dodea

DEPARTMENT OF DEFENSE EDUCATION ACTIVITY

EDUCATION FACILITIES SPECIFICATIONS

HIGH SCHOOL

dodea 21C SCHOOLS

Version 5.0 Issued: February 2017

DoDEA Education Facilities Specification – Version 5.0 – Feb 2017
Change Summary - All School Types

Description of Changes:

- All FY18 PFD's (Program for Design) were updated to the V5 Ed Spec prior to the submission of the DD Form 1391. The exception is the Learning Studio size in the High Schools was not revised for the FY18 projects.
- If there are any discrepancies between the PFD and the Ed Spec, the signed PFD will govern since this is the document used to generate the DD Form 1391.
- The format of all sections of the Ed Spec has been revised. Minor clarifications within each section are not outlined here. The Architect/Engineer (A/E) shall review each section of the Ed Spec during the design process.
- Built-in Items, Plumbing, and Equipment lists are provided at the end of each section. FF&E guidance is being developed and will be added in a future revision.
- For IT equipment requirements, such as interactive technology, refer to "Technology Systems Design Guidelines – DoDEA Special Systems."
- Significant changes to spaces and area allocations are listed below.

1. INTRODUCTION

1.1 Preface

- New section
- Overview of the purpose and use of the Ed Spec and PFD, including gross square foot calculations, space variation allowances, and waiver process.

1.2 Department of Defense Education Activity (DoDEA)

- New section
- Overview of DoDEA

1.3 Facilities for 21st Century Learning

- New section
- Overview of the key themes of 21st Century Learning and their Facility Applications

1.4 Educational Program Listing

- New section
- Listing of all Ed Spec spaces and associated Educational Programs

2. BUILDING AS A TEACHING TOOL

- Revised and updated text.
- Added a list of required Teaching Tools and DoDEA Dislikes.

3. FACILITY ELEMENTS AND REQUIREMENTS

3.1 SITE

3.1.1 Site

- Added Service Staff Parking requirement.

3.1.3 Outdoor Play Areas [ES]

- Revised and updated design regulations and guidelines.
- Play Lot Storage Allowance has been added.
- This change is not reflected in the FY18 PFD's. It may be incorporated using a portion of the Net-to-Gross allowance.
- This change will apply to all FY19+ projects.

3.1.3 Outdoor Play Areas [MS]

- This section does not include information on Athletic Fields. Where Middle Schools participate in interscholastic sports, refer to the High School Ed Spec for additional information.
- Discussion of outdoor fields will become part of the PFD discussion at the parametric stage, beginning with FY19 projects.
- The PFD will govern what is provided, the Ed Spec will list the requirements for each of the fields.
- For FY18 projects, fields and field lighting shall be as documented in the Parametric Design Charrette Report.

3.1.3 Outdoor Athletics [HS]

- Discussion of outdoor fields will become part of the PFD discussion at the parametric stage, beginning with FY19 projects.
- The PFD will govern what is provided, the Ed Spec will list the requirements for each of the fields.
- For FY18 projects, fields and field lighting shall be as documented in the Parametric Design Charrette Report.
- Installation of enhanced surfacing (artificial turf) is permitted where cost is not excessive and climate or soil is too harsh for grass to grow. This decision will be discussed and documented in the PFD, beginning with FY19 projects.

3.2 NEIGHBORHOOD

- The Neighborhood section has been broken into separate sections for each of its constituent parts (Learning Hub, Learning Studio, Group Learning, One-to-One, LIMS, LIMM, Reading Lab, and Academic Support).
- The Staff Collaboration has been moved from the Neighborhood to its own section, 3.3.1.
- The Mandatory Design Guidelines have been incorporated into the general text.

3.2.1 Neighborhood

- [ES] A detailed description of activities and interest areas has been added.

3.2.2 Learning Hub

- New section separated from Neighborhood.

3.2.3 Learning Studio

- New section separated from Neighborhood.
- The size of the Learning Studio has been standardized to 850sf for all grade levels.
- FY18 projects with ES populations have been adjusted to the new area allowance.
- The area allowance remains 800sf for FY18 High Schools
- This change will apply to all FY19+ projects.

3.2.4 Group Learning

- New section separated from Neighborhood.

3.2.5 One-to-One

- New section separated from Neighborhood.

3.2.6 Learning Impaired – Moderate/Severe (LIMS)

- This space shall be included in a Neighborhood, but still requires access from both inside and outside the Neighborhood.
- Building area for handicap restroom, shower and changing has been incorporated into the instruction area.

3.2.7 Learning Impaired – Mild/Moderate (LIMM)

- New section separated from Neighborhood.
- LIMM spaces should be adjacent to Neighborhoods, but not incorporated into them unless there are enough LIMM spaces to give all Neighborhoods access. Access from both inside and outside the Neighborhood is not required.

3.2.8 Reading Lab

- New section separated from Neighborhood.
- Access from the main circulation only.

3.2.9 Academic Support [MS and HS only]

- New section separated from Neighborhood.
- Access from both inside and outside the Neighborhood is not required.

3.3 SHARED SPACES

3.3.1 Staff Collaboration

- New section separated from Neighborhood.

3.3.3 Tatami Room

- Additional detail has been provided in the descriptions.

3.3.6 Information Center

- The Information Center has been completely revised.
- Calculations have been updated based on a study of existing library collections. A linear footage measurement of shelving for the Stack Area has been added to the standard.
- [ES] A Storytime Area has been added in addition to the Instructional Space.
- [MS] The Broadcast Room has been moved from the CTE area to the Information Center.
- The Itinerant workspace has been moved from the Miscellaneous Support Spaces to the Staff Collaboration space in the Information Center because this is a more central location for itinerant staff to work with school staff.

3.3.8 Art

- [ES] Pottery wheels are not provided in Elementary Schools.

3.3.9 Music

- No sinks are required in the Music Storage Rooms.
- [MS and HS] Direct access to the exterior is not required from the Music Room or Music Storage. Provide convenient access to main building circulation.
- [MS and HS] The Choral Room and Keyboard Lab have been combined.

3.3.10 OT/PT

- The size of the Instructional Area has been standardized to 850sf to match the area of the Learning Studios.
- Storage/Planning/Observation has been reduced to 350sf, so there is no net change in area.
- FY18 projects with ES populations have been adjusted to the new area allowance.
- The area allowance remains 800sf/400sf for FY18 High Schools.
- This change will apply to all FY19+ projects.

3.3.12 CTE [MS and HS]

- Outfitting of Family Consumer Science (MS) or Culinary Arts (HS) will be discussed during the Parametric phase and indicated on the PFD, beginning with the FY19 projects.
- For FY18 projects, specific CTE programs shall be as documented in the Parametric Design Charrette Report. If additional clarification is needed, contact HQ DoDEA.
- Specific program descriptions have been moved to the Educational Program Listing section.
- [MS] The Broadcast Room has been moved to the Information Center.

3.3.13 JROTC [HS]

- Informational photographs have been added for target wall lighting and JROTC items to be stored.

3.4 STUDENT SUPPORT AREAS

3.4.1 Administration Suite

- Clarified the description of the secure entry.
- Separated the building area for the Reception Counter.
- Added Registrar Office and Secretary (HR) Office.
- Combined Work/Copy and Mail Room functions.
- Removed all reference to "mail", now referred to as staff inbox or message boxes.
- Deleted School Management Support Specialist (SMSS) office, this position does not exist anymore.

3.4.2 Health Suite

- Renamed from Health Services to Health Suite for consistency.
- Added Nurse's Workspace.
- Standardized the size of the Treatment Area and added a Large School Allowance.
- Clarified the function of the Screening/Storage Room.
- Water fountain removed from Waiting Area based on hygiene concerns between sick and well students.

3.4.3 Guidance Counseling Suite

- Renamed from Guidance Counseling Center to Guidance Counseling Suite for consistency.
- [MS and HS] Clarified description of Career Information/Exploration Area.

3.4.4 Special Education Suite

- Clarification: The Assessment Room is not an office. It is a small meeting room for assessment of special needs.

3.4.5 Shared Conference Room

- New section separated from Miscellaneous Support Spaces.

3.4.6 Parent's Center

- New section separated from Miscellaneous Support Spaces.
- Clarification: The Parent's Center should not be within the Admin, Guidance, or Special Ed suites. This is not a staff space and should be separated from the staff areas.
- [HS] The Parent's Center may be used for school store, spirit wear, and prepackaged light concessions.

3.4.7 Central Workroom

- New section separated from Miscellaneous Support Spaces.
- The building area has been balanced (150/150) so that these spaces can stack.

3.4.8 School's Officer

- New section separated from Miscellaneous Support Spaces.

3.5 BUILDING SERVICES

3.5.1 Food Service

- Locker area has been revised to a Breakroom with Lockers, similar to the Janitorial Workroom. This is not a Locker Room area for changing. Personal items may be stored in the lockers and the Restrooms may be used for changing, if needed.
- German Restroom requirement for male and female restrooms has been added. Additional building area shall come from the Net-to-Gross allowance, or efficiencies in the Kitchen design.
- Clarification: The space allocations for specific functions within the Food Service area may be modified as long as the total overall net area is not exceeded.

3.5.2 Janitorial Workroom

- Janitorial Workroom provided at all schools. The function is different in DoDEA-Americas (CONUS) from DoDEA-Pacific and DoDEA- Europe (OCONUS)

3.5.3 Maintenance Support

- Deleted reference to exterior access. All exterior access where there may be deliveries shall be thru the Receiving Room. All other exterior access shall be thru the main building circulation.
- Revised building area to match PFD. This change was made previously, but the Ed Spec was not updated.

3.5.5 School Supply/Storage Area

- No direct access to Loading Dock. Exterior access to this space shall be thru the Receiving Room.

3.5.6 Receiving Room and Loading Dock

- New section
- This space shall be the only access to the interior of the building from the Loading Dock area.

3.5.7 Main Telecom Room

- New section
- This space was formerly called the "Active Component Area" in the Technology Service Center.
- This space was separated from the Technology Service Center to clarify its function. Refer to Technology Systems Design Guidelines – DoDEA-Network for additional information.

3.5.8 Technology Service Center

- This space was formerly called the "AT Workspace."

3.5.9 Restrooms

- New section
- This section has been added to clarify restroom requirements for different age groups.

1. INTRODUCTION
- 1.1 Preface
- 1.2 Department of Defense Education Activity (DoDEA)
- 1.3 Facilities for 21st Century Learning
- 1.4 Educational Program Listing

2. FACILITY AS A TEACHING TOOL

3. FACILITY ELEMENTS AND REQUIREMENTS

3.1 SITE
- 3.1.1 Site
- 3.1.2 Outdoor Learning
- 3.1.3 Outdoor Athletics

3.2 NEIGHBORHOOD
- 3.2.1 Neighborhood
- 3.2.2 Learning Hub
- 3.2.3 Learning Studio
- 3.2.4 Group Learning
- 3.2.5 One-to-One
- 3.2.6 Learning Impaired Moderate/Severe (LIMS)
- 3.2.7 Learning Impaired Mild/Moderate (LIMM)
- 3.2.8 Reading Lab
- 3.2.9 Academic Support

3.3 SHARED SPACES
- 3.3.1 Staff Collaboration
- 3.3.2 Commons
- 3.3.3 Tatami Room
- 3.3.4 Recycling Center
- 3.3.5 Multipurpose Room
- 3.3.6 Information Center
- 3.3.7 Physical Education
- 3.3.8 Art
- 3.3.9 Music
- 3.3.10 OT/PT
- 3.3.11 Science Lab
- 3.3.12 Career and Technical Education (CTE) Lab
- 3.3.13 JROTC

3.4 STUDENT SUPPORT AREAS
- 3.4.1 Administration Suite
- 3.4.2 Health Suite
- 3.4.3 Guidance Counseling Suite
- 3.4.4 Special Education Suite

3.4.5 Shared Conference Room
3.4.6 Parent's Center
3.4.7 Central Workroom
3.4.8 School's Officer
3.4.9 Alcohol/Substance Abuse Counselor (ASAC)

3.5 BUILDING SERVICES
3.5.1 Food Service
3.5.2 Janitorial Workroom
3.5.3 Maintenance Support
3.5.4 Transportation Support
3.5.5 School Supply/Storage Area
3.5.6 Receiving Room and Loading Dock
3.5.7 Main Telecommunications Room (TR-1)
3.5.8 Technology Service Center
3.5.9 Restrooms

INTRODUCTION

PREFACE

The DoDEA Education Facilities Specifications have been developed to assist in the design and to define the requirements of all DoDEA school facilities. This includes renovations and additions as well as new construction. The DoDEA Education Facilities Specifications are based upon the needs of our students and are aligned to the standards and instructional programs that provide for 21st Century Teaching, Learning, and Leading.

These Education Facilities Specifications provide a consistent approach to designing all 21st Century school facilities by ensuring that every element of the school is focused on curriculum delivery and efficient use of the available space. The school facilities shall provide a healthy, safe and secure learning environment.

School facilities shall adhere to all federally mandated DoD standards for facilities design. To ensure that we are good stewards of taxpayer dollars, school facilities will be sustainable and promote the application of a life cycle cost effective analysis. Projects shall meet the requirements of the DoDEA Facilities Management Guide – Sustainability and Energy Efficiency Program.

Refer to the DoDEA website for additional Facilities Management Guides and requirements for the design of DoDEA facilities. (http://www.dodea.edu/edSpecs/index.cfm) These guides and guidelines define DoDEA specific facility requirements that all projects shall meet. DoDEA guidance will be updated annually. Please verify the current version at the time of the Design Charrette. DoDEA guidance includes, but is not limited to the following:

- DoDEA Education Facilities Specifications
- Technology Systems Design Guidelines – DoDEA-Network
- Technology Systems Design Guidelines – DoDEA-Special Systems
- Physical Security & Antiterrorism Design Guide
- Sustainability and Energy Efficiency Program
- Design Charrette Out-Brief Approval Form
- HQ DoDEA Bid Option Approval Form
- DoDEA's Room Numbering Guideline
- Computation of Gross Square Footage Memo
- DoDEA Project Book Template

Process

The Education Facilities Specifications shall be used in conjunction with the Program for Design (PFD) specific to each project. The PFD identifies the spaces, building area (sf/sm), fields, parking spaces, etc. that are authorized for the design of the school and is used to ensure consistency across the DoDEA program. The PFD is reviewed, discussed, and signed by DoDEA representatives from the school, district, area, and HQ as part of the Parametric Design process.

All room areas (sf or sm) listed in the Education Facilities Specifications are net areas, which means usable space within the walls (including casework). The following net-to-gross allowances are used to calculate the overall gross area of the building:

- 30% (*Germany only – 31%): Gross Allowance (walls, circulation, restrooms, janitor closets, chases)
- 5% (*Germany only – 7%): Multi-Level Allowance (stairs, elevators, vertical circulation)
- 7% (*Germany only – 12%): Mechanical Allowance (mechanical, electrical, communications, utility)
  *For German projects, the net-to-gross allowances are increased to account for German code requirements.

Space variation of +/-5% is permissible to account for common construction constraints such as stacking and structural and utility efficiency. Net area for spaces that are also used for circulation, such as the Commons and Learning Hubs, may be increased using some of the net-to-gross allowance. If it is necessary to reduce overall building area to remain within the congressional authorization on the DD Form 1391, these larger shared spaces shall be reduced. Reducing the area of the instructional spaces is not encouraged and should only be done as a last resort.

The PFD calculates the required parking for each project. Refer to the Site section for additional information. Required Athletic Fields are also indicated on the PFD. Refer to the Athletic Fields section for additional information.

The design charrette process will be used for school facility planning and design and to ensure all Education Facilities Specifications are incorporated into a specific project. Any and all changes, deviations, or one-time waivers to these Education Facilities Specifications shall be submitted to the HQ DoDEA for review and consideration in accordance with DoDEA AI 4300-01.

INTRODUCTION

DEPARTMENT OF DEFENSE EDUCATION ACTIVITY (DoDEA)

Background

The Department of Defense Education Activity (DoDEA), as one of only two Federally-operated school systems, is responsible for planning, directing, coordinating, and managing Pre-Kindergarten through 12th grade educational programs on behalf of the Department of Defense (DoD). DoDEA is globally positioned, operating 168 accredited schools in 8 districts located in 11 foreign countries, 7 states, Guam, and Puerto Rico. DoDEA is committed to ensuring that all school-aged children of military families are provided a world-class education that prepares them for postsecondary education and/or career success and to be leading contributors in their communities as well as in our 21st century globalized society.

DoDEA schools are divided into three geographic areas: DoDEA-Europe, DoDEA-Pacific, and DoDEA-Americas.

Unique Opportunities & Challenges

DoDEA fosters a thriving cultural environment throughout all military installations. Facilities such as commissaries, hospitals, and schools are the foundation of a cohesive and welcoming community. The school is central to the military community as well, providing not only a place for student learning, but also for adult engagement in the performing arts, continuing education, and general community events.

DoDEA also has the privilege of truly operating within a global community. This comes with many opportunities that can benefit the students within the system. Ideas such as "global curriculum" and "global attendance" can provide students with world-wide exposure to learning, both virtually and physically.

However, DoDEA schools face a number of unique challenges. The challenges include the large geographic distribution of facilities and the variability in climate for school facilities. In addition, DoDEA schools are faced with a large variety of cultural influences and the need for consistency across the educational platform as service men and women migrate among military installations.

The emotional needs of children in military families are significant. These needs result from conditions including parent deployment, the hazards inherent in military assignments, and frequent transitions disrupting social relationships and school experiences. DoDEA must respond with adequate psychological support for these students.

One of DoDEA's main objectives is continuity in educational standards worldwide. Whether in the United States or in foreign countries, providing a consistent educational and built environment is critical because students often spend just two to three years at any one military installation. Foreign countries often have varying guidelines and specifications for school construction. In developing countries, incorporating new standards such as sustainable "green" buildings may prove difficult. Similarly, DoDEA must provide consistent operations and instructional pedagogy to provide a healthy transition for students that relocate frequently during their school years.

Security at military bases poses additional challenges when providing a consistent approach to facility design, including limiting availability of technology. Implementation of Anti-Terrorism/Force Protection (AT/FP) requirements for buildings within a military installation may differ depending on the site.

DoDEA Guiding Principles, Mission and Vision

Guiding Principles

Ongoing dialog among subject matter experts, design architects, and other project participants has resulted in three main guiding principles for facilities. These key points for 21st Century learning facilities are consistent with existing DoDEA Education Guiding Principles and the DoDEA Mission and Vision.

Provide student-centered facilities for all learners: The contemporary educational paradigm shifts the focus of instruction from teacher-centered to student-centered. This paradigm aligns with current behavior patterns that have evolved with technological advancements.

Be flexible and adaptable: The student-centered paradigm requires a variety of space types and spatial arrangements. To accommodate this concept, furniture and spaces must be flexible and adaptable enough to be rearranged throughout the course of the day. Spaces should also accommodate the evolution of technology and teaching methods without the need for new construction or significant building alteration.

Be global community-centered: The world is becoming increasingly globalized and requires enhanced capabilities to interact with diverse human cultures, languages, and behaviors. It is important that 21st Century learning facilities embody this emerging reality. While DoDEA must provide consistency and familiarity across all schools, it is important that schools incorporate features of the local culture and community.

Mission

"Educate, engage, & empower each student to succeed in a dynamic world."

Vision

"To be among the World's leaders in education, enriching the lives of military-connected students and the communities in which they live."

INTRODUCTION

FACILITIES FOR 21ST CENTURY LEARNING

21st Century Key Themes

The 21st Century learning environment is evolving to support the ways that children learn best – a pedagogical system that accommodates the unique instructional needs of every learner and supports the positive relationships needed for effective learning. These learning environments holistically include the facilities, technologies, and communities that inspire students to build lifelong skills. Effective learning occurs when these three elements are creatively integrated into a seamless whole in which each reinforces the other to help children develop.

The DoDEA 21st Century facilities are guided by six major themes. The first two are overarching themes that are used to frame how a 21st Century school is to be designed and constructed. The next four themes form the framework and set the tone for exploring the vision for 21st Century education, based on best-practices and promising new trends that promote student success. The six themes are:

Flexible and Adaptable Facility: School facilities should have an expected life cycle of 45 years or greater. Designing an environment that only compliments education for this period of time is not ideal, given the rapid change in technology as well as curricular advances that will be adopted to support student achievement. For this reason, facilities must be flexible and adaptable. This can be best accomplished by minimizing interior load bearing walls which in the long term allows for more economical reconfiguration. Considerable thought should also be given to how support systems in the building are constructed and the impact they might have on implementing future facility modifications. Instructional spaces should be quickly and easily transformed by teachers and students (through light, flexible furniture and operable partition walls) to accommodate their teaching and learning strengths.

Facility as a Teaching Tool and Teaching Environment: Design teams should consider how every square foot in a facility might contribute to education. Building systems and architecture can be used to illustrate and compliment science, technology, engineering, and math (STEM) as well as the arts through architectural design, lighting, and the use of color or materials. Functional spaces within the school that previously were not considered as more directly supporting education or learning, should also be reexamined and opportunities for learning or instruction identified.

Differentiated Learning: Students are individuals with unique learning requirements. To facilitate more effective learning, 21st Century education must respond to students' individual learning needs. Academic needs vary greatly and students have varying skill and interest levels. Some students work best as individual learners, while others prefer one-on-one or group arrangements. Additionally, some students may benefit from atypical space layouts. 21st Century learning models must empower each student by optimizing learning potential through personalized, differentiated instruction. To prepare students academically for the 21st century, a student-centered pedagogical approach serves to place the student in the center of learning.

Multiple Modalities: To accommodate this wide array of learning styles, students need facilities that adapt to different spatial, furniture and learning arrangements both inside and outside the educational facility. 21st Century education must evolve beyond the traditional classroom configuration and provide

spaces that can respond to a variety of concurrent instructional activities, including team-building events, small group sessions, individualized learning, and opportunities for meta-cognition and peer presentations—all potentially simultaneously. Spaces shared between teachers, content areas, and even communities can provide opportunities for a wider array of room configurations without necessarily increasing the footprint and resultant cost of a facility. Instead, sharing spaces increases the usefulness of each room by keeping them fully occupied for more hours of each day.

Multidisciplinary Teaching: Teaching across disciplines adheres to the concept of differentiated learning while being directly supported by multiple modalities, as described above. Providing students with ways to approach new subjects within the context of familiar and more approachable topics can enhance each student's access to, and interest in learning. Synthesizing subject content across disciplines enhances critical thinking skills and creativity. As teachers assemble lesson plans, they have opportunities to explore and integrate cross-curricular matter while simultaneously receiving and providing expert peer input via collaboration. This contributes to the professional development of the teachers and advanced learning opportunities for students.

Real-world Skills Development: The ability to prepare students to be competitive in the real world is key to the success of the 21st Century learning program. To achieve this goal, learning environments must provide access to hands-on instruction and opportunities for students to apply their knowledge and thinking while still providing a rigorous focus on core curricular competencies. Shifting the delivery method of core competency education to include related real-world problem solving, enhanced by multidisciplinary critical thinking, creativity and project-based learning, can provide effective learning experiences.

Facility Applications

- Create adaptable and flexible learning spaces – agile buildings that can change over time:
  - Design a structure that will accommodate future change.
  - Incorporate the openness/flexibility of a professional office as a model for learning spaces.
  - Pursue higher utilization of large, single-use spaces (cafeteria, auditorium, gym).
  - Provide spaces that can be quickly and easily adapted by teachers and students.
- Provide a variety of spaces to accommodate all learning styles:
  - Provide breakout areas for flexible learning spaces.
  - Incorporate formal and informal learning spaces.
  - Use non-assigned circulation space for learning.
  - Allow for exterior space as an extension of the learning space.
- Accommodate all users – students, faculty, stakeholders, community, and families.
- Engage the school and building with the local community/military installation.
- Balance the need for a securable facility with the desired characteristics of open, collaborative and aesthetically pleasing space.
- Embed technology throughout the school.

