

Damp

Bureau of Indian Affairs

Office of Facilities Management and Construction

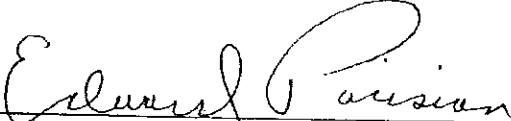
Office of Indian Education Programs



EDUCATIONAL SPACE CRITERIA HANDBOOK

November 1, 2005

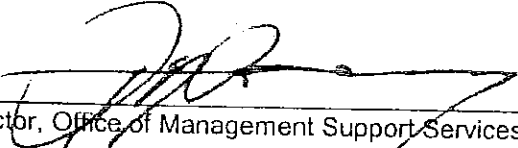
BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Signatures



Director, Office of Indian Education Programs

11-10-05

Date



Director, Office of Management Support Services

11/10/05

Date

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Table of Contents**

Table of Contents

1.	GENERAL	1
1.1	PURPOSE.....	1
1.2	POLICY.....	1
1.3	AUTHORITY.....	4
2.	CRITERIA HANDBOOK APPLICATION	6
2.1	APPLICATION.....	6
2.2	REPLACEMENT SCHOOL SPACE PLANNING.....	6
2.3	EXISTING SCHOOL – ADEQUACY ANALYSIS.....	8
3.	GROSS SQUARE FOOTAGE.....	9
3.1	CIRCULATION AND NON-SPECIFIC PROGRAM SPACES.....	9
3.2	DETERMINING GROSS SQUARE FOOTAGE USING THE PLANNING METHOD.....	9
4.	INTERDISCIPLINARY/STANDARD ELEMENTARY, MIDDLE AND HIGH SCHOOL CLASSROOMS	12
4.1	SCHOOL GRADE LEVELS.....	12
4.2	CLASSROOMS.....	12
5.	DEDICATED/SPECIALIZED ELEMENTARY, MIDDLE AND HIGH SCHOOL CLASSROOMS	14
5.1	SCHOOL GRADE LEVELS.....	14
5.2	COMPUTER LABS.....	14
5.3	SCIENCE LABORATORIES.....	14
5.4	HOME ECONOMICS.....	15
5.5	PRACTICAL AND FINE ARTS FOR ELEMENTARY AND MIDDLE SCHOOLS.....	15
5.6	PRACTICAL ARTS FOR HIGH SCHOOLS.....	16
5.7	FINE ARTS FOR HIGH SCHOOLS.....	16
5.8	VOCATIONAL EDUCATION.....	17
6.	SPECIAL PROGRAMS	19
6.1	FAMILY AND CHILD EDUCATION (FACE).....	19
6.2	SPECIAL EDUCATION.....	19
6.3	GIFTED AND TALENTED.....	20
7.	ADMINISTRATION.....	21
7.1	ADMINISTRATION SPACE.....	21
8.	MEDIA CENTER (LIBRARY).....	22
8.1	MAXIMUM SPACE ALLOWANCE FOR MEDIA CENTER (LIBRARY).....	22
9.	PHYSICAL EDUCATION – INDOOR.....	23
9.1	MULTI-PURPOSE ROOM/GYMNASIUM FLOOR AREA.....	23
9.2	BLEACHER SEATING.....	23
9.3	AUXILIARY PHYSICAL EDUCATION ROOM.....	23
9.4	SHOWER/DRESSING AREA.....	24
9.5	LOCKER ROOMS.....	24
9.6	RESTROOMS.....	24
9.7	PHYSICAL EDUCATION STAFF OFFICES.....	24
9.8	PORTABLE PLATFORM/STAGE.....	24

