THIS IS A REPORT OF A USOE CONFERENCE ON PLANNING PRESCHOOL FACILITIES. THE DISCUSSION COVERED AREAS OF SPACE RELATIONSHIPS, SPACE NEEDS, INDOOR AND OUTDOOR AREAS, AND NEEDS AND ACTIVITIES OF PRESCHOOL CHILDREN. A CHECKLIST OF MAJOR AREAS NEEDED FOR TEACHING AND LEARNING (INDOORS AND OUTDOORS) WHICH HAVE IMPLICATIONS FOR THE PLANNING OF NURSERY-KINDERGARTEN FACILITIES IS INCLUDED. THE REPORT IS DESIGNED TO TOUCH UPON THE ELEMENTS THAT MAKE UP AN IDEAL LEARNING ATMOSPHERE FOR PRESCHOOLERS. THIS ARTICLE IS A REPRINT FROM AMERICAN EDUCATION AND IS ALSO AVAILABLE AS CATALOG NO. FS 5.221-21034 FROM THE SUPERINTENDENT OF DOCUMENTS, U. S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C., 20402, FOR $0.10. (ED)
Reprinted from
AMERICAN EDUCATION
UNITED STATES DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
DEC.-JAN.
Planning Preschool Facilities

By WILLIAM W. CHASE and MINNIE P. BERSON

All over America this year, tens of thousands of little children are being enrolled in newly formed nursery and kindergarten programs. A few—very few—are having their first school experiences in delightful classrooms and play areas especially designed and equipped to make the most of the young child’s blotter-like capacity for learning. Many preschoolers, however, are in makeshift quarters.

Communities that never before offered public preschool classes are now able to do so with funds provided under the Elementary and Secondary Education Act of 1965. The Congress, convinced that the learning process must begin much earlier than the first grade, has included many benefits for preschool education under the act. Provisions for teacher training, remodeling of facilities, hiring of teachers in areas with concentrations of low-income families, use of research and demonstration centers, and supplementary centers and services can all benefit nursery school education.

Now that funds are available, however, most communities have not yet had time to provide—or even to plan for—appropriate space for preschool classes.

Anticipating requests from many school districts for information and guidance on planning good preschool facilities, the Office of Education held a three-day conference. Experts in child development, school administration, architecture, school-building planning, and teacher education from various parts of the United States came together to share their knowledge and experience.

No attempt was made to lay down rigid rules or specifications. The conference did, however, produce a blend of information which can serve as a guide to any community in planning good facilities for their little scholars. The cardinal word at the conference was planning: intelligent planning on the basis of carefully gathered information.

The conference agreed that any community preparing to build a nursery or kindergarten should begin with a wisely selected co-
ties involved. The reading and browsing areas should have rugs. In the housekeeping, science, and water-play areas, hard surfaces should be used for ease of maintenance.

Varied floor levels and ceiling heights relieve monotony in a large area. Lowered ceilings tend to create a friendly atmosphere, but some areas need to have higher ceilings so that such play apparatus and equipment as slides, climbing devices, and wheeled toys may be set up.

After a period indoors, youngsters need to get outside if weather permits. An hour out of doors offers much more than an opportunity to let off steam. It is a time for learning to get along with others as well as a time for physical development. Their little bodies are constantly improved through running, jumping, climbing, sliding, crawling, digging, pulling, pushing, reaching, and bending in an outdoor facility that has been arranged with freedom and safety in mind.

The exterior space of the nursery-kindergarten program is just as important as the interior rooms. Continuous access from indoors to outdoors should be provided in such a way that close supervision of both areas is possible. Important features to be included are a hard surfaced area for wheeled toys, a gardening area, a dirt hill for sliding and digging, a sandbox, water in the form of a running stream or series of pools with pump-circulated water, animal pens, apparatus areas, a treehouse, trees, large conduits, and other objects for climbing.

Social skills are developed through meeting and resolving conflicts that arise in vigorous play. The outdoor scene also provides countless environmental lessons in how vehicles look and sound, how people travel, how leaves are shaped, how snow flakes melt, how water runs, how dirt feels, how insects live, how birds build nests.