INTRODUCTION

EDUCATIONAL PROGRAM LISTING

The program for each new school, called the Program for Design (PFD), is developed from a Staffing Scenario based on the projected enrollment and grade distribution of the students. This Staffing Document follows the basic manpower categories and does not individually list all of the educational programs that may occur in a school. This section links the educational programs and staffing positions to each functional area (Neighborhood, Reading Lab, Art, etc.).

This section is organized by functional area. For detailed requirements of each functional area, refer to the Table of Contents. Each functional area and its associated staff collaboration space is followed by a list of staff positions and any specialized educational programs (LLI, AVID, etc.) that may be associated with that position. Additional information such as specific program requirements or class sizes may also be listed.

Abbreviations
OCONUS – EUROPE, PACIFIC, and CUBA
CONUS – AMERICAS, GUAM, and PUERTO RICO

NEIGHBORHOOD SPACES: Learning Hub, Learning Studio, Group Learning, One-to-One
NEIGHBORHOOD STAFF COLLABORATION

Elementary School

- CLASSROOM TEACHERS – Sure Start Teacher (OCONUS)
  The Sure Start program is a full day preschool program in select OCONUS schools. Class sizes are the same as Kindergarten.
- CLASSROOM TEACHERS – Pre-Kindergarten Teacher (CONUS)
  The Pre-Kindergarten program is a half-day program in select CONUS schools. Class sizes are the same as Kindergarten.
- SPECIAL EDUCATION – Teacher of Preschool Disabled (Preschool Services for Children with Disabilities)
  The PSCD program is a half-day program that serves preschool age children (3 to 6 years). Class sizes range from 4-7 students per session.
- CLASSROOM TEACHERS – Kindergarten Teacher
- CLASSROOM TEACHERS – Elementary Classroom Teacher (Grades 1-3)
- CLASSROOM TEACHERS – Elementary Classroom Teacher (Grades 4-5 or 4-6)
- CLASSROOM TEACHERS – Elementary Heritage Teacher (Guam and Puerto Rico Schools only)
- CLASSROOM TEACHERS – Elementary Host Nation Teacher (OCONUS – Grades 1-5)
- CLASSROOM TEACHERS – Elementary Gifted Education Teacher
  Push-in or pull-out small groups of 3-5 students.
- OTHER PROFESSIONALS – Foreign Language Teacher (Elementary School)
  The Foreign Language in Elementary Schools (FLES) program provides Foreign Language instruction for students in Grades 1-3.
- OTHER PROFESSIONALS – School Support Specialist (Grades 1-3)
  The School Support Specialists serve students who need extra help in language arts, reading, or math. The specialist may work closely with one or two students, while the remaining students are reading or working independently.

- OTHER PROFESSIONALS – School Support Specialist (Grades 1-3) – Leveled Literacy Intervention (LLI)
  Leveled Literacy Intervention (LLI) is DODEA's system-wide K-3 reading intervention program. LLI is a small-group (PTR 5:1 max), supplementary intervention designed for children who need reading and writing support. LLI lessons are 30-45 minutes long and need a space for teaching in close proximity that allows children to face the instructor without distraction (for example in a quiet corner of a larger space but ideally a small room). Students need seating and a workspace that 1. allows them to see clearly when the teacher writes on the board or chart paper and 2. provides a flat surface that supports the correct posture for reading and writing, a horseshoe table is preferred. Teachers have a significant amount of materials which require storage, but constant access. For daily lessons materials are not bulky, at any one time, but a place for basic supplies (8 x 11 white boards, dry erase markers and erasers, sets if magnetic letters, paper, sentence strips, correction tape, pocket charts, books, folders, journals and writing implements) like a rolling cart is optimal, especially if a teacher is not co-located for lessons with his/her assigned storage or has multiple teaching locations.
- SUPPORT STAFF – Paraprofessionals and Aides (Sure Start, Pre-Kindergarten, Kindergarten)
  The Paraprofessionals and Aides work directly with the students and do not require a dedicated workspace. Space shall be provided within the Staff Collaboration for secure personal storage.

<u>Middle School</u>

- CLASSROOM TEACHERS – Middle School Classroom Teacher (Grades 6-8) – English Language Arts (ELA), Mathematics, and Social Studies
- CLASSROOM TEACHERS – Middle Grades Academic Support (Grades 6-8) – Advancement Via Individual Determination (AVID)
  The AVID program works with students in the academic middle, who have the desire to go to college and the willingness to work hard. In the AVID elective class, students learn organizational and study skills, work on critical thinking and participate in enrichment and motivational activities that make college more attainable. AVID tutors are also and essential component of the program. The AVID Elective class features 40% of instructional time in collaborative learning groups of no more than 7 students per 1 adult facilitator; 40% of instructional time on college-level writing, inquiry, reading, organization, and collaboration; and 20% of instructional time focusing on college speakers, team building, and motivational activities.
- CLASSROOM TEACHERS – Middle School Supplement (CONUS)
  Foreign language instruction
- CLASSROOM TEACHERS – Middle Host Nation Teacher (OCONUS)

<u>High School</u>

- CLASSROOM TEACHERS – Secondary Classroom Teacher (Grades 9-12) – English Language Arts (ELA), Mathematics, and Social Studies
- CLASSROOM TEACHERS – Secondary Classroom Teacher (Grades 9-12) – Drama (May also be collocated with Art and Music to form a Fine Arts cluster and staff collaboration.)
- CLASSROOM TEACHERS – Secondary Grades Academic Support (Grades 9-12) – Advancement Via Individual Determination (AVID)
  See program description in middle school section above.
- CLASSROOM TEACHERS – Secondary Host Nation Teacher (OCONUS)
  This is a language program at the high school level.
- OTHER PROFESSIONALS – Secondary World Language Teacher

<u>Any Grade Level</u>

- CLASSROOM TEACHERS – English as a Second Language (ESL) Teacher

- SMALL SCHOOL SUPPORT – Small School Allowance
  Additional FTE's are provided in small schools.
- SPECIAL EDUCATION – Speech/Language Pathologist
  Small groups, as well as one-on-one with assistance from the teacher.
- SPECIAL EDUCATION – Hearing Impaired Services
- SPECIAL EDUCATION – Visually Impaired Services
- SUPPORT STAFF – Paraprofessionals and Aides (Special Education)
  The Paraprofessionals and Aides work directly with the students and do not require a dedicated workspace. Space shall be provided within the Staff Collaboration for secure personal storage.

LEARNING IMPAIRED MODERATE/SEVERE (LIMS)
NEIGHBORHOOD STAFF COLLABORATION

- SPECIAL EDUCATION – Teacher of Learning Impaired (Moderate/Severe)
  This space shall be incorporated into a Neighborhood so that students may have additional interaction with grade level peers. Class sizes range from 6-10 students.

LEARNING IMPAIRED MILD/MODERATE (LIMM)
NEIGHBORHOOD STAFF COLLABORATION

The Learning/Emotionally Impaired – Mild/Moderate program is an inclusion program, but a resource space is provided for use where specialized instruction is required by the IEP. LIMM spaces are located convenient to other instructional areas, but are not incorporated into Neighborhoods unless there are enough for each Neighborhood to have one.

- SPECIAL EDUCATION – Teacher of Learning Impaired (Mild/Moderate)
- SPECIAL EDUCATION – Teacher of Emotionally Impaired

READING LAB – One per school
NEIGHBORHOOD STAFF COLLABORATION

Read 180 Next Generation (R180) is DODEA's system-wide Grades 4-12 reading intervention program. R180 is an intensive reading intervention for older struggling readers. The PTR is 18:1. R180 lessons are 90 minutes long and need spaces for whole-group instruction (30 minutes) and small group rotations (60 minutes). Three groups of 5-7 students are in each small group rotation and engage in teacher led small group instruction; skill practice using instructional software (each student should have their own computing station); and independent/modeled reading (paperbacks, audiobooks, and eReads). The reading and software material needs to be in the classroom and accessible to students. The R180 classroom should be set-up so that each area is distinct and supports productive independent and group work.

- OTHER PROFESSIONALS – School Support Specialist (Grades 4-5) – Read 180
- CLASSROOM TEACHERS – Middle Grades Academic Support (Grades 6-8) – Read 180
- CLASSROOM TEACHERS – Secondary Grades Academic Support (Grades 9-12) – Read 180

ACADEMIC SUPPORT – Middle and High School Only
NEIGHBORHOOD STAFF COLLABORATION

The smaller neighborhood spaces such as Group Learning and One-to-One are intended to be used on an as-needed basis and not assigned to specific programs. The Academic Support spaces are provided in addition to these neighborhood spaces so that they may be assigned to specific programs (AVID, Math

Lab, etc.) as needed. Academic Support spaces are located convenient to other instructional areas, but are not incorporated into Neighborhoods unless there are enough for each Neighborhood to have one.

- CLASSROOM TEACHERS – Middle Grades Academic Support (Grades 6-8)
  One Academic Support space is provided when enrollment is 250 or less. Two Academic Support spaces are provided when enrollment is greater than 250.
- CLASSROOM TEACHERS – Secondary Grades Academic Support (Grades 9-12)
  One Academic Support space is provided for every 200 students.

TATAMI ROOM

- CLASSROOM TEACHERS – Elementary Host Nation Teacher (OCONUS – Grades 1-5) – Japan only

INFORMATION CENTER

INFORMATION CENTER STAFF COLLABORATION

- OTHER PROFESSIONALS – Education Technologist
- OTHER PROFESSIONALS – Information Specialist
- Two additional itinerant workstations are included in the Information Center Staff Collaboration.

PHYSICAL EDUCATION

PHYSICAL EDUCATION STAFF COLLABORATION

- OTHER PROFESSIONALS – Elementary PE Teacher
  A Gymnasium is provided in all schools. A divider curtain may be provided so that simultaneous activities may happen in the Gymnasium.
- CLASSROOM TEACHERS – Middle School Classroom Teacher (Grades 6-8) – Health and PE
  A Gymnasium is provided in all schools. Depending on enrollment an Auxiliary Gymnasium or second Gymnasium may also be provided. Health and PE Teachers are calculated at one per 500 on the PFD.
- CLASSROOM TEACHERS – Secondary Classroom Teacher (Grades 9-12) – Health and PE
  A Gymnasium is provided in all schools. Depending on enrollment an Auxiliary Gymnasium or second Gymnasium may also be provided. Health and PE Teachers are calculated at one per 500 on the PFD. One Learning Studio may be located near the Gymnasium for Health, but this Learning Studio is then deducted from the total Learning Studio allocation in the Neighborhoods.

ART

NEIGHBORHOOD STAFF COLLABORATION or FINE ARTS STAFF COLLABORATION

- OTHER PROFESSIONALS – Elementary Art Teacher
  One Art Room is provided in each elementary school. Where there is more than one Art teacher additional activities shall utilize the Neighborhood spaces.
- CLASSROOM TEACHERS – Middle School Classroom Teacher (Grades 6-8) – Visual Arts
  One Art Room is provided per school. Where there is more than one Art Teacher additional instructional space is calculated in the Neighborhood/Learning Studio allocation.
- CLASSROOM TEACHERS – Secondary Classroom Teacher (Grades 9-12) – Visual Arts
  One Art Room is provided per school. Where there is more than one Art Teacher additional instructional space is calculated in the Neighborhood/Learning Studio allocation.

MUSIC
NEIGHBORHOOD STAFF COLLABORATION or FINE ARTS STAFF COLLABORATION

- OTHER PROFESSIONALS – Elementary Music Teacher
  One Music Room is provided in each elementary school. Where there is more than one Music teacher additional activities shall utilize the Neighborhood spaces.
- CLASSROOM TEACHERS – Middle School Classroom Teacher (Grades 6-8) – Music
  A single Music Room is provided when enrollment is 500 or less. Separate Band and Choral Rooms are provided when enrollment is greater than 500.
- CLASSROOM TEACHERS – Secondary Classroom Teacher (Grades 9-12) – Music
  A single Music Room is provided when enrollment is 500 or less. Separate Band and Choral Rooms are provided when enrollment is greater than 500.

OT/PT
The Occupational and Physical Therapists are often itinerant and serve multiple schools. Two desks (for OT and PT) are provided in OT/PT Planning area.

- SPECIAL EDUCATION – Occupational Therapist
- SPECIAL EDUCATION – Physical Therapist
- EDIS – The Military Medical Departments through their Educational and Developmental Intervention Services (EDIS) are responsible for providing related services (e.g., physical and occupational therapy, clinical psychology) in DoDEA schools located overseas. EDIS is also responsible for the provision of Early Intervention Services (EIS) for children, ages birth through 2, at all DoDEA locations. A Psychologist Office and an OT/PT instructional area are provided in all schools. EDIS may utilize these spaces, but no additional workspace for EDIS staff is programmed within the DoDEA schools.

SCIENCE LAB – Middle and High School Only
NEIGHBORHOOD STAFF COLLABORATION
The number of Science Labs are calculated based on NSTA standards. Where there are more Science Teachers than Science Labs additional instructional space is calculated in the Neighborhood/Learning Studio allocation.

- CLASSROOM TEACHERS – Middle School Classroom Teacher (Grades 6-8) – Science
- CLASSROOM TEACHERS – Secondary Classroom Teacher (Grades 9-12) – Science

CAREER AND TECHNICAL EDUCATION (CTE) – Middle and High School Only
NEIGHBORHOOD STAFF COLLABORATION

- CLASSROOM TEACHERS – Middle Grades PTS (Grades 6-8)
  One Large CTE Lab is provided in each middle school. A Broadcast Room and a Flexible Learning space (formerly Computing Center) are provided near the Information Center in each middle school. Not all courses are offered at all schools, but courses offered include Applied Technology, Business Enterprise, Computer Applications, Computer Server Support, Family Consumer Science, Graphics Communications, Intro to Electronics, Intro to Programming, Pathways to Careers, Technology Leader Communications, and Video Production. At some middle schools, CTE classes may be offered on a rotating basis along with other specialty classes.
- CLASSROOM TEACHERS – Secondary Grades PTS (Grades 9-12)
  One Large CTE Lab is provided in each high school. This Large CTE Lab may be outfitted for Culinary Arts, or as a larger general CTE Lab. Additional CTE Labs are provided based on enrollment. A

Broadcast Studio is provided in each high school. A Flexible Learning space (formerly Computing Center) is provided near the Information Center. Not all courses are offered at all schools, but courses offered include Accounting, AP Computer Science, Applied Architecture Design – CAD, Architectural Drawing, Biotechnology Engineering, Business and Personal Finance, Business Law, Business Law, Career Practicum, Coding for Everyone, Coding for Everything, Computer Animation, Computer Server Support, Culinary Arts, Cybersecurity, Database Software Applications, Digital Electronics, Digital Imaging, Digital Media, Digital Publishing, Engineering Design and Development, Engineering Drawing – CAD, Gaming Technology, Green Technology Engineering, Health Science, Health Team Dynamics, Home Networking, Industrial Production, Java Programming, Management International Business, Marketing and Entrepreneurship, Principles of Engineering, Robotics Engineering, Video Communications, Web Design.

JROTC – High School Only
JROTC STAFF COLLABORATION
- CLASSROOM TEACHERS – JROTC Instructors

ADMINISTRATION SUITE
- ADMINISTRATION – Principal
- ADMINISTRATION – Assistant Principal
- SUPPORT STAFF – School Clerical/Registrar/Supply Technician – Clerical
  The Clerical Work Area is directly behind the reception counter in the Administration Suite. There should be a minimum of two staff in the Clerical Work Area. In small schools this may include the Registrar and Secretary.
- SUPPORT STAFF – School Clerical/Registrar/Supply Technician – Registrar
  The Registrar works directly with parents to register students and deal with student issues. In schools with 300 or more students a separate Registrar Office is provided.
- SUPPORT STAFF – School Clerical/Registrar/Supply Technician – Secretary
  The Secretary is a human resources position that deals with teacher issues. In schools with 600 or more students a separate Secretary (HR) Office is provided.

HEALTH SUITE
- OTHER PROFESSIONALS – Nurse

GUIDANCE COUNSELING SUITE
- OTHER PROFESSIONALS – Guidance Counselor
- SUPPORT STAFF – Administrative Support for Guidance Counselors

SPECIAL EDUCATION SUITE
All schools have a minimum of one Assessor office and one Assessment space within the Special Education Suite, whether or not an Assessor is assigned to the school full-time. Where there are multiple Assessors additional workspace is provided. Where there is an Assessment Clerk a workspace shall be provided in the Waiting Area.
- SPECIAL EDUCATION – Special Education Assessor
- SPECIAL EDUCATION – Speech/Language Assessor
- SPECIAL EDUCATION – Autism Teacher Leader (treated as an Assessor)

- SUPPORT STAFF – Assessment Clerk

SCHOOL'S OFFICER
Where indicated on the PFD.

ALCOHOL/SUBSTANCE ABUSE COUNSELOR (ASAC) – Middle and High School Only

SCHOOL SUPPLY/STORAGE AREA
- SUPPORT STAFF – School Clerical/Registrar/Supply Technician – Supply Technician
  The Supply Technician orders and distributes supplies. A workspace for the Supply Technician shall be provided in the School Supply/Storage Area.

TECHNOLOGY SERVICE CENTER
The Administrative Technologist (AT) is often itinerant and serves multiple schools. Workspace for the AT shall be provided in the Technology Service Center.

FACILITY AS A TEACHING TOOL

FACILITY AS A TEACHING TOOL

Every square foot of a school building and its grounds can be seen as an educational opportunity. Giving students an understanding of how the school building works and how it fits into their broader community can foster their sense of ownership and engagement with their learning environment. The Teaching Tools listed here are suggested ideas. The intent is for the Project Design Team to develop a theme/brand that can tie the school, the community, and the educational mission together. Within that context, the Teaching Tools should be selected with consideration to supporting the school's theme and educational mission. LEED, Federal, and/or site specific sustainability requirements may be highlighted through exhibitry and the overall school theme. The cost for Teaching Tools provided in a school shall not exceed $250K without prior coordination with HQ DoDEA.

Exhibitry (Indoor & Outdoor Signage)

- The theme/brand for the school may be established through super graphics displayed at strategic locations such as the entrance, the commons, and access to individual neighborhoods.
- Exhibitry should be thematic for a particular school and its neighborhoods (i.e. the Phantom neighborhood in an aviation themed school).
- The theme/brand should be built into all signage both inside and outside the school.
- Use exhibitry to highlight sustainability features, technology and utility systems (i.e. exposed structure/systems, occupancy lighting, LID Bio Swales, etc.).
- Exhibitry may be used to convey historical information, such as the history and traditions of the school, local heroes, or a timeline of significant events at the school or installation.
- Promote physical activity and health in schools and the use of the building as a public health instrument through exhibitry (how many calories do you burn when you climb the stairs, etc.).
- Curriculum may be concurrently developed with DoDEA Education so the teaching elements are designed to support the overall branding and theme for the school.
- Plaques, signage and graphics should be visually appealing to the appropriate age group, relevant, educational, fun and encourage imagination.
- The use of vinyl graphics is a very economical way of producing the effect with ability for later modifications.

History wall - Wheatley Elementary School, Apopka, FL SchenkelShultz Architecture

Exposed Structure/Systems

- Include exposed structure or building systems, especially in gathering/assembly areas (i.e. interactive window opening into a mechanical room or building construction demonstration wall cut-out).

- Use appropriate exhibitry to relate systems to learning concepts (i.e. label/color code the piping and equipment and provide information on how these systems work with age-appropriate concepts).
- When possible, provide dynamic components like digital flow meters or temperature sensors on chilled water piping to engage the students and provide information that can aid in learning.
- Engineering systems must be encouraged as a fun learning tool and promote students into STEM fields.
- The school can be presented as a "body"; consider an "Operation Game" in which the data/electrical wiring represents veins, HVAC represents lungs, and the building structure represents bones.

Exposed piping - Hampton Primary School, Ft Bragg, NC SchenkelShultz Architecture

Water Harvesting

- Use rainwater harvesting (inexpensive rain barrels) to demonstrate the water cycle for a defined purpose (i.e. to water a student garden).
- Spillways or troughs may be used as water features when utilizing the harvested rainwater for irrigation in an outdoor classroom.
- Use exhibitry to highlight Low Impact Development (LID) features used at the school and their connection to the water cycle and responsible storm water management.

Rain barrels - bicycle pump Hampton Primary School, Ft Bragg, NC SchenkelShultz Architecture

Outdoor Learning Environments

The Project Design Team (PDT) should be challenged to integrate the great things on each school site into learning opportunities (i.e. butterfly gardens that will attract local specimens, nature trail highlighting local endangered species, site history, etc.). Refer to the Outdoor Learning section for additional information.

Energy Dashboard

The Energy Dashboard collects the real time data from the school's building systems to provide for real-world learning opportunities while also providing student awareness of the environmental impact of their school. The dashboard should collect data such as electrical, water, and natural gas usage and then display it in conventional units of measure and/or an age appropriate conversion. The data should be tracked to show how consumption/ production may change over time and between other schools.

- The Energy Dashboard shall be provided for every school. Consider locating it at a large gathering area such as the school entry or commons.
- Sub-meter different wings, or neighborhoods of the building separately. The design of the Dashboard can have the ability for different neighborhoods to compete and strive for energy savings. This can engage students with sustainability at a new level.
- The Dashboard should be connected to demonstration solar panels, wind turbines and weather stations.
- Refer to the DoDEA Technology Systems Design Guidelines – Special Systems for more information on Dashboard requirements.

DoDEA Required Elements

- Exhibitry/educational signage
- Energy dashboard
- Demonstration solar panels
- Demonstration wind turbine

DoDEA Dislikes

- Curved walls
- Cast in concrete details requiring maintenance (maze/maps)
- Water features that do not provide a function (i.e. fountains)
- Rooftop gardens (cost/maintenance)
- Speakers along a walkway (maintenance costs)
- Living/green walls "living air bio-filters" (cost/maintenance)
- Excessive use of solar tubes (roof penetrations)
- Excessive floor graphics (cost/maintenance and custom finished floor issues)
- Light fixtures that make shapes (if excessive cost)
- Electric vehicle charging station
- Digital energy play tables

Wind turbine - Antilles Elementary School, Ft Buchanan, Puerto Rico BRPH Architects-Engineers, Inc.

FACILITY ELEMENTS & REQUIREMENTS – SITE

SITE

Area Description	# of Spaces	Notes
Staff Parking	One per staff	Not to exceed
Visitor Parking	10% of student enrollment	Not to exceed
Student Parking	20% enrollment of grades 11&12	Not to exceed
Service Staff Parking	10+(1/100 when enrollment>300)	Not to exceed

Functional Area Description

The exterior area of the school provides access, parking, recreation, and service areas. Insure a safe, functional, and aesthetically pleasing site. It must provide ADA accessibility and comply with all Anti-Terrorism / Force Protection (AT/FP) standards. Refer to the "Physical Security & Antiterrorism Design Guide for DoDEA Educational Facilities" for additional information.

Site Layout & Circulation

Siting a school complex poses unique safety considerations. The design team should avoid creating blind spots. Multipurpose driveways and walkways should be sited to avoid conflicts between pedestrian and vehicular traffic. Consider the hierarchy of entries and use the site to reinforce the function of each. Include access control considerations. Provide a clear path around the building for security and surveillance.

Traffic flow considerations include:

- Separate vehicular entrances and exits for bus traffic and Privately Owned Vehicles (POV) parent drop-off traffic, where site access allows.
- Separate bus and parent drop-off locations near building entrances.
- Separate bus and POV parent drop-off from POV parking areas.
- Bus circulation and drop-off shall be designed so that busses can always pull forward and are never required to back up.
- Adequate stacking length within the bus area to accommodate all buses during pick-up times.
- Adequate POV stacking on site to eliminate traffic congestion off site.
- Drop-off location for special education buses and vans.
- Well marked entrance and exit lanes to facilitate traffic flow.
- Drive-up service location for food service, equipment, and supply deliveries.
- Required fire department emergency vehicle access when planning site circulation.
- Proper separation of vehicular and pedestrian activities.
- Sidewalks for all areas where students approach or exit the school. Paths from playgrounds and fields to building entries should avoid crossing vehicular traffic.

