, and an environmental aide. The Montessori School is sponsored by Sea Pines Plantation, on whose property it is located.

The location of the school is spectacular. It occupies a former souvenir shop on the edge of the ocean, and its picture windows overlook a huge play yard, with ocean waves breaking in the background.

Sally Cook, head teacher and director of the school, was largely responsible for its facilities. She, along with Mary Fraser, the school's founder and board chairman, directed—and, to a large extent, carried out—the remodeling project that turned a rundown old store into a bright, air-conditioned, partially carpeted early education center.

The center consists of three large rooms. The largest, running through the building from front to back, contains 2,800 sq ft of carpeted space. In this area, Mrs. Cook has arranged all of the traditional Montessori tools. Each item has a place, and each is in its place, according to plan. "Every child knows where everything is," says Mrs. Cook. "They go to the object they want, take it out, and go to work. Our job is to encourage

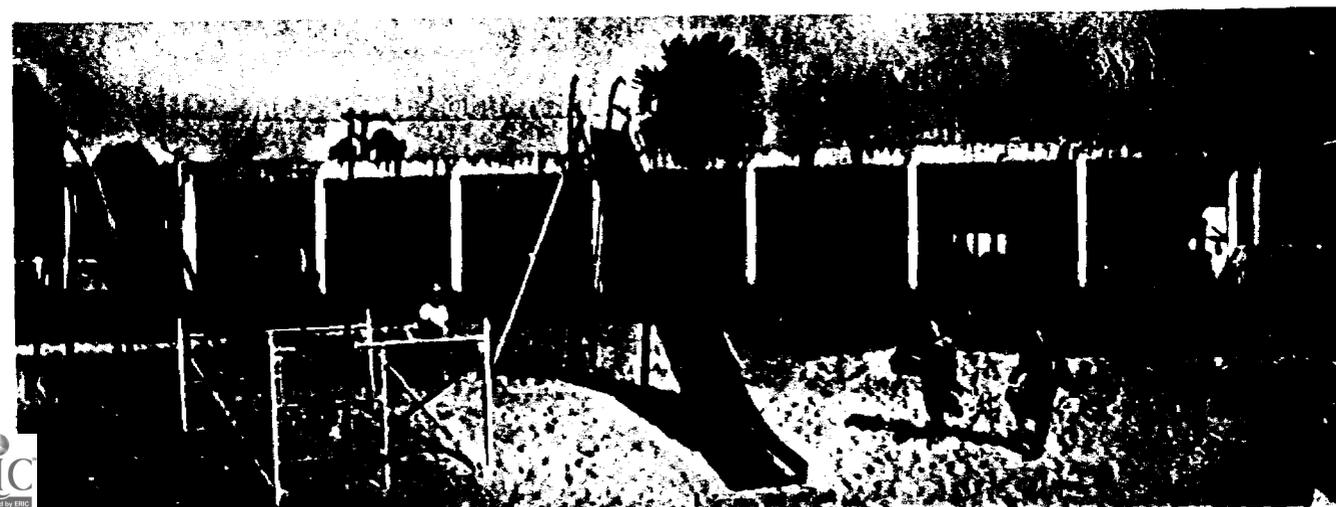
them, to help them when they need it, and, once in a while, to introduce materials, when a child seems to be in need of a little push."

The Hilton Head School is a learning environment. Every tool is there for a purpose, whether that purpose is to learn numbers, letters, words, arithmetic problems, or how to tie shoes. There is no dress-up corner in the school because, as Mrs. Cook says, "children like to do real things, not make believe."

To one side of the main room are two small individual adult toilets. The school's other two rooms are a large office and store room and an equally large (1,100 sq ft) ocean-front playroom. The latter is not carpeted and is used for painting and other messy activities, and for a dance program that Mrs. Cook conducts with the girls. The boys get a physical education program under the direction of the assistant teacher's husband. A beachfront play yard, fenced from the ocean beach, is used year-round.

The center was remodeled in two weeks. Prime attention was given to plumbing, which was almost nonexistent, and airconditioning. Beyond that, loads of sand were dumped in the play yard to cover mounds of glass; paint was liberally applied to the walls; carpet was laid in the main room and asphalt tile in the play area. One-way glass in the walls between the office and the two children's rooms enables parents and visitors to watch the programs in action, but the school puts little emphasis on this activity.