Youngsters can learn a great many valuable lessons from water, sand, sunlight, shadows, rainbows, the smell of wet earth, the sound of wind, the texture of earth surfaces, the hum of insects, and other wonderments that are new and fascinating to the little child, who is free to perceive them from his own viewpoint.

In all the daily activities, the little child gradually assumes responsibility for putting away equipment if a good storage place is conveniently located. He learns to care for himself if toilet facilities are easily accessible; he participates in the serving of a snack if serving utensils and food are suitable. And he learns that there is a proper time for resting and relaxing if proper cots or other equipment are ready for use and easy to put away. In these routines the nursery school child needs more help than the kindergartner.

While the nursery school child usually "helps" the teacher put away the tools of work and play, the kindergarten child seems ready to become a team worker. The fickle, transient three-year-old who played only a small part in putting the room in order eventually emerges as the self-assured, competent five-year-old who can be counted on to get the job done.

The secret of helping children take responsibility for indoor clean-up of equipment and materials is well planned storage space, good organization, and easy-to-clean surfaces that are suitable for assorted activities. These features
involved. The reading and writing areas should have rugs, housekeeping, science, and play areas, hard surfaces should be used for ease of maintenance.

Lowered floor levels and ceilings can relieve monotony in an area. Lowered ceilings tend to create a friendly atmosphere, some areas need to have high ceilings so that such play areas and equipment as climbing devices, and some toys may be set up.

After a period indoors, youngsters need to get outside if it permits. An hour out of doors offers much more than an hour to let off steam. It is a time for learning to get along with others as well as a time for physical development. Their little muscles are constantly improved by running, jumping, climbing, sliding, crawling, digging, pushing, reaching, and moving. An outdoor facility has been arranged with freedom in mind.

The exterior space of the nursery school program is as important as the interiors. Continuous access indoors to outdoors should be provided in such a way that supervision of both areas is possible. Important features included are a hard surface for wheeled toys, a gardening area, a dirt hill for sliding and digging, a sandbox, water in the form of a running stream or series of pools with pump-circulated water, animal pens, apparatus areas, a treehouse, trees, large conduits, and other objects for climbing.

Social skills are developed through meeting and resolving conflicts that arise in vigorous play. The outdoor scene also provides countless environmental lessons in how vehicles look and sound, how people travel, how leaves are shaped, how snowflakes melt, how water runs, how dirt feels, how insects live, how birds build nests.

Youngsters can learn a great many valuable lessons from water, sand, sunlight, shadows, rainbows, the smell of wet earth, the sound of wind, the texture of earth surfaces, the hum of insects, and other wonders that are new and fascinating to the little child, who is free to perceive them from his own viewpoint.

In all the daily activities, the little child gradually assumes responsibility for putting away equipment if a good storage place is conveniently located. He learns to care for himself if toilet facilities are easily accessible; he participates in the serving of a snack if serving utensils and food are suitable. And he learns that there is a proper time for resting and relaxing if proper cots or other equipment are ready for use and easy to put away. In these routines the nursery school child needs more help than the kindergarten child.

While the nursery school child usually "helps" the teacher put away the tools of work and play, the kindergarten child seems ready to become a team worker. The fickle, transient three-year-old who played only a small part in putting the room in order eventually emerges as the self-assured, competent five-year-old who can be counted on to get the job done.

The secret of helping children take responsibility for indoor clean-up of equipment and materials is well planned storage space, good organization, and easy-to-clean surfaces that are suitable for assorted activities. These features...
construction; records, books, rhythm instruments; gadgets for "science"; pegs, beads, numerals for "math"; crayons, scissors, paste, paint, finger paint, clay and other artistic media; pets and plants to watch and care for; and other materials and pieces of equipment to manipulate, take apart, put together, and use in one's own way.

Nursery school children need many opportunities to be loners, to get off by themselves and work on some project. They need the opportunity to try out a variety of equipment and materials. And they need to experiment in social relationships. Their play and work in groups seldom goes beyond two or three companions. They are not ready to be in large groups, all working on the same activity.

