

SPACE TYPES & REQUIREMENTS



Neighborhood

School Type:



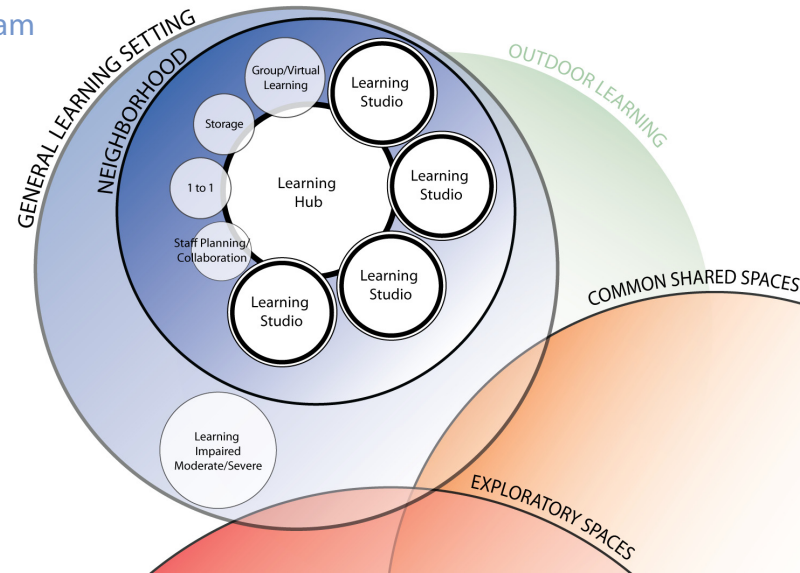
Area Allowances

- 70 sf/studentPre-K – Grade 3
- 60 sf/student Grade 4 – Grade 12
(minimum 10,000 sf per school)
- 7 sf/studentInstructional Storage – ES, MS
- 6 sf/studentInstructional Storage – HS
- 400 sf.....Speech, Hearing, Vision
- 800 sf.....Small School Allowance
Host Nation
Learning Impaired – Mild/Moderate (LIMM)

Functional Area Descriptions

One of the major shifts in the 21st Century School is the move from individual classrooms to the grouping of several different size spaces into a neighborhood. The neighborhood provides space for a variety of large, medium, and small groups, one-to-one pairings, and individual learning. Formal and informal areas are accommodated—ranging from traditional whole class instruction, smaller group project areas, quiet areas, and a casual lounge environment. In addition, support for teachers is provided with staff planning, development and meeting areas. The focus of the neighborhood spaces is to reinforce team, collaboration, and project-based learning. Technology will be integrated throughout. Easy access should also be provided to outdoor learning spaces.

Adjacency Diagram



Planning Requirements

Area Description	SF	M ²	Notes
Neighborhood			
1 Learning Hub	1,200 - 1,800	111.5 - 167.2	
2 Learning Studio	800 - 950	74.3 - 88.3	Typically 4-5 per neighborhood
3 Group Learning	400 - 500	37.2 - 46.5	Typically 1-2 per neighborhood
4 One-to-One	100 - 150	9.3 - 13.9	Typically 1-2 per neighborhood
5 Staff Collaboration Area (area per teacher)	100	9.3	Includes desk and shared collaboration area
6 Instructional Storage (area per teacher)	75 - 100	7 - 9.3	

A neighborhood has four different sizes of instructional spaces, the Learning Hub, the Learning Studio, the Group Learning space, and the One-to-One space. The Learning Hub is a large shared space that all the other spaces in the neighborhood should open up to. It should be sized for larger gatherings than one single class. The Learning Studio should be sized for up to 24 students. The Group Learning should be sized for up to 12 students. The One-to-One space should be sized for up to 4 students. These different sized spaces are provided so that the appropriately sized space can be used for each learning activity. All of these spaces will be shared within the neighborhood. Using these spaces for more than one purpose will offer additional instructional flexibility.

The spaces should be easily supervised from any location within the neighborhood. The separation of spaces within the neighborhood may include some typical walls and doors but most of the separation should be made with glass or moveable walls and mobile furniture. Because of the transparency and mobility desired, it will be advantageous to keep the built-in storage to a minimum to allow for maximum flexibility.

In addition to the instructional spaces, a Staff Collaboration area will be provided. This space will include a workstation for each teacher, a conference area for collaboration, and additional storage. The teachers' Instructional Storage may be combined with the Staff Collaboration area or located in a separate room that is accessible from the Staff Collaboration area or the shared Learning Hub.

In 21st Century education, virtual learning will expand to make additional content available within existing curriculum areas. Virtual learning can give students the ability to take classes that aren't offered at their school or collaborate with peers in other geographic areas. Both hard wired and wireless infrastructure will be provided in all instructional spaces within the neighborhood. This will allow virtual learning using audio, video, and digital collaboration to be set up in any of the instructional spaces.