Sea Pines Montessori School



Sea Pines Montessori School



A school without a school

The Toy Library

An alternative to school, called "The Toy Library," is being developed by Dr. Glendon Nimnicht, director of the Early Education Project of the Far West Laboratory for Educational Research and Development, in Berkeley, California.

Nimnicht's idea for a Toy Library started from the assumption that Head Start was providing some kind of preschool educational experience for children from economically deprived families and that upper middle-class families were buying preschool education for their children, but that no opportunities were being provided for children of families neither so poor they could qualify for Head Start nor so wealthy they could afford to pay for school time.

The Toy Library is aimed specifically at children of these families.

The concept of the Toy Library is almost as simple as it sounds, but its implications are far greater. Physically, the Toy Library is any place where toys, books, and games can be stored, and where parents of preschool youngsters can come to pick out toys and other materials to take home to their offspring.

The Toy Library uses specially developed toys and games designed to promote specific learning skills: number sense; understanding "the same as" and "different from"; colors; shapes; following directions; discriminating among sounds, etc.

At present, there are two Toy Libraries in action, but any number could easily be established. Mothers go to the library with or without their children, and are taught how to present whatever toy they choose. Then the toy is checked out and taken home.

In the current experimental program, parents go to scheduled classes, but Nimnicht expects to provide taped and filmed instruction so that parents can come in at any time. A librarian would be available to aid in the selection of a toy.

In order to avoid having the Toy Library become obnoxious to children, Nimnicht has set up a series of rules which parents must pledge to follow. For example, a mother may ask a child to play with a toy only once during a day. If he says no, she must not ask him again. But if the child later asks to play with the toy, the mother should say yes, and join him.

The parents are to put the game away, and not make it the child's chore. The child can quit the

game any time he wants, and the parent must not ask him why. "In other words," says Nimnicht, "we are building a set of rules to keep the parents from putting pressure on the kid. If he wants to play the game, fine. If he wants to invent his own rules, instead of our rules, fine. It's his game, not ours, and not his mother's."

The Toy Library is only a small step at this point, but its implications are limitless. Consider these possibilities:

- Nimnicht is developing a series of standardized tests to be given to children. Thus, the first time a mother comes to the Library, a simple test battery could be administered, and the child could be retested at regular intervals. The result would be early identification of learning difficulties for children who would otherwise never be observed until they began to fail in kindergarten or the first grade.

- It is virtually impossible to provide enough early education centers for all three- and four-year-old children. Some, but not all, must be in a school situation. But the Toy Library concept could make it possible to reach thousands of children who could not get into a school.

- The Toy Library offers an opportunity to reach parents and teach them better ways of dealing with their children. It also offers the possibility that illiterate parents, or semiliterate parents, might be encouraged to learn how to read, that parents might even develop their interests into a vocation of working with young children.

- The Toy Library will make it possible to employ persons who are not qualified to teach a full-scale preschool class. At the same time, trained teachers could reach more children than in a conventional classroom by visiting many centers and working with many adults and children.

- The idea of "living room" schools has been suggested by many people. These would be schools literally in the living rooms of mothers with preschool youngsters. They might have three or four children in addition to their own. The problem of providing supervision and training for these mothers could be alleviated through the Toy Library—which could also make available a rotating group of books, toys, and games.

The Toy Library

- The cost of setting up, manning, and maintaining a Toy Library is miniscule, compared to setting up a full-fledged school. As Nimnicht points out, it can exist in a closet. One possibility: a Toy Library might use the facilities of an elementary school kindergarten room right after school closes, so that a mother picking up one youngster could at the same time visit the Toy Library for her preschool children.