Kindergarten children also need individual freedom to move about and to make choices. They are apt to play and work in groups which include about five or six and are ready for whole class activity which may last for about 15 or 20 minutes for "lessons" in literature, science, music making and interpretation, or dramatics.

Both nursery school and kindergarten children are ready for such projects as making valentines, baking cookies, churning cream, and other activities combining enjoyment and learning. It is important, however, to recognize that the rule of thumb is respect for the individual child, allowance for individual behavior patterns, and a program which enables each child to be comfortable and productive within a flexible framework.

The large instructional space should be entirely unlike a typical elementary classroom. It should have no partitions and should be equipped with furniture and cabinets that are easily movable for a variety of activities. The large space should have both hard and soft floor coverings, depending upon the activi-
ination; records, books, instruments; gadgets for pegs, beads, numerals; crayons, scissors, paint, finger paint, clay artistic media; pets and watch and care for; and materials and pieces of to manipulate, take together, and use in a way. School children need opportunities to be loners, by themselves and work a project. They need the ability to try out a variety of materials. And to experiment in social ships. Their play and groups seldom goes beyond or three companions. not ready to be in large all working on the same Art garden children also need a freedom to move about and make choices. They are day and work in groups include about five or six ready for whole class which may last for about 15 minutes for "lessons" in science, music making appreciation, or dramatics. Kindergarten and kind children are ready for objects as making valen-making cookies, churning and other activities enjoyment and learning. Important, however, to rec that the rule of thumb is for the individual child, for individual behavior, and a program which each child to be comfort-productive within a flex-nework.

In a large instructional space entirely unlike a typ-ewary classroom. It have no partitions and be equipped with furni-cabinets that are easily for a variety of activi-large space should have and soft floor covering overning upon the activ-

PARENTS- OBSERVATION
KITCHEN
CLOAK ROOMS
PLAY AREAS
INDOOR LEARNING SPACE
OUTDOOR LEARNING SPACE
ADMIN. CLINIC QUIET

active play

ANCILLARY SPACES FOR
- ADMINISTRATION
- HEALTH AND
- SOCIAL SERVICES

GROUP ACTIVITY

PROTECTED OUTDOOR PLAY AREA
"CURRERS" AND STORAGES
CONFERENCE ROOM

PARKING

LEARNING SPACE

SURNAME & CO.
operative planning group. Such a group should represent varied skills and backgrounds. It might include a member of the board of education, the superintendent of schools, the principal of the community’s elementary school, and several teachers. Some members would be lay citizens of the community at large who would contribute to the planning but would also help interpret the plans to the community. An educational consultant might add some specialized knowledge. He would conduct local surveys, develop educational specifications, and then interpret those specifications to the architect chosen to work with the group.

At the outset, the planners should identify every element in the whole preschool program. They should first outline the characteristics, aims, objectives, and purposes of the program, then determine exactly how many pupils, teachers, aids, parents, and others will be accommodated. They need to know the types of equipment to be used. From these elements they can determine the space relationships within the school and the school’s relation to its surroundings.

After identifying the teaching and learning activities required and the groups to be accommodated, the planners’ next step is to determine the kinds of physical facilities that are necessary to the smooth, efficient functioning of the program.

In terms of the general location, the nursery-kindergarten should, of course, be placed on an easily accessible site. The site should be large enough to provide safe access to the building and separate play spaces for individual and group activities. If the nursery-kindergarten program is included in a larger educational complex, it is important that this area be located in a separate wing of the building with its own entrance, play space, toilet area, learning spaces, and auxiliary areas.

Planners need to be aware of certain characteristics of preschool activities. For instance, they can expect the occupants of the nursery or kindergarten to be endlessly active. Children of nursery school age are not ready to sit quietly for any length of time. They learn through doing, touching, and trying things out.

Everything the preschooler does is part of his learning process. His most pleasurable learning—the kind that makes the most indelible impression on him—comes through play. The planned activities of the day, the school building, and the materials and equipment used can all capitalize on this and foster the growth of the child from a dependent to an increasingly self-reliant person.

Nursery schools usually serve children aged three, four, and five, while kindergartens enroll late four, five, and early six-year-olds. This overlap in age and development calls for facilities that are flexible and easily adaptable.