Parking

<u>Staff/Visitor/Student Parking</u>

Refer to the Program for Design (PFD) for not to exceed parking allocations. Parking shall be coordinated with the military installation planners and be compliant with handicap access regulations. Conveniently locate the visitor parking and accessible parking near the front entrance of the school. When possible,

physically separate student parking from other parking areas. Provide parking islands as required by code and installation guidelines. If the site is constrained, coordinate with installation officials regarding the joint use of adjacent parking areas for staff members and recreational sites for school activities. School administrators shall consider actual parking needs and provide input on the appropriate marking of parking spaces so that they are easily identified by use (handicap accessible, visitor, student, staff, and carpool). Marking of all parking spaces is not required. For instance, a small number of visitor spaces may be reserved near the entrance but visitors may park in any available space throughout the day, so all visitor spaces do not need to be marked. The overall total parking allocation shall not be increased without documentation of concurrence from HQ DoDEA.

Service Staff Parking

Additional staff parking for food service, custodial, maintenance and IT personnel is indicated on the PFD. These spaces can be located near the building service area. Part time employees shall use visitor parking.

Recreation

Refer to the Outdoor Learning and Outdoor Play Areas section for additional information.

Service Area

This area is used for chillers, deliveries, trash removal, and other essential services required to support the operation of the school. Consolidate these areas where possible and locate just outside the support area of the building. Visually screen from the predominant areas of the site and major approaches. Provide physical enclosures for trash receptacles. If a dock is provided, verify the height of vehicles making deliveries. Provide for a local recycling program.

Planting

All planting requirements shall be adapted to the local climate. In general, provide native plant materials. Shade trees are desirable when parking islands are provided. Avoid low branching trees to maintain clear sight lines. Use a mix of evergreen and deciduous plant material to shade parking areas and screen service areas (i.e. refuse areas, loading docks, HVAC units) from adjacent uses. Consider sight lines near entrances when choosing and placing plant material.

Select non-poisonous, thorn-less trees, shrubs, plants, and ground covers that can withstand harsher conditions, such as sun, glare, heat, and reduced water supply. Choose trees and shrubs that require minimum maintenance and will not litter the parking area with leaves, fruits, and nuts. Provide enough clearance in planting islands to avoid interference with vehicle overhang. All plantings shall comply with AT/FP standards.

Built-In Items (Not Used)

Plumbing

- Hose bibbs on the exterior wall every 150 feet

Equipment (Not Used)

FACILITY ELEMENTS & REQUIREMENTS – SITE

OUTDOOR LEARNING

Adjacencies

Create Outdoor Learning areas with pedestrian connections from large activity areas within the building (Gymnasium, Multipurpose, Commons, Information Center, Learning Hubs, etc).

Learning Trail – Hampton Primary School, Ft Bragg, NC SchenkelShultz Architecture

Functional Area Description

Outdoor Learning— bringing the outdoors in and the indoors out and making connections are important components in 21st Century education. The options are endless and will vary based on location, site, and climate. Some examples include outdoor classrooms and gathering spaces, art patio, plazas, outdoor amphitheaters or performance spaces, gardens for cultivation and demonstration, walking/running paths, and nature areas. The purpose of these spaces is to connect and engage the learners with the natural environment, further their health and social skills, and increase awareness of natural resources. Outdoor Learning areas should be provided to the greatest extent possible.

Each school shall be provided a demonstration solar panel and wind turbine that is connected to the school's energy dashboard. Refer to the Facility as Teaching Tool section for Energy Dashboard teaching opportunities and to the "Technology System Design Guidelines – DoDEA Special Systems" for Energy Dashboard requirements.

The design of these spaces shall be coordinated with the local school, taking into account ongoing programs, local topography, and other site specific opportunities. All exterior spaces shall be designed to be easily maintained, have good sight lines, and be easy to supervise. AT/FP requirements must be met for all Outdoor Learning areas and site amenities.

Outdoor Classroom & Gathering Space

Provide a large exterior space that includes open, maintained green space in combination with secondary hardscape (sidewalks). Outdoor classrooms and gathering spaces can provide some seating and natural shade for small gatherings. Possible solutions for seating could be built-in benches or raised planting beds.

Art Patio

Provide an Art Patio adjacent to the Art Room. Consider providing an exterior sink to accommodate clean up when the art patio is used. If sink is provided, winterize water supply to prevent maintenance issues.

Outdoor Amphitheater

An amphitheater is an outdoor performance space for a small gathering (40-50 students). Outdoor amphitheaters are permitted only if the site allows for use of natural grade, with minimal material cost. Often, the tiers are constructed as a combination of concrete and grass strips; wood or stone could also be provided. The amphitheater should complement the natural features of the site and all amenities provided should be durable and weather resistant. Consider the maintenance of this area during design.

Community/School Garden

Gardens provide great learning opportunities for students. The origin of food, plant care, lifecycle, and many other connections can be made with the curriculum. If a garden area is provided, it should be located/ oriented in an area conducive to the cultivation of plants. Connections with other Outdoor Learning areas will reinforce multiple educational opportunities. Provide an expandable, fenced area for cultivation and harvest by students and/or community members. Consider co-locating teaching tools such as inexpensive rain barrels near the garden.

Walking/Running Path/Learning Trail

A flexible perimeter path may be provided that offers opportunities for outdoor movement. Consider providing training and obstacle equipment for the use of OT/PT and/or enhanced physical development. Provide connections to existing installation/base sidewalk or trail networks where possible.

Other Possible Outdoor Learning Opportunities

Other low maintenance outdoor site features may be considered. Site features such as sundials, themed walkways, nature paths, bioswales, and other elements that make connections to the natural environment can be incorporated to complement the sustainable design features of the building and to provide educational opportunities for the students. Use age appropriate outdoor signage to highlight the site and sustainability features. Refer to the Facility as Teaching Tool section for additional school learning opportunities.

Built-In Items (Not Used)

Plumbing

- Hose bibbs at Art Patio, outdoor classroom, gathering space and community/school garden
- Sink for Art Patio (optional)

Equipment

- Solar panel and wind turbine - Refer to “Technology System Design Guidelines – DoDEA Special Systems”

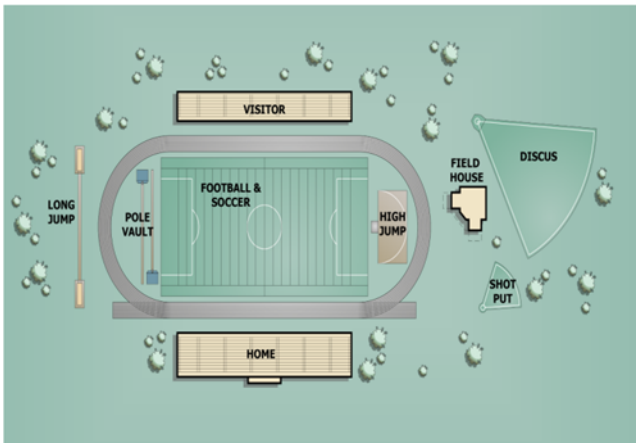
FACILITY ELEMENTS & REQUIREMENTS – SITE

OUTDOOR ATHLETICS

Field House			
Area Description	**sf**	**sm**	**Notes**
Concession	290	26.9	
Concession Storage	100	9.3	
Public Restrooms	530	49.2	
Team Equipment Storage	1200	111.5	

Adjacencies

Locate Athletic Fields with safe and accessible paths from the Gymnasium and parking. Paths to these areas should avoid crossing vehicular traffic.



Stadium diagram

Functional Area Description

Athletic Fields are the primary active outdoor area for high school students. Planning a multipurpose athletic field complex at a school has several advantages: fields can share the lighting and irrigation systems, they conserve land use, and they allow for concentrated and more cost-effective maintenance.

The recommended total acreage for high schools is 10 acres plus 1 acre per 150 students. If the total acreage is less than that recommended, support of the athletic program may need to be reduced. If only a small site is available ensure that construction costs are not unnecessarily driven up in an attempt to provide all recommended athletic facilities.

Existing sports programs and available fields will be evaluated during the Parametric Design process to determine which Athletic Fields are provided at each school. Every school should be negotiating with the installation for the joint-use of nearby athletic facilities such as tennis courts, football, soccer, baseball, and softball fields to support or enhance school programs. The Program for Design (PFD) will include a list of Athletic Fields to be provided for each project.

The following guidelines should be considered in developing a site layout for the Athletic Fields:

- Optimum orientation for sun and wind control.
- Circulation for players and spectators.
- Buffer zones between action spaces.
- Access to parking and buses.
- Grading and slope for drainage.
- Layout, dimensions, and amenities shall be designed in accordance with the National Federation of State High School Associations (NFHS) Court and Field Diagram Guide.

Football/Soccer/Track & Field/Bleachers/Stadium Press Box

A small stadium will be provided at schools with football, soccer and track & field teams.

- Provide a 400 meter, all weather running track with 6 lanes for schools with less than 400 students and 8 lanes for schools with 400 or more students.
- Consider placing the high jump and pole vault within the perimeter of the running track to conserve acreage. Place the discus throw, shot put, and long/triple jump outside the track area.
- Include a natural turf soccer/football field in the center of the running track. Typical orientation for the football field is in a north/south direction.
- Installation of enhanced surfacing (artificial turf) is permitted where cost is not excessive and climate or soil is too harsh for grass to grow.
- Provide an electronic scoreboard for the football/soccer field.
- Provide a prefabricated permanent bleacher system. In typhoon/seismic zones a concrete bleacher system may be used if required to meet code requirements. Use of existing topography to build concrete bleachers into the site is encouraged to help control costs.
- Unless site conditions will not allow, divide bleachers into home and away sides. Provide 70 percent of the seating capacity on the home side of the field. Total seating capacity shall be based on the PFD. Round to the nearest modular dimension for the prefabricated units.
- A press box shall be provided as part of the prefabricated bleacher system. The press box shall be centered on the field at the top of the bleachers on the home field side. The press box shall be less than 250sf/23.2sm. The press box shall be totally enclosed, with windows on the front and sides of the enclosure. Provide seating for four people at a counter along the front wall.
- Refer to "Technology System Design Guidelines – DoDEA Special Systems" for additional information on network connectivity.
- Field lighting is only required for competition sports and will be evaluated during the Planning/Parametric Design phase and indicated on the PFD.
- When an athletics program does not have one or more sports (football, soccer, or track & field), the inclusion of the associate field or elements in the project shall be discussed during the Planning/Parametric Design phase and indicated on the PFD.

Baseball and Softball Fields

- Baseball and softball fields shall be separate.
- Common dimensions for a baseball field are 360ft x 360ft (110m x 110m).
- Common dimensions for a softball fields are typically 225ft x 225ft (69m x 69m).
- Typically the baseball and softball fields should be oriented so that the batter is looking north when standing at the plate.
- Provide dugouts (fenced enclosure, concrete or gravel floor, roof) backstop fencing, warning track, outfield fencing with yellow fence guard and foul poles (recommended maximum height of 20') with mesh wings.
- Non–electronic scoreboards shall be provided for baseball and softball fields.
- Field lighting is only required for competition sports and will be evaluated during the Planning/Parametric Design phase and indicated on the PFD.

Tennis Courts

- Typical orientation for the length of tennis courts is north/south.
- Tennis courts should be paired with chain link fencing between every two courts.

- Court lighting is only required for competition sports and will be evaluated during the Planning/Parametric Design phase and indicated on the PFD.

Basketball Courts/JROTC Drill Pad

- The basketball courts and JROTC drill pad shall be combined.
- Typical orientation for the length of basketball courts is north/south.
- Provide 2 full basketball courts with regulation height baskets.
- Lighting of basketball courts is not authorized.

Field House

The Field House supports all the Athletic Fields and shall be positioned for convenient access. The Field House shall be utilitarian and is not intended to be an architectural statement. A simple architectural style is preferred. Exterior materials should be economical, durable, and easily maintained. Rooflines should be simple. Locate the Field House where it can support multiple fields.

Concession Area

The Concession Area shall have ample counter and storage space. Provide a roll-up shutter at the transaction counter. The Concession Area shall include a double stainless steel sink, small commercial ice maker, separate hand wash sink (if required by code), and electrical outlets. No appliances will be installed that require specialized ventilation/exhaust or fire suppression systems. The intent is for the Concession Area to support a microwave, popcorn machine, crock pots, and refrigerator/freezer or comparable residential level appliances. The entire facility must have the capability to be secured when not in use. Heating only shall be provided to prevent plumbing from freezing.

Concession Storage

Provide a lockable Concession Storage accessible only from the Concession Area.

Public Restrooms

Public Restrooms shall be provided to serve the spectators at the Athletic Fields. Men's and women's restrooms shall be provided. Team showers are not provided in the field house.

Covered Area

The area directly adjacent to the concession area transaction counter and the entrance to the Public Restrooms shall be covered by an overhang. Provide exterior drinking fountains. The covered area shall support a small amount of queuing at the Concession Area.

Team Equipment Storage

Provide single, double or overhead rolling doors as required for storage and access to existing equipment. If an overhead rolling door is used, also provide a single personnel door as another means of access. The storage areas may be subdivided with wire cages as required for secure storage to support individual sports.

FACILITY ELEMENTS & REQUIREMENTS – NEIGHBORHOOD

NEIGHBORHOOD

Functional Area Description

One of the major shifts in the 21st Century School is the move from individual classrooms to the grouping of several different size learning spaces within a Neighborhood. The Neighborhood provides space for a variety of large, medium, and small groups, one-to-one pairings, and individual learning.

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SchenkelShultz Architecture

Formal and informal areas are provided—ranging from whole class instruction, smaller group project areas, quiet areas, and a casual lounge environment. In addition, support for teachers is provided with staff planning, professional development and meeting areas. The focus of the Neighborhood spaces is to reinforce collaboration and project-based learning. Technology will be integrated throughout the spaces for support of learning.

A Neighborhood includes a hierarchy of different sized instructional spaces so that the appropriately sized space can be used for each learning activity to maximize utilization. The Learning Hub is the largest space and is central to the Neighborhood and will accommodate gatherings larger than one single class. The Learning Studio is a class sized space designed for 24 students. The Reading Lab, and Learning Impaired - Mild Moderate spaces are half-size classroom spaces designed for 12-18 students. The Group Learning is a conference room sized space designed for 10-12 students. The One-to-One space is a small meeting room sized space designed for 1-4 students. All of these spaces will be shared within the Neighborhood. A Staff Collaboration space will also be provided in each Neighborhood. This space will include a workstation with personal storage for each teacher, a conference area for collaboration, a small kitchenette, and additional shared Neighborhood storage.

The calculation of the total number of Neighborhood spaces is based on entering the school staffing, calculated from the DoDEA School Level Staffing Standards, into the Program for Design (PFD) spreadsheet. The PFD includes all staffing positions and defines a standard which is used to calculate the total number of Learning Studios. This provides a consistent calculation for all new schools in the DoDEA system. The Learning Studios, Group Learning and One-to-One spaces are intended to be shared Neighborhood resources, rather than being assigned solely to one staff member. Operationally, the district/administration will have the flexibility to assign locations for all programs each year based upon the needs of the school. The 21st Century model emphasizes multi-use spaces rather than single purpose rooms, so interchangeability, flexibility and adaptability of spaces is encouraged.

Each Neighborhood shall include a Learning Hub, four to six Learning Studios, Staff Collaboration, and at least one Group Learning and one One-to-One space. Additional instructional spaces, such as the Reading Lab, Learning Impaired – Mild/Moderate, Learning Impaired – Moderate/Severe, and Art may also be included in a Neighborhood. Since these instructional spaces will serve the entire school they should be placed where they have access to the main circulation path.

The number of Learning Studios in a Neighborhood may vary between four and six, based on the total Learning Studios allocated to the school, desired groupings and/or site constraints. A four or six Learning Studio Neighborhood shall have paired Learning Studios in groups of two with an operable partition between adjacent Learning Studios. In a five Learning Studio Neighborhood, one studio is not required to have an operable partition shared with an adjacent studio. Grouping of more than two Learning Studios is not permitted.

Neighborhoods may be grouped to maximize flexibility for collaboration. Grouping of more than two Neighborhoods is not permitted. Where Neighborhoods are paired, provisions shall be made to ensure that each of the two Neighborhoods is able to function independently. Where “flex studios” are provided that can be used by either Neighborhood, ensure that each Neighborhood can be locked down independently.

The spaces within the Neighborhood shall be designed for maximum flexibility, considering the constant changes in grade level enrollments from year to year. The designers shall work with educators and facility personnel at the school, district, and area levels to develop the number of Neighborhoods and distribution of spaces within each school. Specific designations for grade level, curriculum areas, or special programs should not be indicated in the design drawings.

FACILITY ELEMENTS & REQUIREMENTS – NEIGHBORHOOD

LEARNING HUB

Area Description	sf	sm	Notes
Learning Hub	1400-2100	130.1-195.1	350sf/32.5sm allowance per Learning Studio (4-6 Learning Studios per Neighborhood)

Adjacencies

The Learning Hub is the center of the Neighborhood. All Learning Studios, Group Learning, and One-to-One spaces shall open directly to the Learning Hub. Provide access to Outdoor Learning spaces through the Learning Hub.

Barkley Elementary School, Ft Campbell, KY
Woolpert, Inc.

Functional Area Description

The Learning Hub is a shared area at the center of the Neighborhood. This space allows for circulation to all the spaces within the Neighborhood while also offering additional instructional space. The Learning Hub will function as an extension of the Learning Studio. Some of the functions that may occur in the Learning Hub are spill-out space for group projects, additional learning centers, gathering areas for larger groups (students from 2-3 studios), grade-level reading resources, parent volunteer space, and independent or small group learning environments. Ideally this space should be reconfigurable for a wide range of uses. The Neighborhood Hub is not intended to be used as a central lecture/presenter position for all the neighborhood Learning Studios at the same time. The Learning Hub shall include an instructional area with interactive technology, either fixed or mobile, and its associated media cart. A grouping of individual student desks and chairs shall be provided. These desks may be used for instructional areas in the Learning Hub or when additional desks are needed within the Learning Studios. In addition to the student desks, project tables and material and project storage (shelves/bins) shall be provided. Project tables are larger and have more surface area to spread out and work on a project. Project tables and storage may be on casters for easy reconfiguration. Provide space for project display and presentation area.

Student lockers shall be provided for all students. The student lockers may be located in the entrance to the Learning Hub or just outside the Neighborhoods in the main circulation area. Student lockers may be a maximum of two high when attached to the wall. Single height student lockers (42”/1067mm and lower) may be freestanding and configured to create a work island. The circulation path shall be a minimum of 8’-0”/2450mm clear measured from the edge of the open locker doors.

Built-In Items

- Magnetic surface or tack board

Plumbing

- Drinking fountain with bottle filler

Equipment

- Interactive technology, refer to "Technology System Design Guidelines – DoDEA Special Systems" for additional information.

FACILITY ELEMENTS & REQUIREMENTS – NEIGHBORHOOD

LEARNING STUDIO

Area Description	sf	sm	Notes
Learning Studio	850	79.0	

Adjacencies

All Learning Studios shall be immediately adjacent to a Learning Hub. To the greatest extent possible, Learning Studios shall be grouped in pairs.

Crossroads Elementary School, MCB Quantico, VA
RJE Knoll / Waller, Todd, Todd & Sadler Architects

Functional Area Description

The Learning Studio is one component of the Neighborhood. This space has traditionally been called a classroom, but within the Neighborhood it will have flexible wall configurations to allow the Learning Studio to expand when necessary and to provide for larger group dynamics. The Learning Studios will provide an environment to support a variety of learning strategies including differentiated instruction, cooperative learning, and project-based interaction.

The Learning Studio will be accessed through the Learning Hub. All Learning Studios shall have a transparent operable partition between the Learning Studio and the Learning Hub. The goal is to provide maximum frontage between the Learning Hub and each Learning Studio to ensure maximum unobstructed access and transparency. A high quality transparent operable partition shall be specified that can be easily operated manually by teachers and ensure student and staff safety. Use of motorized partitions shall require HQ DoDEA approval. Vertical “garage door” style partitions with exposed tracks are not permitted.

The transparent operable partition shall have panels that provide at least 70 percent transparency (measured horizontally) along with solid horizontal top and bottom rails of no more than one foot to ensure full line of sight. The panel shall be clear glass to facilitate supervision and allow for visual monitoring of activities that may extend from the Learning Studio into the Learning Hub. The use of blinds, shades, frosting, etching, tints, applied graphics, decorative stickers, etc. is not allowed and strictly forbidden at any time.

A separate personnel door, not part of the transparent operable partition, shall be provided to access the Learning Studio when the operable partition is closed. When the transparent operable partition is open, this door will not be needed and the area behind it may be designed as a stacking area for the operable partition panels.

Generally, all Learning Studios should be grouped in pairs. Where the Learning Studios are paired, a

solid operable partition shall be provided between them. Solid operable partitions may provide a writable surface or display option. Use of the partition surfaces to display items must not impede the ability to easily open and close the operable partition. A personnel door is not required in the operable partition between the Learning Studios.

The minimum sound transmission class (STC) rating for either type of operable partition (transparent or solid) is STC 40. If a higher STC rating can be provided at minimal cost, provide the highest STC rating that the project budget can support. The STC rating of the surrounding construction shall match the STC rating of the operable partition.

All Learning Studios shall have a minimum of two fixed walls. One fixed wall shall be the instructional wall and the other fixed wall is typically an exterior wall. All Learning Studios shall have exterior windows to maximize natural daylighting and views. Where there are limitations, due to the building configuration or site constraints, an interior Learning Studio is acceptable as long as the opportunity for indirect natural lighting from adjacent spaces is maximized.

Furnishings within the Learning Studio should be flexible and provide for easy reconfiguration. Learning Studios shall be designed to accommodate 24 students. Generally, built-in casework does not offer the flexibility that 21st Century learning environments require, therefore shall not be provided in this space without HQ DoDEA approval. All Learning Studios shall have an instructional area that includes interactive technology, a media cart, a marker board, and an instructional table. The instructional table is intended to be used for instruction and not as a permanent staff workspace or storage location. All furnishings within the Learning Studio shall be student focused and directly support daily instruction.

At this age students are capable of assisting the instructor in the arrangement of the learning space, so appropriate furniture should be selected. Student desks should be easily movable so the students can work in pairs, small groups, or in large group configurations easily. Each Learning Studio shall be furnished with 24 student desks and chairs along with mobile curriculum storage (shelves/bins). Provide additional student desks and chairs in the Learning Hub that may be used in the Learning Studios if class sizes are larger than 24.

Built-In Items

- Marker board
- Tack board

Plumbing (Not Used)

Equipment

- Interactive technology, refer to “Technology System Design Guidelines – DoDEA Special Systems” for additional information.

FACILITY ELEMENTS & REQUIREMENTS - NEIGHBORHOOD

GROUP LEARNING

Area Description	sf	sm	Notes
Group Learning	200	18.6	50sf/4.6sm allowance per Learning Studio

Adjacencies

The Group Learning space shall be located within a Neighborhood and accessed from the Learning Hub.

Functional Area Description

Neighborhoods shall have a minimum of one Group Learning space. All Group Learning spaces shall be 200sf/18.6sm. The size of the Group Learning space is not dependent on the number of Learning Studios in a Neighborhood. The Group Learning space is programmed as an allowance per Learning Studio to give flexibility in determining the number of Neighborhoods during the design process. "Excess" area (in Neighborhoods with 5 or 6 Learning Studios) may be used to create additional instructional space, but the space created must meet the Ed Spec standards. For example, if 23.5 Learning Studios are authorized, the excess area from the Group Learning and One-to-One allowance may be used to help "round up" to 24 Learning Studios. Alternatively, if the total excess area is 100sf/9.3sm or more, an additional One-to-One space is permitted.

The Group Learning space is a shared Neighborhood resource and is not intended to be assigned to a specific function on a permanent basis. Group Learning is intended to be a multi-use space for use on an as-needed basis for pull-out instruction or small group settings for project-based learning.

At minimum the Group Learning space shall have a window or side lite for general supervision and monitoring of the space. While there is no specific transparency requirement, additional glazing may be provided. Professional window treatments, such as blinds or shades, shall be specified for Group Learning.