Area Allowances and Planning Requirements

The area allowances for the neighborhood will be calculated on a square foot per student basis to allow for additional flexibility and creativity in the design of the neighborhoods. The designers will work with educators and facility personnel at the local, district, and area level to determine the appropriate number of neighborhoods and distribution of spaces within the neighborhoods. Some general guidelines are provided in the Planning Requirements table.

A worksheet is provided to calculate the area allowance of all the spaces in the school. In addition to the general instruction spaces, there are several programs that are based on locality or caseload, such as the Host Nation and Special Education programs, that vary from school to school. Additional allowances are provided for these programs over and above the sf/student allowances. The ultimate sizes of these spaces may vary from the allocation in order to balance with other areas in the neighborhood as long as the total net area of all the neighborhoods is not exceeded. Ideally, all of the neighborhoods in a school would be similar for maximum flexibility year



▶ Learning studio: Yuyu-no-mori Nursery School and Day Nursery, Environment Design Institute, Yokohama City, Kanagawa Prefecture, Japan



▶ Learning hub: High Tech High School, San Diego, CA

NOTE: Images shown are intended to provide real-world examples and spark design creativity.

to year, considering the constant changes in grade level enrollments.

The area allowance for all classroom teachers (including Science, Art, Music, PE, LIS, CTE, and JROTC) are calculated in the staff collaboration allowance. This is to allow the grouping of visual/performing arts, science, physical education, special education, or any combination of curriculums into neighborhoods and also to keep the calculation of the teacher workspace consistent. This does not mean that these specialized teachers cannot still remain with their instructional areas; it is just to give the flexibility to group them if this is advantageous. If it is not desired for these programs to be included within a neighborhood, then this square footage should be added back into the instructional space, ex. 100 sf would be added back into the art room and the teacher's desk would be located in that room.

1 Learning Hub

The Learning Hub is a shared area at the center of the neighborhood. This space will accommodate multiple functions such as grade-level reading resources, parent volunteer space, independent or small group learning environments, and space for larger groups to gather. This space is intended to have strategically designed flexible walls that allow the Learning Studios to expand when necessary. Ideally, this space should be reconfigurable to accommodate all of the students in the neighborhood for large group meetings and presentations.

Neighborhoods that will contain Pre-K, Sure Start, Kindergarten, and Preschool Services for Children

with Disabilities (PSCD) shall provide a kitchen/exploratory area within the Learning Hub. This area will include a sink, range with commercial hood, microwave, refrigerator, and dishwasher. These appliances are intended for adult use and shall be positioned so that they are not readily accessible to the students when the area is not in use. There must be visual access to the children at all times when this space is in use. If possible, locate this area near the access to the outdoor learning area.

A wet area should be provided in all elementary school Learning Hubs containing hand washing sinks and water fountains or bubblers. If the restrooms are located within the neighborhood this space may be adjacent to them, or it could be located near the outdoor learning area where access to water and hand-washing sinks may be desirable. In the younger grades, the messy centers such as paint, easels, water or sand tables may be located in the Learning Hub, so access to hand washing sinks is desirable.

The Learning Hub should accommodate multiple groupings and provide space for the following:

- Project display and presentation area
- Storage for materials (parent area and project area)
- Varied comfortable seating (upholstered, lounge-like): couches, benches, and chairs
- Moveable bookshelves and cabinets
- Tables and chairs to support various configurations of group settings
- Lockers for student storage in the upper grades – lockers do not have to be along the walls, they may “float” with countertop above for additional work surface



► Study Research Lounge: Steelcase “University,” Steelcase, Grand Rapids, MI



► Independent Learning: Australian Technical College, Birrelli Architects, Invermay, Tasmania

NOTE: Images shown are intended to provide real-world examples and spark design creativity.

2 Learning Studio

The Learning Studios will provide an environment to support a variety of learning strategies, differentiated instruction, cooperative learning, and project-based interaction. This space has traditionally been called a classroom, but will have flexible wall configurations to provide for larger group dynamics. The Learning Studios should be immediately adjacent to the Learning Hub and should connect using windows, moveable walls, roll-up garage-style doors, double doors, or other means of connecting spaces. Furnishings within the Learning Studio should support whole group instruction, small groups, and individualized instruction. They should be flexible and provide for easy reconfiguration. Where Learning Studios are adjacent to each other, it is also desirable to have a moveable partition between them for additional flexibility.