Classes in any nursery or kindergarten should be small. The younger the children, the smaller the group because of small children’s great need for individual guidance and attention. The following group sizes and child-adult ratios have been suggested by experts in the field:

- for three-year-olds, a maximum of 15 children to a group is recommended, with a ratio of one adult to five three-year-olds;
- for four-year-olds, a maximum of 18 children to a group is recommended, with a ratio of two adults to fifteen children;
- for five-year-olds, a maximum of 20 children is recommended for a group, with one teacher and one assistant.

An important prerequisite to planning for a nursery or kindergarten is a knowledge of the typical daily routine of such a school. It is useful to know, for instance, that a nursery school or kindergarten session lasts from two and one-half to three hours. A kindergarten child can do quite a bit for himself and is beginning to show some readiness for group participation. The nursery school child, on the other hand, needs more time to do a given task, more adult assistance and individual attention, and more active, firsthand experiences.

It is desirable for both nursery school and kindergarten children to have a three-hour session in order that individual children and the group as a whole may move from routine to routine and activity to activity with a minimum of pressure. It takes time to provide rich, relaxed daily experiences that will have cumulative value and meaning.

For the purposes of planning facilities, planners can divide the day’s activities into several main categories: arrival, indoor activities, outdoor activities, clean-up, and departure.

The first half hour is usually a free-for-all of arrivals. The nursery school child comes with an adult either by carpool, public transportation, or on foot, and needs a flexible arrival time. The child is first checked by either teacher or nurse, for symptoms of illness or infection and given the necessary assistance with wraps.

Then he joins a play group with a kindergartner usually walk in with an older child. After entering with the opening bell he removes his own wraps, goes to a health check, and usually sits down with the teacher and the class to talk about the day’s activities.

With all this daily traffic, main entrance should have an arrangement that will permit easy movement. Plenty of storage should be available for coats and hats.

The classrooms are usually arranged in interest centers, offering children opportunities to move about easily and make choices. There are spaces for building with blocks, a doll center for make-believe, a carpentry bench and tools.
The planners should represent varied backgrounds. It might be a member of the board of education, the superintendent of schools, the principal of the city's elementary school, several teachers. Some members should be lay citizens of the city at large who would not be directly involved in the planning but also help interpret the plans to the community. An educational architect might add some specific knowledge. He would set the local surveys, developmental specifications, and interface those specifications with the architect chosen to work with the group.

At this point, the planners should identify every element in the whole preschool program. They must outline the aims, objectives, purposes of the program, determine exactly how many groups or classes, aides, parents, person will be accommodated. They need to know the types of group to be used. From these facts they can determine the relationships within the group and the school's surroundings.

Identifying the teaching-learning activities required for groups to be accommodated, the planners' next step is to determine the kinds of physical space needed that are necessary to the efficient functioning of the group.

Rooms of the general location of the nursery-kindergarten of course be placed in a centrally accessible site. The site needs to be large enough to provide access to the building parlor play spaces for individual and group activities. If the nursery-kindergarten program is in a larger educational complex, it is important that this location in a separate wing building and have its own entrance, toilet area, play space, and auxiliary spaces, and auxiliary services need to be aware of the characteristics of pre-school activities. For instance, it is expected that group activity will be of five-year-olds, maximum of 15 children to a group is recommended, with a ratio of five to fifteen children;

For three-year-olds, a maximum of 18 children to a group is recommended, with a ratio of two adults to fifteen children;

For four-year-olds, a maximum of 20 children is recommended for a group, with one teacher and one assistant.

An important prerequisite to planning for a nursery or kindergarten is a knowledge of the typical daily routine of such a school. It is useful to know, for instance, that a nursery school or kindergarten session lasts from two and one-half to three hours. A kindergartner usually walks to school with an older child and enters with the opening bell. He removes his own wraps, submits to a health check, and then usually sits down with the teacher and the class to talk and plan the day's activities.

With all this daily traffic, the main entrance should have floor space that will permit easy maintenance. Plenty of storage space should be available for little coats and hats.