The Group Learning space shall be designed to accommodate 10 to 12 students. The instructional area shall include interactive technology and a media cart. Furnishings within the Group Learning should be flexible and provide for easy reconfiguration. Built-in casework is not required.

Built-In Items

- Marker board

Plumbing (Not used)

Equipment

- Interactive technology, refer to "Technology System Design Guidelines – DoDEA Special Systems" for additional information.

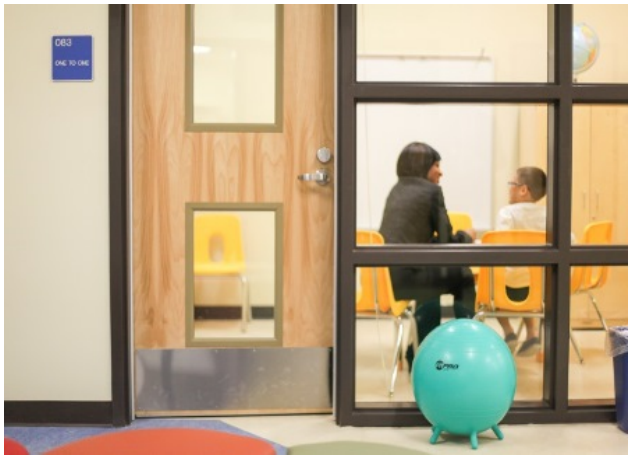
FACILITY ELEMENTS & REQUIREMENTS – NEIGHBORHOOD

ONE-TO-ONE

Area Description	sf	sm	Notes
One-To-One	100	9.3	25sf/2.3sm allowance per Learning Studio

Adjacencies

The One-to-One space shall be located within a Neighborhood and accessed from the Learning Hub.



Hampton Primary School, Ft Bragg, NC
SchenkelShultz Architecture

Functional Area Description

Neighborhoods shall have a minimum of one One-to-One space. All One-to-One spaces shall be 100sf/9.3sm. The size of the One-to-One space is not dependent on the number of Learning Studios in a Neighborhood. The One-to-One space is programmed as an allowance per Learning Studio to give flexibility in determining the number of Neighborhoods during the design process. "Excess" area (in Neighborhoods with 5 or 6 Learning Studios) may be used to create additional instructional space, but the space created must meet the Ed Spec standards. For example, if 23.5 Learning Studios are authorized, the excess area from the One-to-One and Group Learning allowance may be used to help "round up" to 24 Learning Studios. Alternatively, if the total excess area is 100sf/9.3sm or more, an additional One-to-One space is permitted.

The One-to-One space is a shared Neighborhood resource and is not intended to be assigned to a specific function on a permanent basis. The use of this space is intended to be multi-use, scheduled, on an as-needed basis for pull-out instruction, or to provide space for students to work in a private setting for One-to-One learning interacting with an instructor. This space may also be used as teacher conference space if conference space is not available in the Staff Collaboration, or if a private conversation is required.

At minimum the One-to-One space shall have a window or side lite for general supervision and monitoring of the space. While there is no specific transparency requirement, additional glazing may be provided. Professional window treatments, such as blinds or shades, shall be specified for the One-to-One space.

The One-to-One space shall be designed to accommodate 1 to 4 students. Furnishings shall be compatible with other Neighborhood furnishings for interchangeability. Built-in casework is not required.

Built-In Items

- Marker board

Plumbing (Not used)

Equipment

- Interactive technology, refer to "Technology System Design Guidelines – DoDEA Special Systems" for additional information.

FACILITY ELEMENTS & REQUIREMENTS – NEIGHBORHOOD

LEARNING IMPAIRED – MODERATE/SEVERE (LIMS)

Area Description	sf	sm	Notes
Instruction Area	1150	106.8	Includes HC Accessible Restroom and Changing
Kitchen Area	275	25.5	

The Program for Design (PFD) includes Staff Collaboration allocations; refer to Section 3.3.1 for associated requirements.

Adjacencies

Learning Impaired Moderate/Severe (LIMS) shall be included within a Neighborhood. This space shall be positioned so that it can be accessed from both inside and outside the Neighborhood. LIMS students shall have convenient access to mainstream education and be located as close to peers of the same age as possible considering the constraints of the school facility. This space does not need to be located on the ground floor and may be located on the second floor as appropriate.

Functional Area Description

Learning Impaired Moderate/Severe (LIMS) is the instructional space for students who require more focused and specialized instruction based upon their Individualized Education Program (IEP). The specifications for this space are the same for the Moderate/Severe and Severe/Profound programs. This room accommodates up to 12 students who may spend up to 100% of the school day in this instructional area. All student use areas in this space shall be ADA compliant.

Instruction Area

This area is a highly flexible area that will be arranged by the instructor based on the needs of the students being served. The instructional area shall include interactive technology, a media cart, a marker board, and an instructional table. The instructional table is intended to be used for instruction and not as a permanent staff workspace or storage location. All furnishings within the LIMS learning studio shall be student focused and directly support daily instruction. The activities within the LIMS learning studio are dependent on the age of the students being served and should be similar to adjacent Learning Studios. LIMS students also have access to activity centers in the Learning Hub and can benefit from interaction with peers of the same age. All activity tables or student desks provided shall be adjustable height. Ample space shall be provided for adequate maneuvering clearances for students to function as independently as possible. Each LIMS learning studio shall have 10-12 student chairs. Chair height shall be determined by the age of students served. Refer to the Learning Studio section for additional information.

Open floor space shall be provided for specialty items such as swinging equipment. Ceiling hooks shall not be provided as any swinging equipment shall be freestanding. Specialized furniture or assistive equipment will be provided by DoDEA (not as a part of a MILCON project) based on the student's IEP.

The LIMS learning studio shall have a computer area with three accessible stations with ample room for over-the-shoulder adult assistance. There shall be a common printer location in this area.

Where required, open floor space shall be provided for a sensory area. This area will be used for students to interact with the environment as a way of receiving sensory input. Curriculum items, such as

sensory pods, can be used to populate this space. This space shall not be constructed as a separate room.

Kitchen Area

The Kitchen Area shall include a sink, range with hood, microwave, refrigerator, dishwasher, washer and dryer. These appliances are intended for student use for learning home living skills. The range shall have controls on the front of the unit so that students do not have to reach across the heating elements to use the controls. There must be visual access to the students at all times when this space is in use. The kitchen shall be designed so that access may be restricted when not in use. Provide a half-door or gate to secure this area. Full visibility into this area from the Instructional Area is desirable. Provide an open counter area between the Kitchen and the Instructional Area where students can gather to watch a demonstration or work on a project.

Restrooms

Provide a LIMS Handicap Accessible Restroom & Changing Area within the LIMS learning studio. Refer to the Restroom section for associated requirements.

Built-In Items

- Instruction Area – Marker board
- Instruction Area – Tack board or tack strip
- Kitchen – Wall and base cabinets with HC accessible counters

Plumbing

- Instruction Area – Drinking fountain, HC height
- Instruction Area – Hand wash sink, HC height
- Kitchen – Double bowl sink
- Kitchen – Dishwasher connection
- Kitchen – Washer/Dryer connection
- Kitchen – Icemaker connection

Equipment

- Instruction Area – Interactive technology, refer to "Technology System Design Guidelines – DoDEA Special Systems" for additional information.
- Kitchen – Range with hood (Residential)
- Kitchen – Dishwasher
- Kitchen – Refrigerator with icemaker
- Kitchen – Washer and Dryer (Heavy Duty Residential)
- Kitchen – Microwave

FACILITY ELEMENTS & REQUIREMENTS - NEIGHBORHOOD

LEARNING IMPAIRED – MILD/MODERATE (LIMM)

Area Description	sf	sm	Notes
Learning Impaired – Mild/Moderate (LIMM)	400	37.2	Also Emotionally Impaired (EI)

Adjacencies

The Learning Impaired – Mild/Moderate (LIMM) space is a school resource that is provided based on the LIMM/EI population at the school. The LIMM spaces should be distributed throughout the building. Where multiple special education spaces (LIMM, LIMS, PSCD, OT/PT) are provided, they should not be grouped together in one area. LIMM spaces should be adjacent to Neighborhoods, but not incorporated into them unless there are enough LIMM spaces to give all Neighborhoods access.

Functional Area Description

The LIMM program serves students with mild to moderate learning or emotional difficulties. Typically, 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 (up to 100% of the school day) for special instruction as determined by their Individual Education Plan (IEP).

The LIMM Room shall be designed to accommodate up to 12 students. The instructional area shall include interactive technology, a media cart, a marker board, and an instructional table. Built-in casework is not required in this space. Furnishings shall include activity tables, student chairs, and mobile storage. Specialized furniture or assistive equipment will be provided by DoDEA (not as a part of a MILCON project) based on the student's IEP.

Built-In Items

- Marker board
- Tack board

Plumbing (Not Used)

Equipment

- Interactive Technology – Refer to "Technology System Design Guidelines – DoDEA Special Systems" for additional information.

FACILITY ELEMENTS & REQUIREMENTS – NEIGHBORHOOD

READING LAB

Area Description	sf	sm	Notes
Reading Lab	400	37.2	

Adjacencies

The Reading Lab is a school resource and shall be accessible from the main circulation. It shall be centrally located near the Neighborhoods or the Information Center.

Functional Area Description

One Reading Lab will be provided in each school to support the reading intervention programs for students who need extra help in reading. This space shall be designed for up to 18 students. There shall be three distinct areas: group instruction, computer stations for reading/listening activities, and comfortable seating for individual reading. Each of these three areas shall be designed to accommodate 6 students.

An instructional area shall be provided to include interactive technology and associated media cart. Built-in casework is not required in this space. Provide mobile shelving and/or cart for reading and instructional material.

Built-In Items

- Marker board
- Tack board

Plumbing (Not Used)

Equipment

- Interactive technology, refer to "Technology System Design Guidelines – DoDEA Special Systems" for additional information.

FACILITY ELEMENTS & REQUIREMENTS – NEIGHBORHOOD

ACADEMIC SUPPORT

Area Description	sf	sm	Notes
Academic Support	400	37.2	

Adjacencies

The Academic Support is a shared school resource and should be distributed throughout the instructional areas. Where multiple 400sf/37.2sm instructional spaces (LIMM, Reading Lab, Academic Support) are provided, they may be paired with a movable partition for additional flexibility.

Functional Area Description

The Academic Support space will serve programs such as math lab, gifted, and Advancement Via Individual Determination (AVID). This space shall be designed to accommodate up to 12 students. The instructional area shall include interactive technology, a media cart, a marker board, and an instructional table. Built in casework is not required in this space.

Built-In Items

- Tack board
- Marker board

Plumbing (Not Used)

Equipment

- Interactive technology, refer to "Technology System Design Guidelines – DoDEA Special Systems" for additional information.

FACILITY ELEMENTS & REQUIREMENTS – SHARED SPACES

STAFF COLLABORATION

Area Description	sf	sm	Notes
Staff Collaboration – Workspace and Personal Storage	100	9.3	
Staff Collaboration – Kitchenette Allowance	10	0.9	
Staff Collaboration – Collaboration Area Allowance	30	2.8	
Staff Collaboration – Shared Storage Allowance	35	3.2	

Adjacencies

Each Neighborhood is required to have a Staff Collaboration space. Additional Staff Collaboration spaces shall be provided in the Information Center and when specialty instructional areas (such as Art and Music) are grouped together.

Functional Area Description

The Staff Collaboration space provides a workstation and personal storage for each teacher, a small kitchenette, a conference area for collaboration, and shared curricular storage space. The Staff Collaboration space shall provide a dedicated area for on-going job related skills development for required competencies that are correlated to student achievement.

All staff, including grade level teachers and special programs such as Gifted, Reading, ESL, etc., shall have workspace within a Staff Collaboration space. The district/administration will have the flexibility to assign staff to the Staff Collaboration spaces each year based on grade level distribution and other needs of the school. There will generally be one or two more staff positions in the Staff Collaboration than Learning Studios in each Neighborhood (typically 5-7 staff).

The Staff Collaboration allocations for LIMS, CTE, Science, Art, Music, PE, and Information Center staff are calculated in their respective instructional areas in the PFD. These staff shall be included in the nearest Staff Collaboration and consideration shall be given to deliberate and intentional pairing for collaboration purposes. For instance, if Art and Music are located near each other, the teachers may be grouped into a Fine Arts Staff Collaboration area. Or, if the Art Room is near a Neighborhood, the Art teacher may be grouped with the Neighborhood Staff Collaboration.

PE staff must be able to view the gymnasium from their workspace, so typically they cannot be combined with other staff in a Staff Collaboration space. The PE Staff Collaboration space shall be located near the entry to the Gymnasium or the Locker Rooms. Where there are multiple PE teachers, they shall be grouped together in one Staff Collaboration space.

JROTC Instructors must be able to monitor access to the JROTC Instruction Area/Indoor Firing Range from their Staff Collaboration space. Where only JROTC Instructors are located within the Staff Collaboration area, access may be provided from the JROTC Instructional Space. If staff from other curriculum areas (such as Health) are also located in the Staff Collaboration space, the access should be through shared spaces such as the main building circulation to avoid interruption of instruction.

The Information Center Staff Collaboration space includes the Information Specialist, Educational

Technologist, Staff Development Coach, and Itinerant positions. The Itinerant workstation is listed with the Information Center because of its central location. This work station may be located in other Neighborhood Staff Collaboration spaces if requested during the design process. Specialist Staff (i.e. Music, Art) may be co-located with the Information Center Staff Collaboration space, but access to the shared space shall be provided from the general building circulation (corridors) in addition to the Information Center. The Information Center Staff Collaboration space shall be located directly behind the circulation desk.

The general organization of the Staff Collaboration space is typically the Collaboration Area near the entrance and the Workspace & Personal Storage toward the back of the space, to provide more privacy for individual work areas. There is no requirement for visibility between the Staff Collaboration space and the Learning Hub, but glazing is often provided for additional visual supervision of the Neighborhood spaces and to allow additional "borrowed light" in the Staff Collaboration space. Where glazing is provided, professional-looking blinds or shades shall be provided in order to close off visibility when necessary. Curtains or "make-shift" window coverings are not permitted.

The Staff Collaboration space will be technology intensive, allowing staff to readily access information and data so the security of this staff space must also be considered. Access control hardware shall be provided so that the space can remain secure and staff may easily swipe to gain access.

Workspace & Personal Storage

All instructional staff will be provided a dedicated work space within a Staff Collaboration space; no private offices are permitted. No personal workspace will be provided in Neighborhood instructional areas (Learning Studio, Group Learning, and/or One-to-One rooms).

Personal storage shall be incorporated into each workstation within the Staff Collaboration space. This storage shall be lockable and secure for personal items. Full height coat cabinets shall be provided for outerwear storage. Lockable workstation drawers and file cabinets provide general work storage for each staff member.

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.

Kitchenette

A Kitchenette shall be provided in each Staff Collaboration space. A Kitchenette Allowance is provided and is calculated per staff position. For example, if there are 6 staff, then there would be 60sf allocated for the Kitchenette. A compact (4'-6' width) kitchenette shall be provided within the Staff Collaboration space. This space shall have base and wall cabinets, a sink, counter space with power for a microwave and coffee pot, and a small full-size refrigerator.

Collaboration Area

In addition to the individual workspaces, the Staff Collaboration space shall have an open collaboration area. A Collaboration Allowance is provided and is calculated per staff position. This area shall be set up as a conference area and shall have interactive technology and an associated media cart.

Shared Storage Allowance

Shared Neighborhood Storage is for instructional material to support the educational curriculum. A Shared Storage Allowance is provided and is calculated per staff position. This storage is intended for bulk or seasonal items that are not needed on a daily basis. Instructional storage will be provided in the Learning Studios, but will be focused on items needed for daily instruction in order to maximize space available for student instruction.

The Shared Storage area shall be positioned within or near the Staff Collaboration area. The Shared Storage area shall be accessible from the Staff Collaboration area or the Learning Hub, not individual Learning Studios. High density storage systems, along with conventional storage, shall be used to maximize the storage capacity

A portion of the Shared Storage shall be suitable for storage of materials in support of STEM instruction (cotton swabs, paper plates, string, pipe cleaners, measuring tapes, etc.) and larger items such as a grow lights or other equipment.

Built-In Items

- Kitchenette – Base and wall cabinets with countertop (4-6 linear feet)
- Shared Storage - High density storage system (built-in optional, may be provided as furniture)

Plumbing

- Kitchenette - Sink
- Kitchenette - Icemaker connection

Equipment

- Collaboration Area - Interactive technology, refer to “Technology System Design Guidelines – DoDEA Special Systems” for additional information.
- Kitchenette - Small full-size refrigerator with icemaker – (15-20 cu. ft. capacity)
- Kitchenette - Microwave
- Kitchenette - Coffee maker

FACILITY ELEMENTS & REQUIREMENTS - SHARED SPACES

COMMONS

Area Description	sf	sm	Notes
Commons	varies	varies	2,800 + (35% enrollment * 7)

Adjacencies

The Commons shall be centrally located within the school.

Fort Campbell High School, Ft Campbell, KY
Jacobs

Functional Area Description

The Commons is the central shared space at the heart of the school. This space provides a dynamic, flexible space that is easily reconfigurable for dining or informal gatherings. The energy dashboard shall be located in the Commons near the main entry to the school. Refer to the Facility as a Teaching Tool section for additional information.

As many school functions as possible should engage, or "front," the Commons. The Commons may be designed as a central space for dining and gathering with the other functions of the building radiating from this center. A more linear arrangement, sometimes called a "learning street," provides opportunities for education along a widened spine of the building. Where possible, use clerestories or monitors, to bring natural light into this central part of the building.

Dining

The Commons should be designed to accommodate an efficient configuration for dining. When arranged as a Dining Area, this space should accommodate a minimum of 1/3 of the total student population. The Food Service area should be located with convenient access to this area for serving. Where the climate is suitable, outdoor dining opportunities should be provided. Provide water fountains with bottle fillers in the Commons.

Public Space

The Commons is the main public space at the heart of the school. Additional activities that may occur in this space are presentations, display of student work, group or individual study, and informal gatherings or performance. The Commons should be designed to allow for multiple seating arrangements so an audience can view informal or ad-hoc presentations. This space shall have portable technology and audio enhancement capabilities that can be quickly deployed. Acoustics and lighting should also be a design consideration so all activities scheduled to occur in this space can be properly accommodated.

Commons Storage

A storage space should be provided for chairs, tables, portable stage or risers, and audio/visual equipment that will be used in the Commons. Size the Commons Storage based on anticipated space

needed to provide flexible configuration of the Commons space. The storage area should be just large enough for storage of items specifically used in the Commons. The recommended size for this area is between 200-600sf/18.6-55.7sm and the area will be deducted from the overall area of the Commons to encourage efficient design of this space.

Built-In items (Not Used)

Plumbing

- Water fountains with bottle fillers

Equipment (Not Used)

FACILITY ELEMENTS & REQUIREMENTS – SHARED SPACES

TATAMI ROOM

Area Description	sf	sm	Notes
Tatami Room	300	27.9	Kitchenette is a separate space within the 300sf

Adjacencies

The Tatami Room should be easily accessible to the entire school from the main circulation, Commons, or Multipurpose Room.

Functional Area Description

The Tatami Room is provided in schools constructed in Japan for students to learn specialized cultural activities of the Host Nation. The proportion of the Tatami Room is based on the dimensions and layout of the tatami mats used for the flooring. The aspect ratio is roughly 2:1. The size of the room is usually measured in "mats." A common size that would be appropriate for the school is 8 mats (approx. 150sf/13.9sm). The Tatami Room shall be raised one to two steps higher than the surrounding rooms. Shoes are not worn on the tatami mats. Sliding shoji screens shall be used at the entrance to the Tatami Room and at the opening connecting to the Kitchenette. Activity tables may be located in the Commons space just outside the Tatami Room for general class instruction prior to entering the Tatami Room.

M.C. Perry High School, MCAS Iwakuni, Japan

<u>Kitchenette</u>

The Kitchenette shall be a small galley style kitchen containing a sink and refrigerator. A range is not provided. Counter space shall be provided for a microwave. The Kitchenette shall be accessible to the Tatami Room and the main building circulation for general use. The Kitchenette is a separate room from the Tatami Room and shall be at typical finished floor level. Only the Tatami Room is raised.

Built-In Items

- Tatami Room – Tatami mats, Alcove (tokonoma) /shelf (chigaidana), ceiling (wooden)
- Tatami Room optional features - sliding doors (fusuma), translucent sliding doors (shoji), transom (ranma), built-in desk (tsukeshoin)
- Kitchenette – Base cabinets, counter, and wall cabinets

Plumbing

- Kitchenette - Sink
- Kitchenette - Icemaker connection

Equipment

- Kitchenette - Small full-size refrigerator with icemaker – (15-20 cu. ft. capacity)
- Kitchenette - Microwave

FACILITY ELEMENTS & REQUIREMENTS – SHARED SPACES

RECYCLING CENTER

Area Description	sf	sm	Notes
Recycling Center	150	13.9	

Adjacencies

The Recycling Center should be easily accessible from the Multipurpose Room and have a clear path to the exterior service area for easy removal of recyclables.

Functional Area Description

Provide a space for a Recycling Center for users of the facility to implement environmentally responsible practices.

The Recycling Center shall house recycling containers clearly marked for recycled items and have appropriate bulletin board/tack boards and signage describing environmentally responsible practices, programs and policies. The Recycling Center shall be attractive and fit in with the surrounding area. The Recycling Center shall be outfitted with FF&E rather than built in recycling containers.

Many schools have implemented a recycling program. Additional alcoves or sorting/storage areas shall be provided as needed to accommodate each school's needs. Additional space required for these functions will generally be in circulation areas and shall be calculated as part of the net-to-gross allowance.

Built-In Items

- Tack board (optional)

Plumbing (Not Used)

Equipment (Not Used)

FACILITY ELEMENTS & REQUIREMENTS – SHARED SPACES

PERFORMANCE

	0- 250		251-500		501-750		>750	
Area Description	**sf**	**sm**	**sf**	**sm**	**sf**	**sm**	**sf**	**sm**
Performance	1,200 + (35% enrollment *7)							
Stage	800	74.3	950	88.3	1150	106.8	1350	125.4
Stage Storage	200	18.6	200	18.6	200*	18.6*	200*	18.6*
Dressing Rooms	0	0	2@200	2@18.6	2@200	2@18.6	2@200	2@18.6
Control Room	100	9.3	100	9.3	100	9.3	100	9.3

* If additional space is needed for Stage Storage it must come from the overall Performance allocation

Adjacencies

The Performance space shall be designed and located to facilitate after-hours use by the community. Adjacency to the Music Suite may be provided as a "green room" for performances.

Functional Area Description

The purpose of the Performance space is to provide a dedicated location for performances and specialized lectures. There are three options, ranging from a fully reconfigurable Black-Box Theater, to a Hybrid Performance Space with fixed stage and movable seating, to a Seminar Auditorium with fixed seats and stage. Discuss the programs that are likely to occur in this space and evaluate the level of flexibility that will work best for the school.

The Performance space shall be designed to seat at least one third of the student population. This space shall be able to be secured when sets and props are up on the stage for rehearsals prior to a performance. This space is not intended for use as a permanent rehearsal area. The music program may utilize its purpose built space for rehearsal. A preparation space/green room may be included using a portion of the programmed Performance area, or the space may be located adjacent to the Music Suite and configured for use as a green room.

While not required, a movable partition may be provided between the Commons and Performance space to allow for expansion of this space. Where movable walls are proposed, acoustics must be carefully considered. A Performance space open to the Commons (without a movable partition) may only be considered with HQ DoDEA approval.

Black Box Theater- Jackson Heights Middle School, Oviedo, FL SchenkelShultz Architecture

Black-Box Theater:

A Black-Box Theater is designed for maximum flexibility. Seating for the audience should be moveable and easily stored, providing a wide variety of possible configurations. The stage or central platform must also be moveable to allow

for reconfiguration per the intended use of the space, whether performance, seminar, or theater-in-the-round. The design should also accommodate removal of all furniture to provide an open social gathering space. Seating possibilities can also include creative features such as wide, retractable risers designed for sitting or tiered chair arrangements. Storage shall be provided for all movable items.