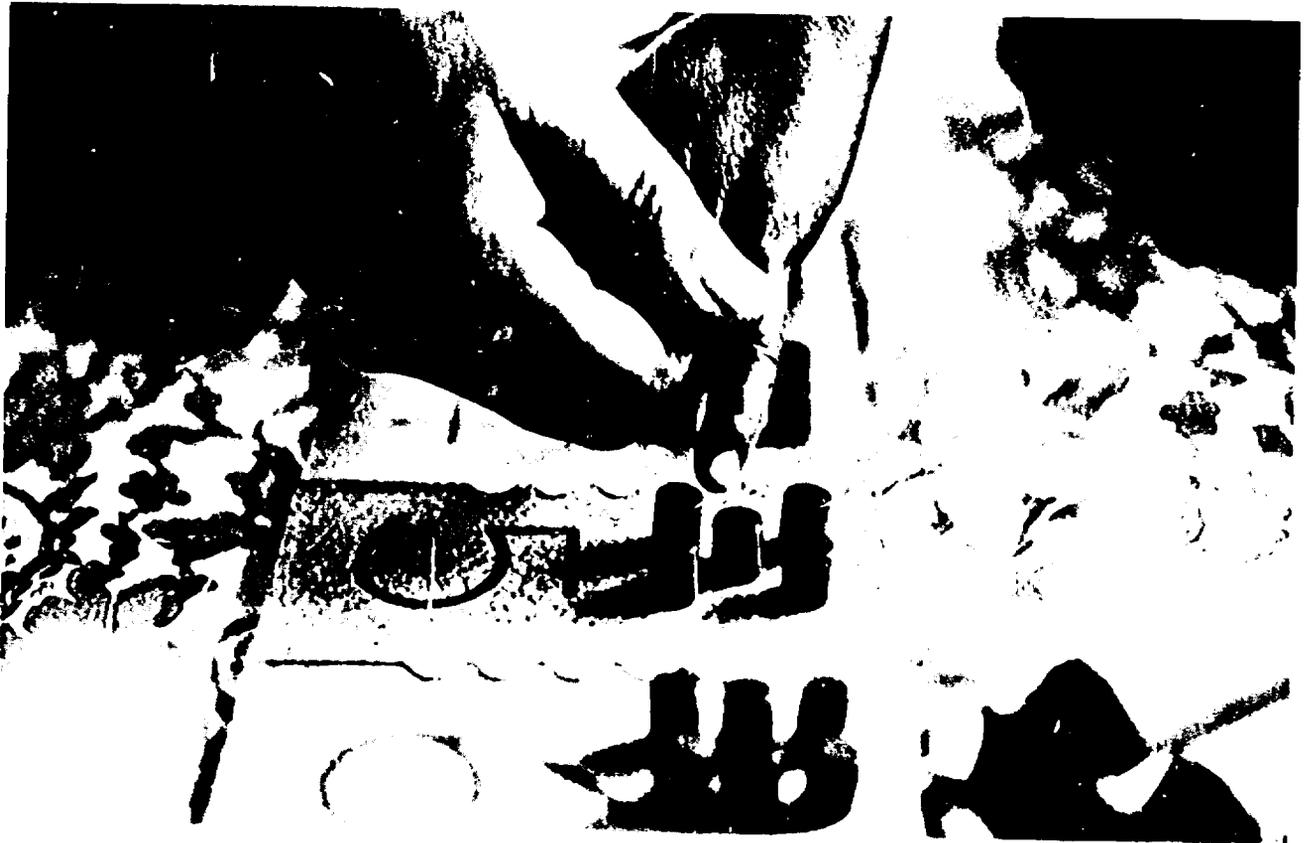
- The combination of the Toy Library concept with such television presentations as Sesame Street could provide a more realistic approach to

economical preschool education than anything yet tried or considered. "This is really a non-school approach to early education," Nimnicht states. "But I'm not sure that's bad. We know very well that children learn as much or more outside school than in, so why rush them into school situations at an earlier and earlier age? We should be looking at other methods of providing learning situations."

If the object of early education is to expose children to learning opportunities, not just to put them in schools, the Toy Library concept should be seriously examined.



The Toy Library



Other publications from EFL

The following reports are available without charge from the offices of Educational Facilities Laboratories, 477 Madison Avenue, New York, New York 10022.

A College in the City: An Alternative

A report of a new approach to the planning of urban campuses, with facilities dispersed through the community, designed to serve community needs and to stimulate community redevelopment. (1969)

Bricks and Mortarboards

A guide for the decision-makers in higher education: how the colleges and universities can provide enough space for burgeoning enrollments; how the space can be made adaptable to the inevitable changes in the educational process in the decades ahead. (One copy available without charge. Additional copies \$1.00.) (1964)

Campus in the City

EFL's annual report for 1968 and an essay on the physical problems and trends in planning of urban colleges and universities and their potential role as a catalyst in the remaking of the cities.