The classrooms are usually arranged in interest centers that offer children opportunities to move about easily and make choices. There are usually areas for building with blocks; a house hold center for make believe; a carpentry bench and tools for

order that individual children and the group as a whole may move from routine to routine and activity to activity with a minimum of pressure. It takes time to provide rich, relaxed daily experiences that will have cumulative value and meaning.

For the purposes of planning facilities, planners can divide the day's activities into several main categories: arrival, indoor activities, outdoor activities, clean-up, and departure.

The first half hour is usually a free-for-all of arrivals. The nursery school child comes with an adult either by carpool, public transportation, or on foot, and needs a flexible arrival time. The child is first checked by either teacher or nurse, for symptoms of illness or infection and given the necessary assistance with wraps.

A warm, informal interior provides a pleasant place for learning all year long.

A warm, informal interior provides a pleasant place for learning all year long.
are especially necessary in order that the child may know where to go when he needs certain materials to carry out a plan. He learns the value of orderliness. Are the brushes clean and in place? Is the paper easy to reach? Are the blocks of similar shapes stacked together? Are puzzles in the rack, pegs in a box, peg boards together?

When going-home time comes, the nursery school children leave one by one or in small carpool groups. The kindergartner who, at the beginning of the school year, came with an older escort, eventually leaves the schoolroom with the whole group and either walks home alone or meets his escort at the designated exit.

In terms of space requirements for nursery-kindergarten pupils, the conferees agreed that there should be a minimum of 35 square feet of clear space per pupil but that each large instructional room should contain a minimum of 1,000 square feet of floor space exclusive of storage, toilets, and built-in equipment.

Heating and ventilation, lighting, acoustical treatment, and color treatment of floors, walls, and ceilings should meet all recommended standards.

Safety factors include avoidance of sharp corners and edges and the provision of non-skid surfaces and space areas which provide children with a sense of security and freedom. At the same time, they should be protected from their own immaturity and enabled to live and learn in a school environment that is both functional and beautiful.

The children are not the only ones to be considered, however. A nursery or kindergarten must accommodate a number of grown-ups. The professional teaching staff is often supplemented by part-time consultants in such fields as speech therapy, psychology, medicine, nursing, and social service.

Assistant teachers carry out some teaching responsibilities under the supervision of the teacher and sometimes assume responsibility for a group of children. Teacher aides assist in such activities as preparing paints, clay, and other materials, assisting in the preparation of snacks and meals, and setting up cots and other equipment for rest and naps. Parents, other community members, and older children with skills or interest in the program serve as volunteer teacher aides.

Observation space should be provided so that parents, teachers, and others can see into the large instructional area and also out into the exterior play and work areas. This space should be elevated above the main floor level and should have one-way glass so that the pupils will not be aware of observers. This observation space can be used as an area where parents may gather, a conference space, and an informal teacher lounge where light lunches can be served.

**SECRETARIAL SERVICES AND CLERICAL SERVICES**

For the planning of nursery-kindergarten facilities: creative activities—work with clay, paints, wood, puzzles, beads, simple tools; block building; library and browsing corner; water and sand play; housekeeping; discussion, storytelling, and reading; storage for educational materials, wraps, furniture, and equipment; display space; snacking; resting; observation (for parents); health, lavatory, administration; teacher preparation; and storage space.

These recommendations, drawn from the O£-sponsored conference, are, of course, designed as a guide to the elements that make up an ideal learning atmosphere for preschoolers. Facilities can be as simple or as complex as local initiative and budget limitations may dictate.

In the midst of careful planning for adequate, flexible, and safe facilities, the planners must remember that the building and grounds should be a source of delight to the children. The experiences a child has in nursery school or kindergarten may form habits, attitudes, and impressions that will be reflected throughout the remainder of his school years.

The little child views the world and its people with curiosity and wonder. He takes in the environment about him through his senses and through continuous activity—listening, looking, tasting, touching, and interacting. He communicates the freshness of coversies and explorations to children and adults alike. Sometimes he dashes off experiences. At other times he pursues one activity for days.