Hybrid Performance Space:

The Hybrid option is designed with a fixed stage/platform and movable seating. This allows some of the flexibility inherent in the black-box theater, but with the characteristic shape and spatial arrangement of the more traditional seminar auditorium. While the stage is fixed, the moveable furniture allows for multiple configurations and presentation spaces within the one space, whether performance or seminar. The seating should be easily storable to provide this wide variety of possible configurations including the removal of all seating so the area may be used as an open social gathering space.

Hybrid Performance Space, High Tech Middle School, San Diego, CA
Carrier Johnson

Seminar Auditorium:

The Seminar Auditorium option includes a fixed stage and fixed seating. The floor is often sloped or tiered to provide better sight lines. This option offers the least flexibility, but may be an appropriate solution for some locations. The acoustics and lighting must be performance quality and not merely sufficient for lectures.

The areas listed in the planning requirements are based on a traditional auditorium type space with a full stage, curtain, lights and sound. Other more flexible seating/stage options are encouraged. For any Performance space configuration the spaces and areas may be adjusted as long as the total net area listed for all spaces in the Performance grouping is not exceeded.

Seminar Auditorium, Great Neck Middle School, Virginia Beach, VA
Waller, Todd & Sadler Architects

Stage/Raised Platform

There are specific code requirements for a Stage that are governed by the size of the area. In some cases it may be possible to provide a Raised Platform, rather than a Stage, in order to simplify building system requirements. The designer shall properly label this area and follow all appropriate code requirements. Where a fixed Stage is provided it is generally elevated 12”-30”/305-750mm above the main assembly area for better sight lines. The Stage shall be fully accessible from the main assembly

area so that persons needing assistance do not have to enter from backstage. A ramp is preferred over a lift.

Stage Storage

Locate the Stage Storage at the same elevation as the Stage to facilitate movement of props and equipment. Oversized double doors, 8-ft high, are often provided to facilitate storage of stage props.

Dressing Rooms

Provide separate dressing areas for males and females. Dressing rooms shall not include plumbing fixtures. Space may be combined for props/costumes, hair, and makeup. Provide adequate power to support lighting and multiple hair appliances. Make-up is often done "in the round" using a stool and mobile make-up cart. Storage shall be provided for costumes and props.

Control Room

A Control Room shall be provided for lighting and sound consoles. This room should provide secure storage for equipment. In a Black-Box Theater configuration a more flexible option may be provided, but there must be provision for the secure storage of sound and lighting equipment.

Specialized Features

The Performance space must be equipped with sufficient performance lighting and acoustical systems. The technology for this space should be seamless and easy to adjust and deploy. Refer to "Technology System Design Guidelines – DoDEA Special Systems" for additional information.

Built-In items (Not Used)

Plumbing (Not Used)

Equipment

- A/V Systems, Video Projection, Lighting Control, Rigging and Drapery, Sound Systems, and other Interactive technology, refer to "Technology System Design Guidelines – DoDEA Special Systems" for additional information.

FACILITY ELEMENTS & REQUIREMENTS – SHARED SPACES

INFORMATION CENTER

	0-500		501-1000		>1000	
Area Description	**sf**	**sm**	**sf**	**sm**	**sf**	**sm**
Stack Area	900	83.6	1000	92.9	1100	102.2
Instructional Area	500	46.5	500	46.5	500	46.5
Circulation Desk	125	11.6	125	11.6	125	11.6
Subtotal – Info Center	**1525**	**141.7**	**1625**	**151.0**	**1725**	**160.3**
Circulation Markup (15%)	229	21.3	244	22.7	259	24.0
Total – Info Center	**1754**	**163.0**	**1869**	**173.7**	**1984**	**184.3**
Workroom/Storage	300	27.9	300	27.9	300	27.9
Flexible Learning	1200	111.5	1200	111.5	1200	111.5

The Program for Design (PFD) includes Staff Collaboration allocations, refer to Section 3.3.1 for associated requirements.

	0-500		501-1000		>1000	
Shelving Requirement	**ft**	**m**	**ft**	**m**	**ft**	**m**
Shelves - Min Linear ft/m	890	271.3	970	295.7	1050	320.0
Average Collection Size	11,570 books		12,610 books		13,650 books	

Adjacencies

The Information Center shall be centrally located and accessible to the entire school. The Information Center may be located on any level of the school. The Information Center shall not be open to the food service area due to unacceptable levels of distraction this presents students.

Crossroads Elementary School, MCB Quantico, VA
Waller, Todd, Todd & Sadler Architects / RRMM Architects

Functional Area Description

The Information Center is a technology and print-intensive environment that provides every student with physical and intellectual access to the resources and tools required for learning in a welcoming and stimulating environment. Information literacy, reading enrichment, and research skills will be a part of the student's educational experience, incorporated into everyday learning and integrated into the subject matter. The Information Specialist provides services not only within the Information Center, but also throughout the Neighborhoods and may even offer digital services via blended learning environments.

Maxwell Elementary / Middle School, Maxwell AFB, AL
Zyscovich Architects

The Information Center contains the Stack Area, Instructional Area, and Circulation Desk. The Workroom/Storage, Staff Collaboration, and Flexible Learning space shall be accessible from the Information Center. Rectangular or square spaces are more efficient for the arrangement of shelving and also allow for better visual monitoring of the entire space. The Information Center shall have doors or a movable partition to allow the space to be secured. Visibility into the Information Center is desirable, but floor to ceiling glazing does not allow for the placement of shelving along the wall. Where glazing is desired, provide low walls designed to accommodate shelving along the wall with glazing above. The Information Center shall include collaborative and individual work spaces, stacks, and flexible furnishings. Computer stations within the Information Center shall be located along the perimeter so that wall outlets may be utilized.

Stack Area

The Stack Area in a High School is usually organized in two sections, fiction and non-fiction. The Information Specialist will typically separate these areas for better circulation within the stacks. Fiction books are arranged alphabetically by author. Non-fiction books are arranged by subject using a numbering system such as the Dewey Decimal system.

Stand-alone shelving units within the Information Center shall be a maximum of 42”/1067mm high. Perimeter shelving, along the wall, shall be a maximum of 60”/1524mm high. The top shelf of a 60”/1524mm high shelving unit shall not be used in the calculation of total linear footage of shelving, since it is often used for display. All shelving units shall have 10”/254mm deep adjustable shelves and may be single-sided or double-sided.

For planning purposes, minimum shelving calculations are based on 42” high shelving units using typical 10-12” shelf height (3-shelves/unit). For High Schools the calculations are based on 13 volumes per linear foot.

Casters are optional on the shelving units, but allow for easy reconfiguration of the shelving. Where casters are used they must be heavy duty with wheel locks. Built-in shelving may be provided at perimeter locations, such as under windows. If built-in shelving is provided it shall not impede future flexibility and reconfiguration of the space.

Instructional Area

The Instructional Area shall be designed to accommodate a full class (24 students). Interactive technology and a media cart shall be provided for whole class instruction.

Circulation Desk

The Circulation Desk serves as reference station, central book drop, and check-out station. The Circulation Desk is generally located near the main entrance with direct access to the Staff Collaboration area. The Circulation Desk shall maintain visibility to all parts of the Information Center. A seated work area for the Information Specialist shall be provided at the Circulation Desk. Where possible, design the Circulation Desk to facilitate a small group work area for 3-4 students at the counter. The Circulation Desk shall be furniture based, rather than built-in, for future flexibility and reconfiguration. A book return bin shall be provided as part of the Circulation Desk.

Workroom/Storage

The Workroom/Storage is used by the Information Specialist and the teaching staff. This area includes shelving for the Professional Library, a work table, and additional storage for book carts, media carts, and lockable storage to secure valuable items. The Professional Library includes e-books, DVDs, multimedia kits, artifacts, and books.

Built-in casework and a sink shall be provided (9-12 lf/2.7-3.7 lm). A minimum of 60 lf/18.3 lm of shelf space shall also be provided for the Professional Library. This shelving may be built-in or furniture based. If built-in shelving is provided it shall be adjacent to the casework along one side of the room, leaving wall space available for additional storage cabinets, carts, and other furniture based storage items. All shelving shall be adjustable. Shelving units shall be a maximum of 72”/1830mm high. Consider locating the Workroom adjacent to the Staff Collaboration space. The Workroom and Staff Collaboration shall not be combined without HQ DoDEA approval.

Staff Collaboration

A Staff Collaboration space shall be provided for the Information Specialist, Educational Technologist, and Itinerant positions. Refer to the Staff Collaboration section for associated requirements.

Flexible Learning

The Flexible Learning space, formerly known as the Computing Center, may be used as a multipurpose computer lab, flex lab, STEM lab, or project-based instruction area regardless of subject matter. This space shall have ample access to technology. Flexible furniture shall be provided to accommodate a minimum of 24 students at individual workstations or collaboratively in small groups. Where computer stations are included, they shall be able to be positioned where the instructor can easily monitor the screens and provide over-the-shoulder instruction. Visibility is desirable between the Flexible Learning space and the

Flexible Learning space - Crossroads Elementary School, MCB Quantico, VA - Waller, Todd & Sadler Architects / RRMM Architects

Information Center to facilitate supervision. A glazed operable partition is preferred, but fixed glazing may be provided where cost is an issue. Built-in casework is not required in this space and the use of furniture based storage solutions is encouraged in order to retain maximum flexibility. Provide data and power connections on all walls. Maximize the use of wall space with tack boards for work display and review.

Built-In items

- Instructional Area, Flexible Learning – Marker board
- Instructional Area, Flexible Learning – Tack board
- Workroom/Storage – Built-in casework

Plumbing

- Information Center – Drinking fountains shall NOT be provided within the Information Center. Where desired, they may be provided in a convenient location outside the Information Center.
- Workroom/Storage – Sink
- Flexible Learning – Sink (optional)

Equipment

- Instructional Area, Flexible Learning – Interactive technology, refer to "Technology System Design Guidelines – DoDEA Special Systems" for additional information.

FACILITY ELEMENTS & REQUIREMENTS – SHARED SPACES

PHYSICAL EDUCATION

Area Description	sf	sm	Notes
Gymnasium	7500	696.8	Provide 2 for enrollment >1000
Spectator Seating	varies	varies	(80%enroll rounded to even 100) x 4sf/0.4sm
Auxiliary Gym	2,500	232.3	For enrollment 700 – 1000
Lockers/Dressing/Showers	varies	varies	(Class lockers + individual lockers) *12
PE Storage	varies	varies	Enrollment; minimum 400sf (37.2sm)
Staff Restroom with Shower	75	7.0	Provide 2 for enrollment > 500
Athletic Locker Rooms	2@400	2@37.2	Enrollment >200 - Each m/f – Add to PE lockers
Athletic Football Lockers	300	27.9	Enrollment >200 – Where HS has football team
Athletic Team Room	500	46.5	Enrollment >200
Athletic Weight Room	850	79.0	Enrollment >200
Athletic Workplace	100	9.3	Enrollment >200
Athletic Storage	varies	varies	Enrollment >200 - Enrollment x 0.6; min 250
Athletic Laundry	100	9.3	Enrollment >200
Athletic Training Room	200	18.6	Enrollment >200

The Program for Design (PFD) includes Staff Collaboration allocations; refer to Section 3.3.1 for associate requirements.

Locker Room Space Allocation (each locker room) = (Class lockers + Individual lockers) x 12sf/1.1sm				
Enrollment	Class Lockers (m/f)	Individual lockers (m/f)	Toilets (Min.)	Showers (Min.)
0-299	18 (216sf/20.1sm)	50% enrollment/5	1 (45sf/4.2sm)	2 (100sf/9.3sm)
300-699	36 (432sf/40.1sm)	50% enrollment/5	2 (90sf/8.4sm)	4 (200sf/18.6sm)
700+	54 (648sf/60.2sm)	50% enrollment/5	3 (135sf/12.5sm)	6 (300sf/27.9sm)

Calculations are based on full height class lockers and 5-stack individual lockers. Other locker configurations may be provided.

Adjacencies

The Gymnasium may be used for after-school events, so it should be able to function discretely from the remainder of the school building. The Gymnasium is a noisy activity space. Sound isolation may be accomplished with a combination of room placement and increased STC ratings. If the Gymnasium is designed to open to an adjacent space such as the Commons for increased flexibility, the Gymnasium must have the capability to be completely closed off to limit noise intrusion when the spaces are used separately. Public restrooms are required near the Gymnasium and shall be accessible for after school events.

Gymnasium and Athletic Seating: St. Joseph School, FGM Architects, St. Joseph, IL

Functional Area Description

The focus of physical education has evolved to include all aspects of the healthy lifestyle of individuals.

Physical education is therefore directed toward fitness and wellness through activity and theory-based instruction for nutrition and healthy lifestyle choices. The Gymnasium should accommodate the evolving curriculum of physical education.

Gymnasium

The Gymnasium provides a dedicated space for physical education. Provide a clear height of 24ft/7.32m. Windows, light fixtures, and mechanical equipment must withstand the impact abuse of sports balls. A divider curtain is desirable to allow two activities to occur simultaneously.

The Gymnasium at the high school level should accommodate a 50ft x 84ft/15.2m x 25.6m basketball court and a regulation volleyball court. Provide a minimum of 10ft/3.1m out-of-bounds at the ends of the court and 6ft/1.8m at the sides. Six basketball goals shall be provided. There is no requirement for the height of these goals to be adjustable. Depending on the arrangement of Spectator Seating, retractable goals may be required on the cross courts.

Spectator Seating

Spectator Seating for the high school shall be based upon school enrollment. The area allocation and minimum number of seats to be provided is indicated on the PFD for each specific project. When the court is used for competition, the bleachers may not encroach on the safety area of the court when extended.

Auxiliary Gym

Where provided, this space may be used for dance, exercise, gymnastics, table tennis, wrestling, and other activities. The Auxiliary Gym shall accommodate a 38x38ft/11.6x11.6m wrestling mat. The clear height shall be a minimum of 16ft/4.9m high; 24ft/7.3m high if possible to match the Gymnasium.

Physical Education Storage

The PE Storage provides a space to secure and store PE equipment when it is not in use. The room shall include a pair of 3ft/900mm wide doors with removable astragal, with direct access to the Gymnasium. Where possible, include doors to the exterior for storage of equipment used on the fields.

PE Staff Restroom

A single unisex PE Staff Restroom, shower, and changing area shall be provided in schools with an enrollment of 500 or less. In schools with enrollment greater than 500, two PE Staff Restrooms shall be provided. The PE Staff Restroom(s) shall be easily accessible to all school staff members from either the main circulation or the Gymnasium. Refer to the Restroom section for associated requirements.

Locker Rooms

Locker Rooms provide space for students to change clothing and store personal belongings while engaging in physical education or athletic events. Provide separate facilities for male and female students. Access to the Locker Rooms directly from the Gymnasium is preferred. Supervision of the locker area is a high priority. The staff collaboration space shall be located close to the entrance to the Locker Rooms. This space will not have direct view into the Locker Rooms for privacy reasons, but should be positioned for easy access for the staff. The Locker Rooms should also provide easy access to the

exterior play fields. Consider privacy and sight lines as well as easy supervision in the layout of the entire space.

PE lockers serve two purposes, to store personal belongings during class (class lockers) and to store uniform/shoes between classes (individual lockers). In most cases it is more efficient to provide larger lockers (full or half-height) for the class lockers and smaller lockers (4, 5, or 6-stack) for individual lockers. The minimum number of toilets and showers required is based on the typical number of students using the Locker Room, rather than the total number of lockers provided.

The following spaces shall be provided in high schools with competitive athletic programs.

Athletic Locker Rooms

Where Athletic Locker Rooms are provided, they will share restroom and shower facilities with the PE Locker Room. Provide 48 – 15” x 15”/38cm x 38cm athletic lockers for boys and for girls. Athletic lockers should be grouped together and not intermixed with the PE lockers. The Athletic Locker Rooms shall have the capability of being secured when not in use.

Athletic Football Locker Room

Where the school has a football team, a separate Football Locker Room shall be provided in the boy’s Locker Room area. This space will also share restroom and shower facilities with the PE Locker Room. Provide 30 – 24” x 18”/61cm x 46cm football lockers.

Athletic Team Room

Where the school has competitive team sports, a separate Team Room shall be provided. The Team Room shall be located so that it may be used by both male and female team sports, depending upon the seasonal sports program. There shall be no direct access from the Locker Rooms to the Team Room. In order to maximize flexibility, the Team Room may be located next to the Weight Room with a movable partition to provide additional fitness space when the Team Room is not in use.

Athletic Weight Room

The Weight Room contains weight lifting apparatus and fitness equipment. Weight training consists of iron weights, barbells, dumbbells, flat benches, incline benches, squat machines, and other equipment. Fitness area consists of treadmills, stationary bikes, step machines, floor mats for stretching, calisthenics and aerobics, and other equipment. Free weights and heavy lifting shall be in a separate zone from the cardio and fitness area for safety. Provide adequate maneuvering clearance around equipment for safety.

Athletic Workspace

This space provides workspace for the athletic program. It may be used by the Athletic Director or coaches. It may be combined with the PE teacher staff collaboration for additional flexibility, or kept as a separate space specifically for the athletic program. Coaches may or may not be DoDEA employees, so this should be a consideration if there is a desire to combine this space with the staff collaboration.

Athletic Storage
The Athletic Storage area provides storage for equipment used by the athletic programs. The room may be divided with wire mesh partitions for separate sports storage areas and may include doors to the exterior for storage of equipment used on the fields. This storage should be easily accessible to the athletic coaches.

Athletic Laundry
Provide a small Laundry facility for the cleaning of towels and uniforms. This area should be separate from the Locker Room area.

Athletic Training Room
The Training Room contains injury treatment facilities. This space houses the trainer's area, treatment table, ice machine and other related items.

Specialized Features (include as required)
- Main court basketball lines
- Main court volleyball lines
- Side court basketball lines
- Side court volleyball lines
- Side court badminton

Schools with Athletic Program
- Scoreboard (2 each min)
- Basketball shot clocks
- Fitness equipment
- Weight equipment
- Interlocking rubber tiles, under weight equipment

Built-In Items
- Gymnasium or PE Storage – Lockable cabinet for independent sound system
- Lockers – Lockers, benches (may be built-in or furniture)
- Locker Room, Weight Room – Mirrors

Plumbing
- Gymnasium – Drinking fountain with bottle filler in recessed alcove
- PE Locker, Athletic Locker & Football Locker Room – Sink, toilet, shower
- PE Staff Restroom – sink, toilet, shower
- Athletic Training Room – Icemaker connection

Equipment
- Gymnasium – Basketball goals (6)
- Gymnasium –
- Wall padding – 6ft/1.8m high
- Gymnasium – Volleyball standards

- Gymnasium – Divider curtain
- Gymnasium – Chinning bars, climbing wall, other wall mounted equipment (optional)
- Athletic Training Room – Icemaker

FACILITY ELEMENTS & REQUIREMENTS - SHARED SPACES

ART

Area Description	sf	sm	Notes
Art	1200	111.5	
Kiln	100	9.3	
Art Storage	200	18.6	

The Program for Design (PFD) includes Staff Collaboration allocations, refer to Section 3.3.1 for associated requirements.

Adjacencies

Locate the Art Room adjacent to other instructional spaces. The Art Room may be located in a Neighborhood, or grouped with other instructional spaces, such as Music, to allow for collaboration. Position the Art Room so that primary access is from the main building circulation with direct access to an outdoor learning area. A northern exposure for daylighting is preferred. The art teacher workspace shall be part of a Staff Collaboration area.

Barkley Elementary School, Ft Campbell, KY
Woolpert, Inc.

Functional Area Description

The art program provides a standards based curriculum that encourages students to create works of art in two and three-dimensional modes to develop their capacity for innovation, enrichment and creativity and where applicable, to integrate with other content areas. Students explore many fundamental techniques with an emphasis on developing and enhancing skills related to group interaction, self-esteem, reflection, decision making and innovative thinking as a means of self-expression through art. Natural daylighting and views are desirable features in the Art Room.

Art Room

The general work area provides space for individual and small or large group activities. Provide student tables to accommodate 24 students. Computer tables shall be provided to accommodate 4 computers. A printer cart shall also be provided. The instructional area shall include an interactive white board, marker board, media cart, and instructional table. Provide areas for display of student artwork, both 2-D and 3-D, within the Art Room and in the main circulation area near the entrance to the Art Room. Provide a door from the general work area to an outdoor learning area.

A clean-up area shall be provided in the Art Room for students and teachers to clean themselves and their equipment. Provide 3-4 sinks located so that they are out of the main circulation path and positioned far enough apart for simultaneous use. At least one sink shall be a deep sink with a gooseneck faucet for cleaning large items. All sinks in the Art Room shall be outfitted with solids interceptors.

Hawaii Baptist Academy, Honolulu, O'Ahu, HI
Group 70 International

Storage is needed in the Art Room for both student work and art supplies. The basic module for 2-D student work is 18"x24"/420x594mm(A2). Student tables, drying racks, flat files for student work, and shelving for paper storage shall all be sized appropriately. Storage shall be provided as a combination of built-in casework and furniture pieces. Built-in casework, typically containing the sinks, shall be provided on one wall of the Art Room. This casework may contain any combination of drawers, base and wall cabinets, tall storage, and/or flat files. In addition to the built-in storage, furniture shall be provided for additional storage. Consider the use of mobile storage so that supplies can more easily be distributed around the room. Provide some open wall space within the Art Room for equipment such as drying racks. The AE shall work with the art teacher to determine the correct proportion of different types of storage within the Art Room.

Provide an area for three pottery wheels. Electric pottery wheels are preferred. This is a wet area. Power shall be provided from the wall, not the floor.

Kiln

The Kiln Room requires space for a kiln, a freestanding service sink (quench sink), and utility shelving. This is a wet area. Only items relating to the use of the kiln shall be stored in this room. Shelving shall be provided for organization of clay pieces (greenware, bisque, or glazed) and for storage of kiln related items (shelves and posts). A mobile cart shall be provided to transport clay pieces to the Kiln Room. Select a style of cart that will allow some protection from items rolling off the shelves during transport. Provide interlocked outside supply air and exhaust air fans in the Kiln Room to prevent conditioned air from the adjacent classroom space from being exhausted. Position the Kiln Room near the exterior for efficient ventilation. The door to the Kiln Room shall be 48"/1200mm wide to accommodate moving equipment in and out of the room. This can be accomplished with a single extra wide door, or a pair of doors. Where a pair of doors is provided, the active leaf shall be wide enough to accommodate a mobile cart without having to open both doors (ex. a standard door with a smaller inactive leaf). One of the Art Room doors (exterior or interior) must also be extra wide to provide a clear path for movement of equipment.

Art Storage

The Art Storage Room contains shelving and storage areas for art supplies and equipment. Open, adjustable, utility shelving is preferred for paper and supply storage. Provide at least one deep shelf to accommodate oversize paper. Provide a lockable storage cabinet for items that need to be secured and a small safety cabinet for flammable/hazardous materials such as inks, paints and thinners. Provide open floor area for storage of mobile units.

Outdoor Learning Area

Provide a paved exterior space adjacent to the Art Room to function as an extension of the work area.

This space should be large enough for the entire class to work individually or in groups. Refer to the Outdoor Learning section for additional information.