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Table of Contents**

9.9	STORAGE.....	25
9.10	CONCESSION AREA.....	25
10.	PHYSICAL EDUCATION – OUTDOORS.....	26
10.1	PLAY AREA AND FIELDS.....	26
10.2	FOOTBALL FIELD AND TRACK.....	26
11.	DINING ROOM AND KITCHEN AREA.....	27
11.1	DINING ROOM.....	27
11.2	KITCHEN AREA.....	27
12.	AUXILIARY SPACES.....	28
12.1	AUDITORIUM.....	28
12.2	SWIMMING POOLS.....	28
13.	SUPPORT SERVICES.....	29
13.1	BUS GARAGES AND/OR YARDS.....	29
13.2	BUS LOADING AREA.....	29
13.3	FACILITIES MAINTENANCE SHOP.....	29
13.4	CUSTODIAL CLOSETS AND STORAGE.....	30
13.5	GENERAL STORAGE.....	30
13.6	EQUIPMENT ROOMS (INCLUDING COMPUTER/SERVER ROOMS).....	30
14.	DORMITORIES.....	31
14.1	RESIDENTIAL AREA.....	31
14.2	SUPPORT SPACE.....	32
14.3	RECREATIONAL AREA.....	33
14.4	AUTHORITY.....	33
15.	EMPLOYEE QUARTERS.....	34
15.1	EMPLOYEE QUARTERS.....	34
16.	SITE.....	36
16.1	SITE.....	36
APPENDIX A. DEVELOPMENT PROCESS.....		A-1
APPENDIX B. EXAMPLES – REPLACEMENT SCHOOLS.....		B-1
APPENDIX C. EXAMPLE – EXISTING SCHOOL.....		C-1
APPENDIX D. REPLACEMENT SCHOOL SPACE PLANNING.....		D-1

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Chapter 1. General**

1. General

1.1 Purpose.

- A. The Bureau of Indian Affairs (Bureau) is responsible for providing facilities to support educational programs for eligible Indian School Equalization Program (ISEP) students. The following criteria are intended to provide guidance for use in the planning phase of replacement school construction, renovation of existing schools, and evaluation of the adequacy of existing school facilities.
- B. The purpose of developing the Educational Space Criteria is to provide a standard method of evaluating space planning criteria for Bureau school facilities. The overall goal is to incorporate core instructional requirements with functional space needs and develop space standards for these needs that utilize existing national and state guidance to ensure that every Bureau school has enough space to effectively provide core programs based on each school's enrollment for each grade.

These space criteria have been adjusted to address the reality of student population ranges that exist in Bureau schools. The desired outcome is a reliable and practical methodology for translating programmatic requirements into actual space requirements. This handbook provides a formalized methodology for Bureau-funded schools to establish minimum requirements for new construction and provide an evaluation methodology to determine modifications and upgrades to existing schools required to meet core education functional requirements.

- C. This release supersedes any criteria used or previously issued in conjunction with Bureau education facilities, with exception given to provisions contained in this supplement that are inconsistent with the rules and regulations contained in Title 25 of the Code of Federal Regulations (CFR), Subchapter E. When inconsistent, the provision of the rules and regulations contained in Subchapter E shall take precedence.
- D. State and regional education accreditation association space requirements applicable in the particular state or region where the school is located may be used instead of, but not in combination with, these criteria. Before any additional program requirements will be applied, they must be defined in equal or greater detail than the criteria presented in this handbook and must be approved by the Office of Indian Education Programs (OIEP).

1.2 Policy.

- A. Educational programs, activities and enrollment are the primary determinants of education space requirements. Spaces must accommodate the program as set forth in the education specifications under 25 CFR Part 36, as opposed to requiring that the program conforms to the space. Facilities must accommodate the educational program needs in accordance with Bureau

BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Chapter 1. General

standards and state and regional accreditation requirements. To meet these goals, it is important for the educational program to be fully defined and approved by the OIEP early in the planning stage. Space requirements, construction, and operation and maintenance costs will be influenced and affected by program organization and space utilization.