The child's first school must nurture his endless wonder and desire to probe. It must provide an environment that stimulates learning. The child must say "yes" to the child's inclinations to work and learn.

Secretarial services and clerical services for correspondence, record keeping, and other office functions depend on the size of the program. Service workers including a cook, custodian, bus driver, and other nonprofessional staff are employed whenever necessary.

There should be administrative office space for the director who is usually responsible for operating the program and who serves as liaison between the staff and the policy-making officers.

It is apparent from the number of persons involved in the nursery school and kindergarten programs that a variety of spaces is needed. There are a number of different kinds of spaces to be considered and the relationship of one area to another is extremely important in terms of pupil traffic, educational program requirements, and a free flow of activity.

It is extremely useful for planners to work with a diagram of these general space relationships. The focal points which should be included are the entry with cloak and rest room, indoor and outdoor learning space, and the play areas. Any diagram of these areas, to be fully useful to a planning group, should suggest various possibilities for room relationships including multiple uses of spaces.

The following is a checklist of major areas needed for teaching and learning (indoors and outdoors) which have implications for the planning of nursery-kindergarten facilities: creative activities—work with clay, paints, wood, puzzles, beads, simple tools; block building; library and browsing corner; water and sand play; housekeeping; discussion, storytelling, and reading; storage for educational materials, wraps, furniture, and equipment; display space; snacking; resting; observation (for parents); health, lavatory, administration; teacher preparation; and storage space.

Needless to say, teaching can be done in any space, and the space will change with the pupil. Children from disadvantaged or neglected homes and low-income families, however, need the advantage good preschool education can offer. Funds and time become priorities whenever education should take a high priority. The added benefits of early training through nursery schools in whatever form are available.

Children from disadvantaged homes and low-income families, however, need the advantage good preschool education can offer. Funds and time become priorities whenever education should take a high priority. The added benefits of early training through nursery schools in whatever form are available.
This open environment that is both safe and freedom. At the same time, the child in nursery schools in whatever quarters may dictate. It is extremely useful for planners to work with a diagram of these general space relationships. The local points which should be considered are the entry with cloak and rest room, indoor and outdoor learning space, and the play areas. Any diagram of these areas, to be fully useful to a planning group, should suggest various possibilities for room relationships including multiple uses of spaces.

1. The following is a checklist of major areas needed for teaching and learning (indoors and outdoors) which have implications for the planning of nursery-kindergarten facilities: creative activities—work with clay, paints, wood, puzzles, beads, simple tools; block building; library and browsing corner; water and sand play; housekeeping; discussion, storytelling, and reading; storage for educational materials, wraps, furniture, and equipment; display space; snacking; resting; observation (for parents); health; laboratory; administration; teacher preparation; and storage space.

These recommendations, drawn from the OE-sponsored conference, are, of course, designed as a guide to the elements that make up an ideal learning atmosphere for preschoolers. Facilities can be as simple or as complex as local initiative and budget limitations may dictate.

In the midst of careful planning for adequate, flexible, and safe facilities, the planners must remember that the building and grounds should be a source of delight to the children. The experiences a child has in nursery school or kindergarten may form habits, attitudes, and impressions that will be reflected throughout the remainder of his school years. The little child views the world and its people with curiosity and wonder. He takes in the environment about him through his senses and through continuous activity—looking, listening, smelling, tasting, touching, manipulating, and interacting. He communicates the freshness of his discoveries and explorations to the children and adults close by. Sometimes he dashes off for new experiences. At other times he pursues one activity for days.

The child's first school contact must nurture his endless curiosity and desire to probe. It must provide an environment that stimulates learning. The school must say "yes" to the child's natural inclination to work for self-enhancement. Present joys and fulfillment must promise future aspiration and attainment.

Needless to say, preschool teaching can be done in far from ideal facilities. Conscientious parents have struggled for years to provide early training for their youngsters through cooperative nursery schools in whatever quarters were available.

Children from disadvantaged homes and low-income neighborhoods, perhaps more than any others, need the advantages of good preschool education. As the funds and time become available, those responsible for preschool education should take into consideration the added benefits that can come to children from having their first school experiences in appropriate surroundings.