Built-In Items

- Art Room – Marker board
- Art Room – Tack board, tack strip, 3-D display area for student work
- Art Room – Built-in casework (one wall)
- Art Room – Coat hooks for smocks

Plumbing

- Art Room – Sinks with solids interceptor – Student and adult height
- Kiln Room – Freestanding service sink with solids interceptor

Equipment

- Art Room – Interactive technology, refer to "Technology System Design Guidelines-DoDEA Special Systems" for additional information
- Art Room – Pottery wheels (3)
- Kiln Room – Kiln

FACILITY ELEMENTS & REQUIREMENTS - SHARED SPACES

MUSIC

	0-250		251-500		501-750		>750	
Area Description	**sf**	**sm**	**sf**	**sm**	**sf**	**sm**	**sf**	**sm**
Music Room	1000	92.9	1300	120.8	0	0	0	0
Band Room	0	0	0	0	1600	148.6	2000	185.8
Choral Room	0	0	0	0	1500	139.4	1500	139.4
Music/Instrument Storage	250	23.2	400	37.2	500	46.5	650	60.4
Practice Room – Large	0	0	100	9.3	100	9.3	100	9.3
Practice Room – Small	0	0	0	0	50	4.6	2@50	2@4.6
Music Library	0	0	75	7.0	2@75	2@7.0	2@75	2@7.0

The Program for Design (PFD) includes Staff Collaboration allocations; refer to Section 3.3.1 for associated requirements.

Adjacencies

Locate the Music Suite near the Performance area. The larger instructional spaces (Music/Band/Choral) may be positioned adjacent to the Stage to act as a "green room" during performances. The Music Suite may be co-located with other specialty instructional areas, such as Art to allow for collaboration between programs. Direct access to the exterior is not required, but the Music Suite should be located with convenient access to the main circulation and the exterior of the building for movement of large instruments. Direct access to the exterior may be provided only if this cannot be achieved.

Shughart Middle School, Ft Bragg, NC
SchenkelShultz Architecture

Functional Area Description

The Music Suite serves as the primary area for music education**.** The activities in these rooms require acoustical treatment within the rooms and sound transmission control between adjacent spaces. Sound isolation may be accomplished with a combination of room placement and increased STC ratings. Storage rooms and other non-occupied spaces may be used as buffer spaces.

The Music Instructional Spaces (Music Room, Band Room, and Choral Room) shall be provided as indicated based on student enrollment. The required ceiling height for a Music Room is directly related to the size of the room and ranges from 16-20'/4.9-6.1m for choral music and 18-22'/5.5-6.7m for instrumental music.

These spaces shall be designed by an acoustical engineer. An acoustic door is NOT required. A high quality classroom door with appropriate door bottom and perimeter seals is sufficient. Maintenance and durability shall be considered when specifying door seals.

Exterior access is not required from any of the instructional spaces, but may be provided if required for egress. A pathway shall be provided for the movement of large instruments from the Music Storage Room, and the Music Room or Band Room. At least one door to these rooms (interior or exterior) shall be at least 48”/1200mm wide. This can be accomplished with a single extra wide door, or a pair of doors. Where a pair of doors is provided, the active leaf shall be wide enough to accommodate a mobile cart without having to open both doors (ex. a standard door with a smaller inactive leaf).

The Music Instructional Spaces shall accommodate a minimum of 30 students. All Music Instructional Spaces shall include an instructional area with a marker board (with music staff), interactive technology, media cart, instructional table, and instructor’s music stand. Student chairs shall be stackable and shall have a dolly so that they may be easily rolled out of the way (posture chairs are not required). A Music/Instrument Storage room is provided in all schools, but additional storage may be provided within the Music Instructional Spaces using built-in casework or furniture pieces. All storage within the Music Instructional Spaces should be focused on items needed for daily instruction and should be kept to a minimum in order to maximize the space available for student instruction.

Music Room (enrollment ≤ 500)

In schools with enrollments of 500 or less, a single Music Room shall be provided for both vocal and instrumental music classes. Furnishings within the Music Room must allow the easy reconfiguration of this space. Portable risers may be provided but are not required. Provide 4 movable computer workstations.

Band Room (enrollment >500)

In schools with enrollments greater than 500, the Band Room is the primary space for instrumental instruction. The Band Room shall be suitable for large ensembles, and requires a large volume for acoustics. Provide a small sink for cleaning mouthpieces and a separate drinking fountain within the room. Risers are not typically provided in the Band Room.

Choral Room (enrollment >500)

In schools with enrollments greater than 500, the Choral Room is the primary space for vocal instruction. Provide portable risers instead of a fixed tiered floor. A drinking fountain shall be provided within the room. Additional space has been provided in the Choral Room for keyboard instruction. Provide music stands, student tables (appropriate size for keyboards), and portable risers (optional).

Music/Instrument Storage

The Music/Instrument Storage room includes space for the storage of supplies, instruments and larger equipment that cannot be stored within the Music Instructional Spaces. Provide open shelving and/or lockable cabinets as required for both the instrumental and choral programs. Where separate Band and Choral spaces are provided, this can be a shared storage space or it can be divided into two spaces to serve the needs of each program. If two spaces are provided, the total net area may not exceed the Ed Spec requirement.

Practice Rooms

The Practice Rooms provide space for individuals or small groups of students to practice. The rooms require sound absorbing wall construction and finishing. All spaces shall have vision glass to allow for

supervision. Acoustically-isolated modular practice rooms may be considered. These rooms should be positioned with supervision in mind and are best located with access to the Music Instructional Spaces.

Music Library

The Music Library serves as a storage area for sheet music, recordings and other resources needed for music education. The Music Library is often combined with the Staff Collaboration Space for easy access by the staff. Where separate Band and Choral Rooms are provided, the Music Library can be one shared space, or it can be split into two rooms, one for band and one for choral. If two spaces are provided, the total net area may not exceed the Ed Spec requirement.

Built-In Items

- Music Room, Band Room, Choral Room – Marker board, with music staff
- Music Room, Band Room, Choral Room – Tack board
- Music Room, Band Room, Choral Room – Built-in casework (optional)–Any tall storage shall be 30”/762mm deep, min

Plumbing

- Music Room, Band Room – Small sink, for hand washing and cleaning mouthpieces
- Music Room, Band Room, Choral Room – Drinking fountain

Equipment

- Music Room, Band Room, Choral Room – Interactive technology, refer to “Technology System Design Guidelines – DoDEA Special Systems” for additional information.
- Music Room, Band Room, Choral Room – Independent sound system

FACILITY ELEMENTS & REQUIREMENTS – SHARED SPACES

OT/PT

Area Description	sf	sm	Notes
Instructional Area	850	79.0	
Storage/Planning/Observation Area	350	32.5	

Adjacencies

The OT/PT space is a shared resource for the entire school. It can be located near the Neighborhoods or the Gymnasium. It must be accessible from the main circulation. This space may be located on any level of the school.

Functional Area Description

This area provides space for students to receive IEP identified educational support and intervention for small (occupational) and large (physical) muscular needs. Provide an open, flexible space within the area to accommodate a variety of activities needed for student therapy. An oversized door (48”/1200mm minimum) or double doors shall be provided in the Instructional Area and Storage/Planning/Observation Area for movement of bulky assistive equipment.

Instructional Area

The occupational therapy services (OT) area addresses the small muscle deficits that are negatively impacting the student’s progress in the educational environment. Services are not provided to address medically based OT needs that are provided in the medical environment (i.e., doctor’s office, hospital, clinic, etc.). The area should provide a quiet and comfortable learning environment for OT. Provide an adjustable height activity table that can accommodate 4 students.

The physical therapy services (PT) area focuses on large motor skills and requires an open, flexible space that can accommodate a variety of movement activities using equipment such as balance bars, tricycles, and floor mats. The space should accommodate free movement exercises and dance.

A heavy-duty ceiling hook is not required, as this type of movement can be accomplished using freestanding equipment. Specialized furniture or assistive equipment will be provided by DoDEA (not as a part of a MILCON project) based on the student’s IEP.

Storage/Planning/Observation Area

Provide a storage area for secure storage of equipment and educational resources. Provide open floor area in the storage room for trikes, walkers and other bulky equipment. Provide a combination of open shelving and tall storage cabinets for smaller items.

This area will also serve as workspace for the Physical Therapist and/or Occupational Therapist. These positions are often itinerants, so this is not the primary workspace. Provide a simple desk with file drawer for each position. Provide power and data connections for each workstation.

Provide view windows with one-way glass into the Instructional Area for observation. Provide a door

directly to the hall from this area so that students can be observed without disturbing instruction.

Built-In Items

- Instructional Area – Marker board
- Instructional Area – Tack board
- Storage/Planning/Observation Area – Shelving (built-in optional, may be provided as furniture)
- Storage/Planning/Observation Area – Tall storage cabinets (built-in optional, may be provided as furniture)

Plumbing (Not Used)

Equipment

- Interactive Technology – Refer to "Technology System Design Guidelines – DoDEA Special Systems" for additional information.

FACILITY ELEMENTS & REQUIREMENTS - SHARED SPACES

SCIENCE LAB

Area Description	sf	sm	Notes
Science Laboratory	1200	111.5	Multipurpose Science Lab or Chemistry Lab
Prep Room	200	18.6	Per Science Lab
Chemical Storage	100	9.3	One per school
Learning Hub Allowance	350	32.5	Per Science Lab

The Program for Design (PFD) includes Staff Collaboration allocations; refer to Section 3.3.1 for associated requirements.

Adjacencies

The Science Labs may be distributed throughout the Neighborhoods, or grouped together with other specialty spaces, such as CTE or Art, to create a specialized Neighborhood (STEM/STEAM). Access to the main building circulation is desirable in order to minimize disruption of neighborhood activities.

Consider a solution that allows grouping of the labs so that they can share a prep room and utility connections. Efficiency of utilities should be considered in the placement of labs, even if they are distributed to each Neighborhood.

Portsmouth HS, Portsmouth, OH
Fanning/Howey Associates, Inc.

Functional Area Description

The Science Lab is a space designed to support flexible and dynamic scientific exploration. These spaces should be designed to support a variety of learning strategies and educational applications. Laboratories should provide work environments in which practical application of instruction and skills practice may be accomplished effectively and safely. This space should be open and flexible, have access to utilities, good ventilation, and be equipped with durable floor and countertop work surfaces. Each Science Lab shall accommodate 24 students.

The number of Science Labs is calculated based on the National Science Teachers Association (NSTA) Guide to Planning School Science Facilities guidance and teacher/class rotations. Refer to the NSTA Guide for additional information on the design of Science Labs, Prep Rooms and Chemical Storage Rooms.

All labs and their supporting spaces are required to be handicap accessible. Built-in casework shall include a variety of open, closed and lockable cabinets. Countertop material in Labs and Prep Room shall be resin or acid-resistant plastic laminate. Open shelving or glazed wall cabinets (for display of projects and glassware) above base cabinets are preferred. Equipment and casework should be positioned for ease of cleaning and cabinets should fit flush to walls. Expensive items, especially those that are only used occasionally, will require a storage location that can be secured, either in the Lab, Prep Room, or in

the Staff Collaboration Shared Storage area.

Science Laboratory

There are two types of Science Labs in the high school, the Multipurpose Science Lab (Physics, Earth Science, Environmental Science, etc.) and the Chemistry Lab (Chemistry, Biology). The Multipurpose Science Lab is outfitted with movable furniture and is more flexible while the Chemistry Lab contains fixed lab stations in order to maintain required safety zones. Both types of labs shall be provided in each school. The number of each type of lab shall be based on a review of the science classes being offered, but generally there are no more than two Chemistry Labs in a school.

All labs shall have a minimum of two (2) exits from the room with doors opening outward. Wide aisles should be positioned between work stations, in front of storage cabinetry, and around fixed equipment. Storage should be located convenient to work areas so that there would be minimal travel and congestion. Provide eye goggle sanitation cabinets for safety equipment.

Multipurpose Science Lab

The Multipurpose Science Lab requires the use of a coordinated system of movable lab tables and built-in perimeter casework to allow the conversion of the space from one use to another. Include storage and countertop on at least two sides of the room. Provide six student sinks (with goose-neck faucets) spaced far enough apart for independent lab group work. Where the lab will be used for Physics, there shall be at least one long run of counter uninterrupted by sinks. In this case, the number of sinks may be reduced, but may not be less than 2 per lab. Electrical and data outlets shall be provided at the perimeter casework. Provide appropriate separation of power and water for the safety of the students. Computers and printers are an integral part of the curriculum and must be considered in the design of the lab. Gas outlets and emergency eye-wash/shower are not required in the Multipurpose Science Lab.

Chemistry/Biology Lab

The Chemistry Lab will be used for Chemistry and Biology and requires additional equipment, such as access to gas, a fume hood, and an emergency eye-wash/shower. Fixed lab stations and an instructor's demonstration station shall be provided. Utilities (gas, water, power, and data) shall be provided at the lab stations, rather than at the perimeter of the room. Casework may be provided at the perimeter of the room for additional storage. Balance the need for counter space at the lab stations with the need for clear circulation paths to help insure the safety of the students.

KSC International School, Mitchell Giurgola Architects, New York, NY

Where gas outlets are provided they shall be piped to the lab stations from a central source. Use a natural gas line when readily available. A single easily accessible shut-off valve shall be provided in the lab to turn the gas off to all lab stations in that lab. An emergency shut-off switch shall also be provided for the electrical outlets in each lab containing gas outlets.

Chemistry Labs shall be equipped with teacher-controlled built-in fume hoods (venting separate from building HVAC system) that exhaust directly to outdoors. Do not provide storage below the fume hood for safety reasons. Consider the use of a pass-through fume hood between the prep room and the lab. The fume hood should not interfere with placement of marker boards or interactive technology in the lab.

Chemistry Labs shall be equipped with a combination emergency deluge shower and eye wash (meeting ANSI standards). Modesty curtains are not required by ANSI but are highly recommended for school environments. A floor drain shall be provided. Slope the floor to a floor drain located below the shower head. The floor drain shall include trap primer and shall be connected to a wastewater neutralization system. Locate the eye-wash/shower near the instructional area and prep room, rather than in the back corner of the room, for better accessibility.

Prep Room

The Prep Room shall be directly accessible from the Science Lab. Prep Rooms are often combined and located to serve two Science Labs. This area should include built-in casework with access to sinks, data and electrical outlets and a full-size refrigerator. Where the Prep Room serves a Chemistry Lab access to gas shall also be provided. Maximize the use of wall space with tall cabinets and wall cabinets for secure storage of equipment and materials and counter space for a printer and other peripheral devices. All Prep Rooms shall be equipped with a lockable countertop chemical storage cabinet (4 gallon) for short term storage of items needed for daily instruction. Chemical storage cabinets shall not be located in the lab unless the lab is not directly connected to a Prep Room.

Chemical Storage Room

Provide one Chemical Storage Room per school. This separate, lockable Chemical Storage Room is imperative for safety. The Chemical Storage Room should meet all applicable safety codes (i.e. exhaust, smoke detectors, sparking, etc). The Chemical Storage Room shall be accessible from the main building circulation so that it may be restocked without disturbing classroom activity. A door may also be provided to an adjacent Prep Room to minimize transport distance. All doors to the Chemical Storage Room shall have vision panels.

The Chemical Storage Room shall be equipped with flammable, acid/corrosive, and chemical storage cabinets. The size of these cabinets should be determined with input from the science staff regarding the number of courses being taught requiring hazardous chemicals. The use of tall cabinets will help to maximize storage capacity. This room is for the storage of chemicals and is not intended to be used as a prep area so counters should not be provided in this space.

Shelving shall be provided for chemicals that are not required to be stored in a storage cabinet. This shelving shall either be a pre-manufactured cased unit specifically designed for chemical storage or wall mounted standards and bracket system with wood shelves. All shelving shall be strongly fastened to the wall, a maximum of 12”/300mm deep, spaced a minimum of 10”/254mm apart, with a raised lip at each shelf edge, and be at or below eye level (60”/1524mm) for easy access.

Learning Hub Allowance

A Learning Hub Allowance is included in the Science Lab section of the Program for Design (PFD). This allows the Science Labs to be incorporated into a Neighborhood and maintain some frontage to the Learning Hub. Consider providing some fixed glazing or a transparent operable partition between the Science Lab and the Learning Hub.

Built-In Items

- All Science Labs – Marker board
- All Science Labs – Tack board
- All Science Labs and Prep Room – Built-in casework (along two walls)
- All Science Labs and Prep Room – Drying rack above sink(s)
- Chemistry Lab – Built-in lab stations
- Chemistry Lab – Instructor's Demonstration station (built-in or mobile)
- Chemical Storage Room – Wall mounted shelving for chemical storage

Plumbing

- All Science Labs – Student lab sinks (6 typ, 2 min at Physics focused Multipurpose Labs)
- All Science Labs and Prep Room – Acid Resistant piping and acid neutralization.
- Multipurpose Science Lab – Emergency eye wash at one sink
- Chemistry Lab – Emergency eye wash and shower with floor drain
- Chemistry Lab – Demonstration Sink (optional) – Only at built-in instructor's demonstration station
- Prep Room – Double bowl sink
- Prep Room – Icemaker connection

Equipment

- All Science Labs – Interactive technology, refer to "Technology System Design Guidelines – DoDEA Special Systems" for additional information.
- All Science Labs – Eye goggle sanitation cabinet
- Chemistry Lab - Fume hood
- Prep Room – Refrigerator with icemaker
- Prep Room – Lockable countertop chemical storage cabinet (4 gallon)
- Chemical Storage Room – Flammable storage cabinet
- Chemical Storage Room – Acid/corrosive storage cabinet
- Chemical Storage Room – Chemical storage cabinet

FACILITY ELEMENTS & REQUIREMENTS – SHARED SPACES

CAREER AND TECHNICAL EDUCATION

Area Description	SF	SM	Notes
Video/Broadcast Studio	600	55.7	
CTE Lab	1000	92.9	
Culinary Arts Lab	1400	130.0	
Learning Hub Allowance	350	32.5	Per staff position

The Program for Design (PFD) includes Staff Collaboration allocations, refer to Section 3.3.1 for associate requirements.

Adjacencies

The CTE Labs may be distributed throughout the Neighborhoods, or grouped together with other specialty spaces, such as Science or Art, to create a specialized Neighborhood (STEM/STEAM). Access to the main building circulation is desirable in order to minimize disruption of neighborhood activities.

Venice High School, Sarasota County Schools, FL
SchenkelShultz Architecture

The Broadcast Studio shall be located near a CTE Lab for use by the Video Communications program. The Broadcast Studio shall not be solely accessed through the CTE Lab in order to encourage use by all programs throughout the school. The Broadcast Studio and its associated CTE Lab may be located with other CTE Labs, or near the Information Center.

Where the Large CTE Lab is outfitted for Culinary Arts, this space shall be located near the Food Service area for convenient access to the receiving area and service drive. A connection to the Commons is desirable to facilitate larger gatherings.

Functional Area Description

Career and Technical Education (CTE), formerly Professional Technical Studies (PTS), offers career-related courses to high school students. Schools offer different programs based on school size and staffing. The number of CTE spaces provided corresponds with the student enrollment, but the programs offered are determined by staff availability and student interest. The CTE Labs in each school shall be designed for the current course offerings. Future flexibility should be kept in mind when designing these spaces since the CTE curriculum is continually changing to follow trends in future career paths.

Broadcast Studio

A Broadcast Studio will be provided in all high schools. This area provides space for students and instructors to record TV and audio visual material and conduct small group projects with instruction.

There are three distinct areas in this space (not necessarily separate rooms); the control room, the studio, and storage. Minimum areas are suggested for the studio and storage; other areas shall be distributed to maximize the function of each space.

The control room provides space for recording and dubbing equipment. The room is set up to work like an actual control room in a recording studio. This space shall accommodate 3-4 people with views into the studio. Provide a full size equipment rack that can accommodate a dedicated video switcher. The studio shall be accessed through the control room so that it may also act as a sound vestibule. Provide an oversized single leaf door into the studio to accommodate large equipment while still addressing better acoustic performance.

The studio shall be a minimum of 300sf/27.9sm. Students produce TV and audio visual material in this multi-use room. Students shall have the capability to broadcast material prepared in the studio throughout the school. The room incorporates specialized lighting, various backdrops, a green screen, and whiteboard space for brainstorming, flow charts, storyboards, etc.

The storage area (minimum of 100sf/9.3sm) may be integrated into the control room or be a separate room accessed from the control room. This space shall have adjustable shelving and lockable storage units for high value equipment.

CTE Lab

The CTE Lab spaces will serve a variety of programs and will be outfitted differently depending on the courses offered. This space will be technology intensive and shall have access to both wired and wireless communications infrastructure. Furnishings will vary based on curriculum needs, but should be flexible to allow for configuration for multiple uses. Flexible furniture shall be provided to accommodate a minimum of 24 students working individually or in small groups. Built-in casework is not required in this space and the use of furniture based storage solutions is encouraged in order to retain maximum flexibility. Provide data and power connections on all walls. Maximize the use of wall space with magnetic marker boards and/or tack boards for work display and review.

Large CTE Lab

The Large CTE Lab is similar to the other CTE Labs, but provides additional instructional space for specialized curriculum that has larger equipment requirements. Furnishings will vary based on curriculum needs, but should be flexible to allow for configuration for multiple uses. Where there is an existing Culinary Arts program, the Large CTE Lab may be outfitted for this curriculum. The Large CTE Lab will be outfitted for Culinary Arts if there is an existing program offered at the school. Provision of this space will be determined in conjunction with HQ DoDEA and indicated on the PFD.

Only one Large CTE Lab will be provided for each school. Where the Large CTE Lab is outfitted for Culinary Arts and there are other technology programs that have larger equipment requirements, two CTE Labs may be paired with a movable partition (similar to the Learning Studios in the Neighborhood) to provide additional flexibility.

Culinary Arts Lab

The Culinary Arts program provides individual and group instruction for students interested in a career in the food service/restaurant field. Most of the class time will be in a group work situation in a complete simulated restaurant scenario with food prep, cooking, dish washer, wait staff, and managerial personnel. The lab will have a commercial kitchen area and an instruction/dining area to accommodate up to 15 people. This may occur in one large lab space, or may be divided into an instruction/dining space and a commercial kitchen space.

Renaissance Academy, Virginia Beach, VA
RRMM Architects

The dining and instruction area will provide space for group instruction, computer and audiovisual presentations, independent work, and consumption of food prepared in the kitchen. Provide space for four dining tables with four chairs each, television/DVD with cable TV connection, interactive technology, and shelving for cookbooks and video equipment.

Venice High School, Sarasota County Schools, FL
SchenkelShultz Architecture

Provide a minimum of 20 lockers for storage of personal belongings while the students are in class wearing cooking attire. The locker area can be open to the dining/instruction area near the entrance to the culinary arts lab and away from the main food prep areas.

Provide a service area with a counter and shelving for dishes, cups, mugs, silverware and bus items for use when the instruction area is set up for dining. Provide a sink with hot and cold water and utility connections for a coffee maker and ice machine.

The majority of the Culinary Arts Lab shall be configured for the student kitchen. The kitchen shall be equipped with commercial kitchen equipment and stainless steel work tables and counters. Special electrical utility service and a dedicated water heater shall be provided. If natural gas is already supplied to the school, gas appliances may be installed. Natural gas will not be supplied to the school solely for the culinary arts program. The student kitchen shall contain: a cooking area; a mixing/blending/microwave area; a refrigerator/freezer area; a food prep area; a dish wash area; a mop/laundry area; and an equipment/food storage space. These areas shall be arranged to provide open space for portable food service work tables for student instruction.

The cooking area shall include a stove with a minimum of six burners. The area shall also accommodate

a minimum 2ft x 2ft/61cm x 61cm grill, char-broiler and two ovens (at least one convection). The stove, grill, char-broiler, and ovens shall be under a vented stainless steel hood. A stainless steel counter shall be provided near the food prep and cooking areas to accommodate the mixing/blending/microwave area. A refrigerator/freezer area shall also be provided near the food prep and the cooking areas. This area shall have a stainless steel stand-up, double-door, large-capacity refrigerator and a stainless steel, double door, large-capacity freezer.

The food prep area shall include a double sink for washing and draining foods. A garbage disposal shall be provided at the food prep sink. Provide open shelving above the sink and counter. A central area with at least six portable food service work tables shall be provided for student instruction. At least one of these tables should also be a demonstration table. This area shall be positioned near the food prep area so that it can be used for salad/vegetable/fruit preparation and chopping/slicing of non-vegetable and non-fruit foods. This central area may also be used for final preparation and staging of meals before serving. A storage rack shall be provided within the kitchen area for storage of miscellaneous kitchen items such as mixers, locking knife rack, and frequently used kitchen equipment such as graters, blades, blenders, large pots/pans etc. A wash area shall be provided, separate from the food prep and cooking areas.