Each Learning Studio should accommodate 18 to 24 students and provide space for the following:

- Flexible furniture
- Comfortable ergonomic student chairs
- Mobile teaching station
- Tackable wall surface/bulletin boards
- Moveable book shelves and storage cabinets
- Interactive white board
- Magnetic marker board
- Coat cubbies (FF&E) for student storage in the younger grades
- Virtual learning

3 Group Learning

The Group Learning space will be used for pull-out instructions or to provide space for students to work

in small group settings for project-based learning. This area should have glass walls, allowing for observation and instructor supervision.

The Group Learning area should accommodate 10 to 12 students and provide space for the following:

- Group table with chairs
- Interactive white board
- Magnetic marker board
- Open and closed storage
- Countertop work area

4 One-to-One

The One-to-One area will provide space for students to work in an “office-like” setting for one-to-one learning. This will allow students to interact with an instructor. This area should have glass walls, allowing for observation. Private space will be provided for teacher conferences if separate conference space is not available in the Staff Collaboration area.

The One-to-One area should accommodate 1 to 4 students and provide space for the following:

- Group table with chairs
- Magnetic marker board

5 Staff Collaboration

The Staff Collaboration area provides individual teacher work spaces as well as a conference area for teachers to interact and collaborate. This will provide a dedicated area for on-going job related skills development for required competencies that are correlated to student achievement. The conference/collaboration area may be open or enclosed. An open area will provide more flexibility. An enclosed area



► Small group room: Canby Applied Technology Center (ATC), Dull Olson Weekes Architects, Canby, OR



► Staff planning/collaboration area: Zeeland West High School, GMB Architects, Zeeland, MI

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will provide an opportunity for private conversation to occur within the Staff Collaboration area. If an open area is desired, the One-to-One space can be used for any private conversations that need to occur. A small kitchenette should be provided near the collaboration area. The entire Staff Collaboration area should have good visibility to the rest of the neighborhood and possibly even to the commons. This area may have a glass separation or be partially open to the neighborhood. Consider the security of this office space. This space will be technology intensive, allowing staff to readily access information and data.

Because of the relatively small number of teacher's desks in any one area, DoDEA prefers the use of a "desking system" with cable management using the standard data and power receptacles on the walls rather than a systems furniture solution with power and data running in the systems furniture panels.

This Staff Collaboration area should accommodate 5 to 7 teachers and provide space for the following:

- Conference table
- Staff workstations with lockable storage
- Ergonomic task chairs for comfortable seating
- Interactive White Board
- Bookshelves

Provide a small kitchenette with the following in each Staff Collaboration area:

- Countertop (for microwave, coffee pot)
- Small sink
- Space for under-counter refrigerator

6 Instructional Storage

Provide dedicated Instructional Storage areas for each teacher. Each teacher should have the same amount of storage that can be secured individually. The Instructional Storage must be accessible from the Staff Collaboration area or the shared Learning Hub rather than from the individual Learning Studios.

Restrooms

Preschool Restroom - Neighborhoods that contain Pre-K, Sure Start, PSCD, and Kindergarten rooms shall have individual ADA compliant restrooms, one per Learning Studio, each containing a child height toilet. Where possible, group these restrooms in pairs for efficiency of plumbing. Provide 54 inch (137 cm) high doors on the restroom stalls to allow for supervision. The lavatories for these restrooms shall be placed outside the restroom and visible to the instruction area. This allows the teacher to monitor that the children have washed their hands and also allows the lavatories to be used for general hand washing in the instructional area. These lavatories should be child height and should also include a bubbler. Be sure to position the soap and paper towel dispensers where small children will be able to reach them.

PSCD Changing/Shower Room - Neighborhoods that contain the PSCD program shall have a changing/shower room in addition to the preschool restroom. This room shall contain a shower with fold down seat, lavatory (handicap height) and space for a changing table with hydraulic lift. Provide power for the hydraulic lift. Include storage for diapering and hygiene supplies. Be sure that these supplies are within easy reach of the caregiver but will not present a hazard to the child.



► *Medium group/conference: Balnaves Multitmedia Learning Centre at Bond University, Wilson Architects, Gold Coast, Australia*



► *Instructional storage: Mason Early Childhood Center, VSWC Architects, Mason, OH*

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General Student Restrooms – Quantities of restrooms to serve all other neighborhoods shall be determined based on plumbing codes. Access to the restrooms should be convenient to the neighborhoods, either within or between the neighborhoods. Efficiency of plumbing runs and reduction of the total number of plumbing fixtures required are considerations in addition to convenient access to the neighborhoods. Consideration may be given to individual restrooms, rather than gang toilets with multiple fixtures, if efficiencies are gained functionally or operationally.

Staff Restrooms - Separate staff restrooms shall be conveniently accessible from the neighborhood. Consider overall distribution of staff restrooms throughout the school facility.

The space allocations for all the restroom facilities are calculated as part of the net-to-gross factor to encourage efficiency in the provision of these spaces.