College Students Live Here

A report on the what, why, and how of college housing; reviews the factors involved in planning, building, and financing student residences. (1962)

Design for ETV—Planning for Schools with Television

A report on facilities, present and future, needed to accommodate instructional television and other new educational programs. Prepared for EFL by Dave Chapman, Inc., Industrial Design. (1960) (Revised 1968)

Design for Paperbacks: A How-to Report on Furniture for Fingertip Access

Physical solutions to the problems of displaying paperback books for easy use in schools. (1968)

Educational Change and Architectural Consequences

A report on school design that reviews the wide choice of options available to those concerned with planning new facilities of updating old ones. (1968)

The Impact of Technology on the Library Building

A position paper reporting an EFL conference on this subject. (1967)

Relocatable School Facilities

A survey of portable, demountable, mobile, and divisible schoolhousing in use in the United States and a plan for the future. (1964)

The Schoolhouse in the City

An essay on how the cities are designing and redesigning their schoolhouses to meet the problems of real estate costs, population shifts, segregation, poverty, and ignorance. (1966)

The School Library: Facilities for Independent Study in the Secondary School

A report on facilities for independent study, with standards for the size of collections, seating capacity, and the nature of materials to be incorporated. (1963)

School Scheduling by Computer/The Story of GASP

A report of the computer program developed by MIT to help colleges and high schools construct their complex master schedules. (1964)

SCSD: The Project and the Schools

A second report on the project to develop a school building system for a consortium of 13 California school districts. (1965)

Transformation of the Schoolhouse

A report on educational innovations in the schoolhouse during the next decade. With financial data for the year 1968. (1969)

Profiles of Significant Schools:

A series of reports which provide information on some of the latest developments in school planning, design, and construction.

Schools Without Walls

Open space and how it works. (1965)

Three High Schools Revisited

Andrews, McPherson, and Nova. (1967)

Middle Schools

Controversy and experiment. (1965)

On the Way to Work

Five vocationally oriented schools. (1969)

The Early Learning Center

A Stamford, Conn. school built with a modular construction system provides an ideal environment for early childhood education. (1970)

Joint Occupancy (1970)

Case Studies of Educational Facilities:

A series of reports which provide information on specific solutions to problems in school planning and design.

8. The Schools and Urban Renewal

A case study of the Wooster Square renewal project in New Haven, Connecticut. (1964)

9. Air Structures for School Sports

A study of air-supported shelters as housing for playfields, swimming pools, and other physical education activities. (1964)

10. The New Campus in Britain:

Ideas of Consequence for the United States

British experience in university planning and its implications for American educators, architects, and planners. (1965)

12. The High School Auditorium:

Six Designs for Renewal

Renovation of little-used auditoriums in old and middle-aged schools to accommodate contemporary educational, dramatic, and music programs. (1967)

13. Experiment in Planning an Urban

High School: The Baltimore Charette

A two-week meeting enabled community people to tell educators and planners what they expect of a school in a ghetto. (1969)

Technical Reports:

1. Acoustical Environment of School Buildings

Acoustics of academic space in schools. An analysis of the statistical data gathered from measurement and study. (1963)

2. Total Energy

On-site electric power generation for schools and colleges, employing a single energy source to provide light, heat, air conditioning, and hot water. (1967)

3. 20 Million for Lunch

A primer to aid school administrators in planning and evaluating school food service programs. (1968)

4. Contrast Rendition in School Lighting

A discussion of requirements for school lighting with 18 case studies. (1970)

5. Instructional Hardware:

A Guide to Architectural Requirements
(1970)

College Newsletter:

A periodical on design questions for colleges and universities.

Films:

The following films have resulted from EFL-funded efforts and are available for loan or purchase as indicated:

To Build a Schoolhouse

A 28-minute color film outlining the latest trends in school design. Available on loan without charge from EFL in care of Association Films, Inc., 600 Madison Avenue, New York, N.Y. 10022, and for purchase at \$93.45 from EFL.

Room to Learn

A 22-minute color film on The Early Learning Center in Stamford, Connecticut, an open-plan early childhood school with facilities and program reflecting some of the best current thinking. Prepared by The Early Learning Center under a grant from EFL and available on loan without charge from Association Films, Inc., 600 Madison Avenue, New York, N.Y. 10022, and for purchase at \$126.00 from The Early Learning Center Inc., 12 Gary Road, Stamford, Conn.

A Child Went Forth

A 28-minute color film on inner-city and ghetto schools and school building problems. Available on loan without charge from Modern Talking Picture Service, Inc., 2323 New Hyde Park Road, New Hyde Park, Long Island, New York 11045 or for purchase at \$75 from The Library, American Institute of Architects, 1735 New York Avenue, N.W., Washington, D.C. 20006. A 45-minute version is available for purchase from Larry Madison Productions, Inc., 253 E. 49 Street, New York, N.Y. 10017.

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