The dish wash area includes the dish washing machine and a counter with two stainless steel sinks for pot washing and scrubbing. One sink shall be a deep sink for washing large items. Open shelving above the sink and counter shall be installed for storage of recently washed items. A garbage disposal shall be provided for the sink drain.

A mop/laundry area shall be provided. The mop area shall have a mop sink, space for storage of mop buckets and cleaning products, and a built-in wall rack for the storage of mops. The laundry area shall have a full size washer and dryer and built-in shelving for detergent, bleach, and softeners. This mop/laundry area can be open to the student kitchen area, but should be away from the main food prep areas.

An equipment/food storage room shall be provided-for the storage of canned foods, oils, condiments, sealed non-perishable food containers, and food preparation/cooking equipment and accessories. This may be an open space within the student kitchen, or an enclosed storage room. If a separate room is provided it shall not be more than 100sf/9.3sm and the space shall be part of the overall square footage allowance for the Large CTE Lab.

Learning Hub Allowance

A Learning Hub Allowance is provided in the high schools to allow the CTE labs to be arranged in their own Neighborhood or incorporated into the academic Neighborhoods. This will give the CTE spaces the same functionality for collaboration and project based learning that is provided in the academic Neighborhoods. Associating the CTE spaces with a Learning Hub also provides the ability to open the CTE Labs to the hub for additional instructional space.

Built-In Items

- Broadcast Studio/CTE Lab/Large CTE Lab – Marker board
- Broadcast Studio/CTE Lab/Large CTE Lab – Tack board

- Culinary Arts Lab – Commercial kitchen stainless steel open shelving, work tables, and counters
- Culinary Arts Lab – Wall rack, for the storage of mops

Plumbing

- Culinary Arts Lab – Hand wash sink
- Culinary Arts Lab – Commercial double sink at prep area, with garbage disposal
- Culinary Arts Lab – Commercial double sink at dish wash area, with garbage disposal
- Culinary Arts Lab – Mop sink
- Culinary Arts Lab – Commercial dishwasher connection
- Culinary Arts Lab – Washer/dryer connection
- Culinary Arts Lab – Commercial refrigerator/freezer connection

Equipment

- CTE Lab/Large CTE Lab – Interactive technology, refer to "Technology System Design Guidelines – DoDEA Special Systems" for additional information.
- Culinary Arts Lab – Flat panel monitor, with DVD and cable TV connection
- Culinary Arts Lab – Lockers, minimum of 20
- Culinary Arts Lab – Commercial stove, minimum of six burners
- Culinary Arts Lab – Commercial grill, deep fryer, char-broiler
- Culinary Arts Lab – Oven, two with at least one convection
- Culinary Arts Lab – Stainless steel hood, vented
- Culinary Arts Lab – Commercial mixer/blender
- Culinary Arts Lab – Commercial microwave
- Culinary Arts Lab – Commercial dishwasher
- Culinary Arts Lab – Stainless steel stand-up, double-door, large-capacity refrigerator
- Culinary Arts Lab – Stainless steel, double door, large-capacity freezer
- Culinary Arts Lab – Portable food service work tables, 8 min.
- Culinary Arts Lab – Washer/dryer

FACILITY ELEMENTS & REQUIREMENTS – SHARED SPACES

JROTC

Area Description	sf	sm	Notes
Instructional Areas/ Indoor Firing Range	1600	148.6	Two 800sf/74.3sm Learning Studios with movable partition. >150 JROTC students - Add 800sf/74.3sm Learning Studio
Armory	150	13.9	
Battalion HQ	150	13.9	
JROTC Storage	200	18.6	>150 students - Add 150sf/13.9sm

The Program for Design (PFD) includes Staff Collaboration allocations, refer to Section 3.3.1 for associated requirements.

Adjacencies

The JROTC area shall have access to an outdoor area suitable for use as a drill pad or parade ground. The paved area for a drill pad shall be multi-use and can be combined with other functions, such as an outdoor basketball court or other paved surface.

Example of recessed lighting at target wall

Functional Area Description

The Junior Reserve Officer Training Corps (JROTC) area is the primary space within the school for JROTC instruction as well as indoor physical training areas. The JROTC area shall consist of Instructional Areas/Indoor Firing Range, Armory, Battalion HQ, JROTC Storage, and Staff Collaboration for the JROTC Instructors. For programs with over 150 participants an additional Learning Studio and an additional 150sf/13.9sm of JROTC Storage shall be provided.

Instructional Areas/Indoor Firing Range

The main Instructional Area for JROTC will be set up as a pair of learning studios with an operable partition between them. This will allow the space to be divided into two Instructional Areas, or opened up into one area for combined instruction and/or for use as an Indoor Firing Range. Both studios should be able to be accessed from main circulation. All furniture in this space should be easily movable and nesting or stacking for easy conversion to the Indoor Firing Range. Provide space to the side or rear of the designated firing lanes for storage of furniture and teaching materials when the firing range is in use. The proportions of the learning studios shall be appropriately configured for conversion to an Indoor Firing Range. The required length of the range shall be 32.8ft/10m from muzzle to target. The actual target/trap system shall be provided as a curriculum item (government furnished, government installed) so that it is coordinated with the type of weapon being fired. Provide supplemental lighting of the target wall on a separate circuit controlled by a switch behind the firing line. A minimum of 6 lanes shall be provided. Lanes shall be 40-49 inches (102-124 cm) in width. The depth of each shooting position behind the firing line shall be 60-80 inches (152-203 cm) to allow space for all firing positions (standing to prone). Appropriate acoustical separation shall be provided to minimize disruption of instruction in

adjacent spaces when the firing range is in use. Storage and office areas may be used as a buffer between other instructional areas. All doors downrange shall be able to be secured when the range is in operation. Any doors downrange that connect to the main circulation shall have a visual indicator that the range is in use.

In JROTC programs with more than 150 participants, the program shall have access to an additional learning studio located adjacent to the JROTC Instructional Areas/Indoor Firing Range. This space shall be accessible from the main circulation and be separate from the larger JROTC Instructional Areas, but may include a door between the spaces for direct access. This will allow for better sound control if this space is used simultaneously with the Indoor Firing Range or for other curriculum needs.

Armory

The Armory provides space for the storage of guns and ammunition. This area shall be secured and shall be accessed from behind the firing line.

Battalion HQ

Provide workspace for the student-run Battalion Headquarters. This space shall accommodate four students at desks and include shelf storage and filing space.

JROTC Storage

The JROTC Storage provides space for storage of all non-armory equipment, such as; uniforms (hanging or folded), shoes, hats, coats, ribbons/pins/patches, and other supplies. Provide secure storage for high-value items. Consider the use of high density storage systems in this area. A small desk shall be provided for equipment issue and return paperwork to be processed. JRTOC Storage may be accessible from the Instruction Area or main circulation.

Example of type of JROTC items to be stored
Discuss specific storage needs with JROTC Instructors

Example of type of JROTC items to be stored
Discuss specific storage needs with JROTC Instructors

Example of type of JROTC items to be stored
Discuss specific storage needs with JROTC Instructors

Built-In Items

- Instructional Areas/Indoor Firing Range, Battalion HQ - Marker board
- Instructional Areas/Indoor Firing Range, Battalion HQ - Tack board

Plumbing (Not Used)

Equipment

- Instructional Areas/Indoor Firing Range - Interactive technology, refer to "Technology System Design Guidelines – DoDEA Special Systems" for additional information. Interactive technology shall be provided in each Learning Studio.

FACILITY ELEMENTS & REQUIREMENTS – STUDENT SUPPORT AREAS

ADMINISTRATION SUITE

Area Description	sf	sm	Notes
Waiting Area	200	18.6	
Reception Counter	100	9.3	
Clerical Work Area	varies	varies	100sf/9.3sm per assigned position
Registrar Office	100	9.3	Where clerical staff >3
Secretary (HR) Office	100	9.3	Where clerical staff >4
Principal's Office	200	18.6	
Assistant Principal's Office	175	16.3	Area per assigned Assistant Principal
Conference Room	200	18.6	
Student Records Room	75	7.0	
Work/Copy Room	200	18.6	
Suite Circulation	varies	varies	15% of Administration Suite total NSF

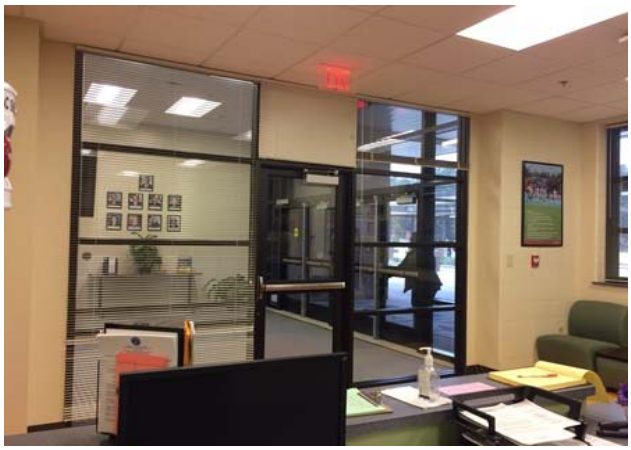
Adjacencies

Locate the Administration Suite adjacent to the main entrance. All visitors must sign in at the Reception Counter prior to entering the school.

Functional Area Description

The Administration Suite will provide the organizational and instructional leadership that is conducive for supporting teaching and learning. The Administration Suite will assist in coordinating overall instruction and interaction with parents and community.

The Administration Suite will house several different student services including: Waiting Area, Reception Counter, Clerical Work Area, Registrar Office, Secretary (HR) Office, Principal's Office, Assistant Principal's Office, Conference Room, Student Records Room, and Work/Copy Room. A secure entry system shall be designed at the main entry to direct visitors to the Administration Suite during off-peak times when students are not arriving or leaving. The Administration Suite shall also have a secondary exit to allow the Principal and other staff to enter and exit the suite without going through the front reception area. This secondary exit shall connect to the main circulation of the school.



Secure Entry - Hampton Primary School, Ft Bragg, NC SchenkelShultz Architecture

Waiting Area/Reception Counter

Two secure doors shall be provided to enter and leave the Waiting Area. The first door shall enter from the main entry vestibule so that all visitors are directed to sign-in at the Reception Counter. The second door shall exit to the main building circulation. Both of these doors shall remain locked at all times and require release from the staff at the Reception Counter. The Waiting Area shall provide space for visitor seating and displaying/posting informational materials. The Reception Counter shall separate the Waiting Area from the Clerical Work Area. A portion of the Reception Counter shall be at the appropriate height for handicapped accessibility.

Reception/Clerical-Hampton Primary School, Ft Bragg, NC SchenkelShultz Architecture

Clerical Work Area

The Clerical Work Area houses clerical staff, intercom system, clock and bell system, public address system, and telephone switchboard. The clerical staff may also need visibility of any security monitors.

This area shall have convenient access to the Work/Copy Room.

Reception/Clerical-Crossroads Elementary School, MCB Quantico, VA Waller, Todd, Todd & Sadler Architects / RRMM Architects

Registrar Office

Where the clerical staff is greater than three a separate office may be provided for the Registrar. The Registrar shall have convenient access to the Student Records Room. The Registrar primarily handles student issues.

Secretary (HR) Office

Where the clerical staff is greater than four a separate office may be provided for the Secretary. The Secretary primarily handles Human Resources/staff issues.

Principal's Office

The Principal's Office is typically at the rear of the Administration Suite. This office should have exterior views of the main approach to the school including the main entrance and/or bus loading area. Provide space for a small conference table in the office. The Principal's Office shall not have an exterior door because of additional security considerations.

Assistant Principal's Office

The Assistant Principal typically handles student discipline and should have convenient access to the Waiting/Reception area and Conference Room. Provide one office for each Assistant Principal assigned to the school. Provide space for a small conference table in the office.

Conference Room

Furnish the Conference Room to accommodate a minimum of 10 people. Visitors as well as the Principal should be able to access this room easily.

Student Records Room

Provide a separate, lockable, 1-hour fire rated room for storage of confidential records. This room is fire rated so that standard file cabinets, rather than fire rated cabinets, may be used to achieve higher storage capacity. Shelving may also be required in the Student Records Room for boxes of archived records that are required to be retained.

Work/Copy Room

The Work/Copy Room contains space for a small kitchenette, copy area, work area, and staff inbox. This space is provided to serve the Administration Suite. The kitchenette shall contain a small refrigerator and a counter area to accommodate a sink, microwave, and coffee pot. The copy area shall include space for a copy machine, fax machine, and any other tabletop equipment. Noisy equipment, such as high production copy machines, shall be located in the Central Workroom. A central work table is a desirable feature in this space. The staff inbox shall provide an area for distribution of paper correspondence to the school staff. The Work/Copy Room shall be centrally located within the Administration Suite to provide convenient access to the admin staff. Access should also be provided from the secondary entry to the Administration Suite so that teachers may access the staff inbox without entering through the reception area. The Work/Copy Room is not required to have a door, but should be designed in a manner that contains the noise and clutter that may be associated with this space.

Work/Copy-Hampton Primary School, Ft Bragg, NC SchenkelShultz Architecture

Work/Copy Kitchenette-Hampton Primary School, Ft Bragg, NC SchenkelShultz Architecture

Staff Restrooms

Staff Restrooms shall be located within or easily accessible from the Administration Suite. Refer to the

Restroom section for associated requirements.

Built-In Items

- Waiting Area/Reception Counter – Reception counter
- Offices (Principal, Assistant Principal, Registrar, Secretary) and Conference Room – Marker board
- Waiting Area, Offices (Principal, Assistant Principal, Registrar, Secretary), and Conference Room – Tack board
- Student Records Room – Shelves (optional)
- Work/Copy Room – Base and wall cabinets with countertop
- Work/Copy Room – Staff Inbox – Message boxes, open or closed (built-in or furniture)

Plumbing

- Work/Copy Room – Sink
- Work/Copy Room – Small full-size refrigerator with icemaker – (15-20 cu. ft. capacity)
- Work/Copy Room – Microwave
- Work/Copy Room – Coffee Pot

Equipment

- Interactive technology, refer to "Technology System Design Guidelines – DoDEA Special Systems" for additional information.

FACILITY ELEMENTS & REQUIREMENTS – STUDENT SUPPORT AREAS

HEALTH SUITE

Area Description	sf	sm	Notes
Waiting Area	80	7.4	Enrollment >350
Nurse's Workspace	100	9.3	Per assigned position
Treatment Area	275	25.5	
Restroom	65	6.0	
Screening/Storage Room	50	4.6	
Large School Allowance	250	23.2	Enrollment > 1000

Adjacencies

Locate the Health Suite near the front entrance. Parents must always check in at the Administration Suite, so provide convenient access if a student is sick and needs to be sent home.

Mason Early Childhood Center, Mason, OH
VSWC Architects

Functional Area Description

The Health Suite provides space for the health and wellness treatment of students during school hours. A Health Suite should be provided in every school. The Health Suite shall be one open area containing the waiting, nurse's workspace, treatment, and rest area. The only enclosed spaces within the Health Suite are the handicap accessible restroom with shower and the screening/storage room. The function of this space is similar regardless of school size. The entire space shall be configured for easy monitoring of all areas by a single staff member. Small schools without a full time nurse shall also include a visual and physical connection to the Administration Suite to allow a clerical or other staff to continuously monitor sick students.

Students visit the Health Suite for a variety of reasons: taking medicine, health screenings (vision, hearing, weight, etc), when they are hurt, or when they are sick. A student height hand wash sink shall be located near the entrance to the suite so that students may wash their hands before returning to class when visiting the Health Suite for routine medication or screenings. The Nurse's Workspace and the Treatment Area shall be central to the suite. When students are hurt or sick they will be assessed in the Treatment Area and either sent home or sent back to class. The Rest Area will be used when a student is sick and waiting to be picked up by a parent/guardian. The Rest Area shall be located toward the rear of the suite. The Restroom is generally located near the Rest Area to serve a student who is sick, but also located near the entrance to the suite. The Screening/Storage Room shall be convenient to the Treatment Area.

Waiting Area

The Waiting Area shall be near the entrance to the suite where students and parents can wait to see the nurse. In small schools, without a full-time nurse, this space may be in the Administration Suite adjacent to the door to the Health Suite for visual supervision of students waiting to see the nurse.

Nurse's Workspace

The Nurse's Workspace shall be central to the suite for visual supervision of all areas of the Health Suite. It should be convenient to both the Waiting Area and the Treatment/Rest Area. Provide a workstation with lockable storage for personal items and a lockable file for student records. In small schools without a full-time nurse, a small desk or counter shall be provided in lieu of a full workstation since space is more limited and this will not be the primary workspace for this staff member.

Treatment/Rest Area

The Treatment Area shall have enough space for a sink, work counter, refrigerator, physician's scale, and a lockable medicine cabinet/cart. A motion operated faucet is preferred for the sink. The refrigerator shall be lockable and will be used for storing medicine, single-use icepacks, diabetic snacks, etc. It will not be used for general storage of food items. Provide base cabinets in this area with drawers for the easy organization of small medical supplies. The treatment area does not require a treatment table. The nurse and student will sit at the same level, talking and writing. Provide a low desk or computer stand for convenient computer access in this area. This computer station is separate from the computer at the Nurse's Workstation. This space should be configured for the assessment of injuries and illness and the provision of basic first aid. The Treatment Area shall also include an area with a clear distance of 20 feet to administer eye tests. This distance can usually be accommodated in the general circulation between functional areas. This area shall have the ability to be darkened with blinds.

The Rest Area shall provide an area for students who are sick to lie down with some minimal privacy. There should be no view from the main hallway into this area. Include cots with ceiling hung curtains to provide privacy for each cot. Furnishings should be kept to a minimum in this area for ease of cleaning. Cots should be at an age appropriate height with a cleanable vinyl surface with cot paper (no linen) and slightly raised head. Provide an area at the foot of or under the cot for storage of books/backpack. For small schools, at least one cot shall be provided. In schools with a full-time nurse, provide a minimum of two cots. In larger schools additional cots may be provided as space allows. This space will primarily be used as a rest area for students until they are able to be picked up by a parent/guardian.

Restroom

Provide a single handicap accessible restroom with shower. Refer to the Restroom section for associated requirements.

Screening/Storage Room

A small room shall be provided for private screenings (hearing, height, weight, blood pressure, etc.), confidential conversations, and storage of bulky items such as a wheelchair and other miscellaneous equipment. A tall lockable storage cabinet may be provided for storage of equipment and supplies. Power, data, and telephone shall be available in this space. A small table and chair shall be provided for private consultations or telephone conversations and for use with small equipment such as a portable audiometer for hearing screenings. Glazing shall be provided for visibility to and from the Health Suite.

Built-In Items

- Treatment Area – Base and wall cabinets with countertop
- Rest Area – Ceiling mounted privacy curtains

Plumbing

- Waiting Area – Hand wash sink, handicap accessible
- Treatment Area – Double bowl sink
- Treatment Area – Icemaker connection

Equipment

- Treatment Area – Small full-size refrigerator with icemaker – (15-20 cu. ft. capacity)

FACILITY ELEMENTS & REQUIREMENTS – STUDENT SUPPORT AREAS

GUIDANCE COUNSELING SUITE

Area Description	sf	sm	Notes
Waiting Area	100	9.3	
Psychologist Workspace	100	9.3	One per school
Counselor Workspace	100	9.3	Per assigned position
Career Information/Exploration Area	100	9.3	

Adjacencies

The Guidance Counseling Suite has no required adjacencies. The Guidance Counseling Suite and Special Education Suite are often co-located along with the Shared Conference Room. Where the Guidance Counseling Suite is located near the Administration Suite it is required to have a separate entrance.

Functional Area Description

The Guidance Counseling Suite provides space for counselors and/or school psychologists to work with, counsel, and administer assessments to students. The design should consider the confidential nature of communication (to include telephonic or in person) that takes place. Student enrollment will determine the number of spaces required**.**

Waiting Area

Provide a Waiting Area for students and parents requesting assistance from the Guidance Counseling Suite. The Waiting Area for the Guidance Counseling Suite and Special Education Suite may be combined. Larger schools have staff for Administrative Support for Guidance Counselors. When this position is provided (see PFD) a workstation shall be provided in the Waiting Area, otherwise a workstation is not required in this space. Where there is no workstation required in the Waiting Area, a portion of this space may be re-allocated to create a full office where a partial staff position (0.5) is indicated for Guidance Counselors.

Counselor/Psychologist Workspace

Each school will have one Workspace for the School Psychologist. The number of Workspaces for Counselors is determined by the number of assigned positions. Psychologist and Counselor Workspaces shall open onto the Waiting Area or common corridor. The Psychologist and Counselor Workspaces may be grouped together to encourage collaboration. If this is desired, the Shared Conference Room may be used for private meetings and telephone conversations.

Career Information/Exploration Area

This space is used by students to research career opportunities. It may be an enclosed room or an open area within the Waiting Area. It should be positioned for easy supervision. Interior glazing or sidelites may be provided for increased visibility into this space. Much of the career and college information available is online but display space shall be provided to highlight specific interest areas. The Career Information/Exploration Area shall be outfitted to appeal to teens.

Built-In Items

- Offices (Counselor/Psychologist) - Marker board
- Offices (Counselor/Psychologist) and Career Information/Exploration Area - Tack board

Plumbing (Not Used)

Equipment (Not Used)

FACILITY ELEMENTS & REQUIREMENTS – STUDENT SUPPORT AREAS

SPECIAL EDUCATION SUITE

Area Description	sf	sm	Notes
Waiting Area	100	9.3	
Assessor Workspace	100	9.3	One per school, additional per assigned position
Assessment Room	100	9.3	
Lockable Storage	75	7.0	

Adjacencies

The Special Education Suite has no required adjacencies. The Guidance Counseling Suite and Special Education Suite are often co-located along with the Shared Conference Room.

Functional Area Description

The CSC (Case Study Committee) provides critical screening services for students to determine if special needs programs are appropriate. The Special Education Suite provides workspace for the CSC chairperson (Assessor Workspace) along with a Waiting Area, an Assessment Room, and Lockable Storage.

Waiting Area

Provide a Waiting Area for the Special Education Suite that is easily accessible to students and visitors. The Waiting Area for the Guidance Counseling Suite and Special Education Suite may be combined. Some schools may be assigned an Office Automation Assistant or Assessment Clerk. When this position is provided (see PFD) a workstation shall be provided in the Waiting Area, otherwise a workstation is not required in this space.

Assessor Workspace

This workspace provides an area for the CSC chairperson to work and conduct confidential student educational program meetings. These meetings may include participation of students and/or visitors. This space must be lockable for secure storage of special education files. Design the space to permit one-on-one conferences between the specialist and student or parent. Locate for accessibility to the Waiting Area and the Assessment Room.

Assessment Room

The Assessment Room shall open toward the Waiting Area while providing privacy and quiet. One-on-one testing is conducted between an assessor and a student in this room. One Assessment Room is provided in each school. If additional Assessment Rooms are required, due to special circumstances such as a high Special Education population, approval must be obtained from HQ DoDEA.

Lockable Storage

Provide a Lockable Storage Area, preferably accessible from the Waiting Area or the internal hallway within the suite. Provide shelving for storage of testing materials and supplies.

Built-In Items

- Assessment Room – Marker board
- Assessment Room – Tack board
- Lockable Storage – Shelving (built-in optional, may be provided as furniture)

Plumbing (Not Used)

Equipment (Not Used)

FACILITY ELEMENTS & REQUIREMENTS – STUDENT SUPPORT AREAS

SHARED CONFERENCE ROOM

Area Description	sf	sm	Notes
Shared Conference Room	200	18.6	

Adjacencies

The Shared Conference Room is one of two dedicated conference rooms provided within the school. The other is in the Administration Suite. The Shared Conference Room shall be located so that all staff suites have convenient access to a conference room.

Todd Beamer High School, Seattle, WA
Concordia Architects

Functional Area Description

The Shared Conference Room is generally used by the Guidance staff and the Special Education/CSC staff. This space does not need to be accessed directly from the Guidance or Special Ed Suites. Access from the main circulation will facilitate use by various groups needing conference space. If additional conference space is needed, the Neighborhood Group Learning or One-to-One spaces may also be available for occasional use.