General DoDEA Grade Distribution

- Preschool (Pre-K, Sure-Start, PSCD)
- Early childhood (Kindergarten – Grade 3)
- Elementary grades (Grades 4-5, sometimes 6)
- Middle grades (Grades 6-8)
- Secondary grades (Grades 9-12)

Description of Educational Programs in the Neighborhood

The number of core academic spaces (grade level teachers) and other academic support spaces will be based on the staffing calculations provided by the DoDDS/DDESS School Level Staffing Standards. Additionally, more specialized programs will also be

accommodated within the neighborhoods. Following is an alphabetical listing of the educational programs that could occur within the neighborhood. The designers should work with the school administration to make sure that adequate instructional space is provided for all the programs authorized for the school. The 21st Century model is moving toward multi-use spaces rather than single purpose rooms, so interchangeability of spaces should be encouraged.

English as a Second Language (ESL)

The English as a second language (ESL) program provides specialized instruction and practice to improve English reading, writing, and verbal skills for those students having limited or no English proficiency. The room should accommodate teaching methodologies that include physical demonstrations and cooperative games.

Gifted

The gifted program provides supplementary and/or intensified instruction for those students who benefit from challenges.

Hearing Impaired

The hearing impaired program serves students who require environmental and/or academic modifications to access their academic and school program. Sign language interpreters work with the students in both small settings as well as in the general instruction area. Include space for students to work in small groups as well as one-on-one with a sign language interpreter. The Individuals with Disabilities Education Act Amendments of 1997 provides for “assistive technology devices.” This is any

item, piece of equipment or product system, whether acquired commercially off the shelf, modified or customized, that is used to increase, maintain, or improve the functional capabilities of a child with a disability. For example, the hearing impaired program needs a sound-field system to support the needs of students with hearing impairments. DoDEA shall determine any such assistive technology devices in the planning and design phase of each project.

Host Nation (OCONUS – DoDEA-Europe and DoDEA-Pacific)

The Host Nation Program provides students with an introduction to host nation languages as an essential experience of the DoDEA curriculum. With host nation teachers as guides, students also participate in activities that build appreciation and understanding of the culture of the country in which they are located. The host nation space shall include amenities for specialized cultural activities and light preparation of host nation foods. DoDEA-Pacific schools located in Japan and Okinawa will also have a tatami room and a kitchenette. The tatami room and kitchenette area shall be centrally located rather than associated with an individual neighborhood. This area may be provided in conjunction with the commons to highlight the specific culture of this region.

Kindergarten

The kindergarten program is a full-day program in all the DoDEA schools.



Learning Impaired – Mild/Moderate (LI-MM)

This program serves children with mild to moderate learning or emotional difficulties. These students will spend less than 50 percent of their day in this room. However, space must be available to support students who may require more time for special instruction. This space has no special built-in requirements but may require specialized furniture. All furniture must be ADA compliant. Having this program within a neighborhood offers convenient access to mainstream education with peers of similar ages. Where multiple special education spaces are provided, they should be distributed throughout the building, not grouped together in one area.

Pre-Kindergarten

The Pre-Kindergarten program is a half-day program in the CONUS schools (DoDEA-Americas (DDESS)).

Preschool Services for Children with Disabilities (PSCD)

The PSCD program serves Pre-K children with learning difficulties and other mental and physical disabilities.

School Support Specialist/Read 180

This program serves students who need extra help in language arts, reading, or math. This instruction requires a quiet environment for individual and small group work. Sub-grouping of the students is common. The specialist may work closely with one or two students, while the remaining students are reading or working independently.

Speech/Language Therapy

Speech/language therapy provides specialized instruction and testing to improve verbal skills. This program requires a quiet environment for individual and small group instruction. The specialist may work closely with one or two students while others are doing independent work. The room should include a space for students to work in small groups, as well as one-on-one with a teacher. The room should accommodate an enrollment of up to eight students per instructional session.

Sure Start

The Sure Start program is a full-day program in the OCONUS schools (DoDEA-Europe and DoDEA-Pacific (DoDDs)). There is a healthy component to the Sure Start program which calls for two snacks and family style lunch to be served in the classroom. Lunch is provided by the food service vendor. Space for preparation and storage of food for snacks must be provided for this program.

Visually Impaired

The visually impaired program assesses vision, evaluates orientation and mobility skills, and provides instruction and training in those areas. The program staff also consult with other school personnel on program and classroom modifications. Provide additional shelving for Braille textbooks, as required. The Individuals with Disabilities Education Act Amendments of 1997 provides for “assistive technology devices,” meaning any item, piece of equipment, or product system, whether acquired commercially, modified, or customized, that is used to increase, maintain, or improve the functional

capabilities of a child with a disability. DoDEA shall determine any such assistive technology devices in the planning and design phase of each project.