Built-In Items (Not Used)

Plumbing (Not Used)

Equipment

- Interactive technology, refer to "Technology System Design Guidelines – DoDEA Special Systems" for additional information.

FACILITY ELEMENTS & REQUIREMENTS – STUDENT SUPPORT AREAS

PARENT'S CENTER

Area Description	sf	sm	Notes
Parent's Center	200	18.6	

Adjacencies

The Parent's Center has no required adjacencies. The Parent's Center shall not be a part of any staff suite (Administration, Guidance, or Special Education). This room is often located near the main entrance or the Central Workroom.

Functional Area Description

The Parent's Center serves as a central parent volunteer work area. Provide casework or furniture and a file cabinet for storage of volunteer materials and files. Provide a work/meeting table and chairs for six to eight people; a desk is not required. Note that parents may also use space within the neighborhoods for volunteer activities.

In the high school the Parent's Center may be used for school store, spirit wear, and prepackaged light concessions. No cooking appliances may be installed in the Parent's Center. Provide a transaction counter with a rolling shutter and furniture for storage and display of merchandise.

Built-In Items

- Marker board
- Tack board
- Built-in casework (optional)

Plumbing (Not Used)

Equipment (Not Used)

FACILITY ELEMENTS & REQUIREMENTS – STUDENT SUPPORT AREAS

CENTRAL WORKROOM

Area Description	sf	sm	Notes
Central Workroom	150	13.9	
Secondary Workroom	150	13.9	Only in multi-story buildings

Adjacencies

The Central Workroom shall be centrally located with easy access from the Neighborhoods. The Secondary Workroom is only provided in multi-story buildings and shall be located where it can be conveniently accessed from the upper level(s).

Northwest Middle School, Salt Lake City, UT
VCBO Architecture

Functional Area Description

The Central Workroom and Secondary Workroom provide space for large reproduction equipment such as high production printers and copiers and items such as a die-cut machine, laminator and other specialized equipment that cannot be distributed to the Neighborhoods. This space is primarily for staff, but may also be used by parent volunteers. Provide layout space convenient to the reproduction equipment. Provide casework as required for specialized items such as the die-cut machine and paper cutter. This noisy area should be acoustically separated from any adjacent areas. Typically, a fairly square room with a central work table and built-in cabinets on one wall works well. Provide open floor space for large copiers and printers.

Built-In Items

- Tack board
- Built-in casework

Plumbing (Not Used)

Equipment

- High production printers and copiers (freestanding)
- Die-cut machine and templates (counter)
- Laminator (counter or freestanding)
- Paper cutter (counter)
- Paper rolls (freestanding)

FACILITY ELEMENTS & REQUIREMENTS – STUDENT SUPPORT AREAS

SCHOOL'S OFFICER

Area Description	sf	sm	Notes
School's Officer	100	9.3	

Adjacencies

The School's Officer has no specific adjacency requirements.

Functional Area Description

The School's Officer is employed by the military installation's commander and functions as a liaison between the school and community. This officer deals with school discipline from the perspective of the military installation and is not responsible for controlling access and emergencies for the school. The School's Officer Workspace is generally not part of the Administration Suite.

Built-In Items

- Marker board
- Tack board

Plumbing (Not Used)

Equipment (Not Used)

FACILITY ELEMENTS & REQUIREMENTS – STUDENT SUPPORT AREAS

ALCOHOL/SUBSTANCE ABUSE COUNSELOR (ASAC)

Area Description	sf	sm	Notes
Alcohol and Substance Abuse Counselor (ASAC)	100	9.3	

Adjacencies

The Alcohol/Substance Abuse Counselor (ASAC) shall be located away from Administrative and Guidance Suites, but be readily accessible to students.

Functional Area Description

The Alcohol/Substance Abuse Counselor (ASAC) provides space for counseling students at risk of abuse problems. The room should provide a quiet, private space for a counselor to speak one-on-one with a student. The room should also accommodate small group sessions. Provide furniture that is easily movable for students to arrange for a comfortable conversation with the counselor.

Built-In Items

- Marker board
- Tack board

Plumbing (Not Used)

Equipment (Not Used)

FACILITY ELEMENTS & REQUIREMENTS – BUILDING SERVICES

FOOD SERVICE

Area Description	sf	sm	Notes
Serving Line/Food Prep-Full Service	varies	varies	Enrollment x 3; min, 1600sf/148.6sm
Serving Line/Food Prep-Satellite	varies	varies	Enrollment x 1.5; min 1000sf/92.9sm
Dishwashing	300	27.9	
Dry Storage	varies	varies	Enrollment x .4; min 100sf/9.3sm
Refrigerator/Freezer (1/3 freezer)	varies	varies	Enrollment x .4; min 100sf/9.3sm
Food Service Office	100	9.3	
Breakroom with Lockers	150	13.9	
Restroom (Handicap)	60	5.6	Unisex – Exception: Germany male/female
Janitor's Closet	20	1.9	
Receiving Area	100	9.3	

Adjacencies

The Serving Line in the Food Service area shall be adjacent to the Commons. The Receiving Area for the Food Service shall be adjacent to the Receiving Room. There shall be no exterior doors directly from the Food Service area. All deliveries shall be routed through the Receiving Room. Buffer the noise of the Food Service area from the quiet areas of the school.

Hampton Primary School, Fort Bragg, NC
SchenkelShultz Architecture

Functional Area Description

The Food Service area provides space for delivery, storage, preparation and serving of student meals. Overseas programs are run by Army and Air Force Exchange Service (AAFES), the Navy Exchange (NEX), a Navy galley, or a contractor.

The kitchen may provide a full service or satellite operation. A full service kitchen includes a full complement of spaces to allow for the storage and preparation of the food served. A satellite kitchen serves food prepared elsewhere but may heat up prepared items and do other finishing work on-site.

A food service equipment professional with specialized expertise shall prepare the food service equipment floor plans and specifications. The space for the kitchen is generally allocated in the planning stage by the number of meals served (or total student capacity) and refined by the size and requirements of the actual food service equipment. The space allocations identified on the PFD for specific functions within the Food Service area may be modified as long as the total overall net building area for the Food Service area is not exceeded.

Serving Line

Multiple factors determine the number of serving lines: the number of students per serving period, the variety of foods offered, the length of the lunch period, and the method of payment for meals. Assume that students require half of the lunch period to eat. A serving line can process about 5 students per minute. Paying at the cashier limits the speed of the line. If utilizing a card system, the speed can increase to 6 students per minute. Utilize mobile serving line equipment for ease of cleaning. The serving line tray slide height shall be 32”/813mm AFF for elementary students. In combined schools, the height shall default to the standard for the youngest students served.

Food Preparation

Layout of this space should allow for efficient preparation of food. In a full service kitchen this will involve large scale equipment for baking, steaming and cooking of foods. In a satellite kitchen this may only include reheating. Equipment selection is greatly affected by menu variety and types of foods served. Include hand washing sinks for staff in this area. For schools in Germany, plan for separate areas for “dirty” prep for cleaning foods, cold prep, and hot prep (no sf increase from PFD but individual allocations may be adjusted within the overall total).

Dishwashing

The size of this area will vary depending on the type of dishware used. This space is usually located adjacent to the Commons for dish drop-off.

Dry Storage

Provide space for dry storage. Adjust the size of the space if the facility buys in bulk.

Refrigerator/Freezer

Walk-in refrigerator/freezer storage shall be provided except in very small kitchens, where upright units shall be provided. Adjust the size of the space if the facility buys in bulk. For schools in Germany, provide two walk-in refrigerators for separation of meat and vegetables.

Food Service Office

The Food Service Office shall be positioned where the food service manager can see both the receiving and food preparation areas. Provide view windows in walls or doors as needed.

Restroom (HC)/Changing

Provide a single ADA compliant restroom near the Breakroom. In Germany, provide separate male and female restrooms sized to German handicap codes. Provide wall hooks and other furnishings to facilitate changing within this space. Refer to the Restroom section for associated requirements.

Breakroom with Lockers

This space provides a breakroom and personal storage space for the kitchen staff. A kitchenette shall be provided with cabinets and a countertop containing a sink and space/power for a microwave, coffee pot. A full height refrigerator shall be provided. Provide personal storage lockers, full or half height, and a table with seating for up to 6.

Janitor's Closet
Provide a janitor's closet specifically for the kitchen only.

Receiving Area
The receiving area provides access for deliveries and shall be immediately adjacent to the Receiving Room. Provide an oversize or double door to accommodate deliveries.

Built-In Items
- Food Service Office and Breakroom - Tack board
- Food Service Office and Breakroom - Marker board
- Breakroom – Base and wall cabinets
- Breakroom – Lockers (built-in or furniture)

Plumbing
- Kitchen - As determined by food service consultant
- Breakroom – Sink
- Restroom – Refer to the Restroom section for fixture requirements

Equipment
- Kitchen - As determined by food service consultant
- Breakroom - Small full-size refrigerator with icemaker – (15-20 cu. ft. capacity)

FACILITY ELEMENTS & REQUIREMENTS – BUILDING SERVICES

JANITORIAL WORKROOM

Area Description	sf	sm	Notes
Janitorial Workroom	150	13.9	

Adjacencies

Locate the Janitorial Workroom in the Building Services area.

Functional Area Description

In DoDEA-Americas locations, custodial services are typically provided by DoDEA personnel. A separate break area is not needed, but larger cleaning equipment will need to be stored at the school. Provide a floor receptor with drain and a deep service sink in this area for the draining and cleaning of equipment.

In DoDEA-Europe and DoDEA-Pacific locations custodial services are typically provided by host-nation contractors rather than DoDEA personnel. This space provides break room and personal storage space for 4-6 people. A kitchenette shall be provided with cabinets and a countertop containing a sink and space/power for a microwave, coffee pot. A full height refrigerator shall be provided. Provide six personal storage lockers, full or half height, and a table with seating for up to 6. Large cleaning equipment is brought in by the contractor on an as-needed basis for deep cleaning and is not stored at the school.

Built-In Items

- DoDEA-Europe and DoDEA-Pacific - Base and wall cabinets
- DoDEA-Europe and DoDEA-Pacific - Lockers (built-in or furniture)

Plumbing

- DoDEA-Europe and DoDEA-Pacific – Sink
- DoDEA-Americas – Floor receptor
- DoDEA-Americas – Deep service sink

Equipment

- DoDEA-Europe and DoDEA-Pacific - Refrigerator

FACILITY ELEMENTS & REQUIREMENTS – BUILDING SERVICES

MAINTENANCE SUPPORT

	0-500		501-750		751-1000		>1000	
Area Description	**sf**	**sm**	**sf**	**sm**	**sf**	**sm**	**sf**	**sm**
Maintenance Support	200	18.6	300	27.9	360	33.4	480	44.6

Adjacencies

Locate the Maintenance Support in the Building Services area.

Functional Area Description

The Maintenance Support area provides space for the maintenance personnel/contractor to work on repair projects and store supplies for routine maintenance of the facility. At locations where a maintenance contract is in place, ensure that this space can be secured in accordance with the contract.

This space shall include a work bench, heavy-duty utility shelving, and lockable storage cabinets.

Built-In Items

- Marker board
- Tack board

Plumbing (Not Used)

Equipment (Not Used)

FACILITY ELEMENTS & REQUIREMENTS – BUILDING SERVICES

TRANSPORTATION SUPPORT

Area Description	sf	sm	Notes
Reception/Waiting/Photo Area	100	9.3	
Transportation Workspace	100	9.3	Per assigned staff

Adjacencies

Transportation Support shall have access to the main circulation providing easy access for both students and visitors.

Functional Area Description

This functional area is for Transportation Support that serves a smaller complex of schools. It is not intended to be used for planning the space requirements of a large, centralized school bus office. This office plans and directs the bus transportation for the local student body. All aspects of traffic flow and safety concerns are handled here. A single space shall be provided with reception, waiting and photo area on a public side of a transaction counter and workspace for staff provided behind the counter.

The reception area should open onto the main hallway. Provide a transaction counter to separate the waiting area from the staff workspace, preferably furniture based. Provide an area for taking student identification photos at one end of the transaction counter. This area shall have a plain backdrop and a place to set up the camera.

The workspace area will vary according to the number of people assigned to this function at a particular school. An area with a desk, computer and telephone should be provided for each person. At least one workspace should be able to see the reception/waiting area. A lockable storage cabinet shall be provided for the camera equipment and supplies.

Built-In Items

- Tack board
- Marker board

Plumbing (Not Used)

Equipment (Not Used)

FACILITY ELEMENTS & REQUIREMENTS – BUILDING SERVICES

SCHOOL SUPPLY/STORAGE AREA

Area Description	sf	sm	Notes
School Supply/Storage Area	varies	varies	Enrollment + 200sf
Supply Tech Workspace	100	9.3	

Adjacencies

Locate the School Supply/Storage Area adjacent to the Receiving Room. There shall be no exterior doors directly from the School Supply/Storage Area. All deliveries shall be routed through the Receiving Room.

Hampton Primary School, Ft Bragg, NC
SchenkelShultz Architecture

Functional Area Description

The School Supply/Storage Area serves as the primary storage area for the school. If windows are provided they shall be above the height of standard utility shelving to reduce security risk. Coordinate the height of the shelving with clearances required for sprinkler systems.

Interior double doors shall connect directly to the main circulation for ease of transporting materials throughout the school. An enclosed workspace shall be provided for the Supply Technician. Position the workspace near the interior entry for convenient access to the school and to allow for visual surveillance of the entire area and all entrances. Lockable storage cabinets may be provided for storage of high value items. A lockable file cabinet shall be provided for secure storage of purchasing records.

Generally, if there are hazardous materials that need to be stored they should be in small enough quantities that a flammable storage cabinet may be provided in lieu of a flammable storage room. If a separate flammable storage room is provided, it shall not be more than 100sf/9.3sm (which will be deducted from the School/Supply Storage Area) and it shall only be accessed from the exterior.

Built-In Items (Not Used)

Plumbing (Not Used)

Equipment (Not Used)

FACILITY ELEMENTS & REQUIREMENTS – BUILDING SERVICES

RECEIVING ROOM AND LOADING DOCK

Area Description	sf	sm	Notes
Receiving Room	280	26.0	

Adjacencies

The Receiving Room shall be the only access point from the Loading Dock. The Receiving Room shall be immediately adjacent to the School Supply/Storage Area and Food Service area to provide access for deliveries.

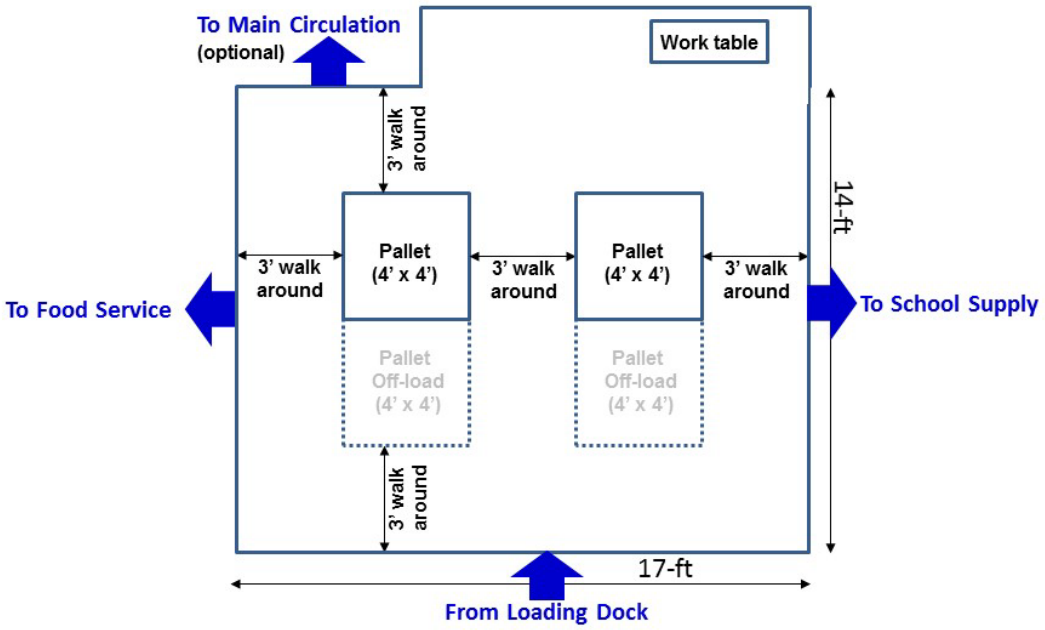
Functional Area Description

The Receiving Room and Loading Dock shall support the safe inspection and unloading of all deliveries for Food Service as well as the School Supply/Storage Area. These space shall also comply with any additional requirements identified in the DoDEA Physical Security Antiterrorism Design Guide.

Receiving Room

Minimum dimensions for the Receiving Room shall be 17'x14'/5.2m x 4.3m so that two pallets may be off-loaded and inspected simultaneously. This space shall provide direct access to and from the Loading Dock, School Supply/Storage Area, and Food Service (main building circulation access is not required).

The Receiving Room shall be equipped with a combination emergency eye wash, dedicated air ventilation system, and shut-off switch for the entire building. Provide space for a small table to process paperwork for deliveries. No filing cabinets, utility shelving, or staff workstations shall be located in this space.



Loading Dock

Each school shall have an exterior Loading Dock to receive deliveries for the Food Service and Central Supply/Storage Area. Building access to the Loading Dock shall be from the Receiving Room. The Loading Dock shall be designed and sized for vehicles that make regularly scheduled deliveries. Other considerations during design include, dock approach grade and drainage, apron space and surface material, dock height, dock equipment, edge markings, safety hand rails and building access door widths.

The Loading Dock door will be outfitted with electronic locks, card readers, audio/video intercom, and remote access capabilities (electronic door release). At a minimum, remote access locations (master station) shall include the Administration Suite, Food Service Office, and School Supply/Storage Area.
If applicable, provide exterior egress stair and ramp from the Loading Dock to apron grade, providing access for rolling hand carts. Stairs and ramp do not need to be covered.

If an overhead canopy is provided at the Loading Dock, the area shall be calculated as 50% for gross building area purposes.

Built-In Items (Not Used)

Plumbing

- Emergency eye wash

Equipment

- Refer to “DoDEA Physical Security Antiterrorism Design Guide” for additional information.

FACILITY ELEMENTS & REQUIREMENTS – BUILDING SERVICES

MAIN TELECOMMUNICATIONS ROOM (TR-1)

Area Description	sf	sm	Notes
Main Telecommunications Room	200	18.6	Minimum dimensions 10'x16'/3.0x4.9m

Adjacencies

The Main Telecommunications Room (TR1) does not have specific adjacency requirements, but should be located for efficient cable routing.

Crossroads Elementary School, MCB Quantico, VA
Waller, Todd, Todd & Sadler Architects / RRMM Architects

Functional Area Description

Each school shall contain one Main Telecom Room (TR-1) for network equipment. Refer to "DoDEA Facilities Management Guide: Technology System Design Guidelines – DoDEA-Network" for additional information. Minimum dimensions for the TR-1 are 10'x16'/3.0x6.9m. If additional area is required it shall be a part of the net-to-gross allowances provided in the Program for Design (PFD). Area allowances for Secondary Telecommunications Rooms shall be a part of the net-to-gross allowances as the number and size will be dependent on the specific configuration of the building and the allowable cable runs.

Built-In Items (Not Used)

Plumbing (Not Used)

Equipment

- Refer to "Technology System Design Guidelines – DoDEA Network" for additional information.

FACILITY ELEMENTS & REQUIREMENTS – BUILDING SERVICES

TECHNOLOGY SERVICE CENTER

Area Description	sf	sm	Notes
Technology Service Center	300	27.9	

Adjacencies

The Technology Service Center is usually located near the Main Telecommunications Room (TR-1), but it may also be located near the Information Center if the Educational Technologist (ET) and Administrative Technologist (AT) work closely together. Access to this space shall be from the main circulation, not thru an adjacent space.

Functional Area Description

This area consists of a staff workspace, repair area, and storage area. The workspace provides a desk and file storage for the Administrative Technologist (AT). The repair area provides space for maintenance and repair of equipment. This area shall contain a work surface large enough for multiple computers, stools, shelves, and an area for tool storage. The storage area provides space for storage and distribution of supplies and equipment. This area shall contain shelves and/or lockable cabinets.

Built-In Items (Not Used)

Plumbing (Not Used)

Equipment (Not Used)

FACILITY ELEMENTS & REQUIREMENTS – BUILDING SERVICES

RESTROOMS

Functional Area Description

The total number of toilets, lavatories, showers and drinking fountains shall meet minimum International Building Code (IBC) plumbing requirements. This Education Specification provides information specific to DoDEA schools, but shall not supersede any code requirements.

The type of toilet accessories, such as toilet tissue, soap, and paper towel dispensers shall be coordinated with the District/School to ensure that they are compatible with current supply contracts. In some cases dispensers are provided with the consumables and do not need to be specified as a built-in item in the construction project. The choice of paper towel dispensers or hand dryers shall be determined at the school level, but junction boxes for hand dryers shall be included in public restrooms for future flexibility.

Student Restroom – Neighborhoods

Restrooms for students in the Neighborhoods may be accessed from the Learning Hub or the main building circulation. Restrooms are generally located near the entrance to the Learning Hub or between two Neighborhoods for convenient access. Lavatories shall be within the restroom for student privacy. Consideration may be given to individual toilet rooms, rather than group toilets with multiple fixtures, if efficiencies are gained functionally or operationally.

Handicap Accessibility for Individual Restrooms (ADA/ABA shown in italics)

213.2 Exception 4 - Where multiple single user toilet rooms are clustered together at a single location, no more than 50 percent of the single user toilet rooms for each use at each cluster shall be required to comply with 603. A "cluster" is a group of toilet rooms proximate to one another. Generally, toilet rooms in a cluster are within sight of, or adjacent to, one another.

DoDEA Comment: If clusters of individual toilet rooms are used in lieu of group restrooms within the Neighborhoods, only 50% are required to be handicap accessible.

Learning Impaired – Moderate/Severe (LIMS) Restroom

Restrooms for LIMS students shall have a handicap accessible water closet, lavatory, shower and changing area accessible from the LIMS Learning Studio. The net area required for the LIMS Restroom shall be calculated as part of the net area of the Learning Studio. The changing area shall accommodate a hydraulic changing table. 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 student.

Locker Rooms

Locker Rooms shall have restroom and shower facilities with the minimum number of fixtures as indicated in the Physical Education section.

Staff Restrooms

Staff restrooms shall be conveniently accessible from the Neighborhood and other instructional spaces. Staff restrooms are not specifically indicated in the building code and shall be provided at one restroom

per 10-15 staff. Staff restrooms are typically single restrooms and can be indicated as male/female or unisex. Staff restrooms may not be located within the Staff Collaboration areas. At least one staff restroom shall be included in the Administration Suite. At least one staff restroom with a shower shall be located near the Gymnasium and shall be accessible from the Gym or the main circulation path. Carefully consider the overall distribution of staff restrooms throughout the school facility.

Public Restrooms

Public Restrooms shall be provided near areas commonly accessed by the public after hours (Commons, Performance, Gymnasium, Information Center, etc.). Ensure that all instructional spaces outside the neighborhood (Art, Music, PE, etc.) have convenient access to a public restroom.

Health Suite Restroom

The Health Suite shall have a handicap accessible water closet, lavatory, and shower.

Food Service Restroom

Food Service shall have a single ADA compliant Restroom near the breakroom. In Germany, provide separate male and female Restrooms sized to German handicap codes. Any additional building area required shall be taken from the overall Food Service allocation or the net-to-gross allowance.

Field House Restroom

Men's and Women's public restrooms and drinking fountains shall be provided in the Field House to serve the spectators at the athletic fields. Shower and locker facilities for athletes are not provided at the Field House.

Miscellaneous Plumbing Notes

- Sinks with bubblers shall never be provided in any area of the school because of hygiene issues.
- All water fountains shall have water bottle filler.