- B. Bureau schools are constructed to meet the educational needs of eligible ISEP students, as defined in 25 U.S.C. §2007(f) and are not built primarily for community activities or non-school use. Although the community is encouraged to use the school, space specifically for staff or community use is not funded under education facilities construction.
- C. Bureau schools will be constructed or improved and repaired so as to comply with all applicable health and safety codes and standards as pursuant to 25 U.S.C. §2005(b).
- D. Bureau schools shall be constructed or improved and repaired to comply with 41 CFR 101-19.6 Appendix A Uniform Federal Accessibility Standards (UFAS), §504 of the Rehabilitation Act and 28 CFR Part 36 Americans with Disabilities Act Accessibility Guidelines (ADAAG). Elementary schools serving children in grades 6 and below should also comply with the Architectural Transportation and Barriers Compliance Board's "Recommendation for Accessibility to Serve Physically Handicapped Children in Elementary Schools."
- E. A variety of factors affect the amount of space that can be provided for an educational program. These factors are based on state and federal government regulations, environmental and conservation practices, construction costs, and other factors related more directly to the education program, including:
 - 1) Educational program requirements and standards. The primary factor in allocating space for a school is the educational program it is designed to support, as defined in the education specifications. The facility spaces must be designed to fit an education program. The local school establishes the teaching methods and determines which learning process should be emphasized. Curriculum requirements are established by the Bureau, state and tribal Departments of Education, and tribal school boards.
 - 2) Enrollment projections will be based on the current enrollment policy for the Bureau of Indian Affairs. Enrollment projections shall be based on the current enrollment policy for the Bureau of Indian Affairs. The Director, OIEP is responsible for determining the enrollment capacity based on current enrollment policy. The determination of space allocation for enrollment capacity will be joint concurrence of the Director, OIEP and Director, OMSS in accordance with approved space criteria. When concurrence cannot be achieved, the Assistant Secretary, Indian Affairs will make the final determination.

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Chapter 1. General**

- 3) Teacher-student ratio. *Teacher-student ratios* are specified in 25 CFR Part 36—Minimum Academic Standards for the Basic Education of Indian Children and National Criteria for Dormitory Situations. Class sizes will vary according to the courses offered and/or the grade levels included.
- 4) Schedule and curriculum.
 - a) *Schedule* refers to the number of class periods per day and week and is usually developed along with the curriculum. The number of class periods per day, student class sizes, the number and length of class periods per week, and the number of students enrolled affect the number and size of teaching and other spaces within a school facility.
 - b) *Curriculum* refers to all the subjects or class courses to be taught at a school. The major portion of the curriculum is dictated by the courses that are required for a school to be accredited and are called *required courses*. Additional courses offered are referred to as *electives* or *elective courses*. The curriculum must be realistic and balanced to properly provide the staff and budget necessary to implement the curriculum at each school.
- 5) Utilization of space and efficiency of utilization.
 - a) *Utilization of space* refers to a space being occupied or utilized versus the space being vacant.
 - b) *Efficiency of utilization* refers to the efficient use of spaces. To achieve desirable efficiency of utilization, a classroom must function at a minimum capacity of 75% to 80% for middle and high schools and 90% to 95% for elementary schools for most of the class day.
- 6) Accreditation standards. Class size and course offerings are factors when determining the amount and type of space needed to meet accreditation requirements. Bureau schools must meet state or regional accreditation requirements.
- 7) Flexibility of space. Multi-use space should be considered, as well as space that can be divided into different configurations to provide maximum adaptability to a variety of uses as educational programs and teaching techniques change. These factors are important considerations in maximum space allowance. Irregular classroom spaces and sizes shall be avoided.
- 8) Combination of grades offered. The combination of grades offered at a Bureau school must be considered in determining the amount and types of spaces needed. Bureau schools may include elementary and middle school grades (K–8), middle school and high school grades (7–12), or elementary, middle school and high school grades (K–12).

BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Chapter 1. General

- 9) Climate and length of school year. These factors have a great deal of influence not only on operation and maintenance expense, but also on certain building and site features.
- 10) Operation and Maintenance. The cost of operation and maintenance of the school facility is a major education space consideration. The facility must be energy efficient and should be designed so that energy consumption is minimized when a wing of a large building is not being used. Building design and construction must be conducive to efficient operation and maintenance to minimize long-term costs.
- a) *Operations* includes cost categories of services that are required to meet minimal mission objectives. These include salaries, utilities, custodial services, pest control, refuse collection and disposal, expendable facilities equipment, protection services, program administration, GSA vehicle rental, communication, and work supervision.
- b) *Maintenance* includes preventative and unscheduled maintenance.
- 11) Isolation. A number of Bureau schools are located in isolated areas, making it necessary to provide support facilities not commonly found in urban public schools. In such instances, Bureau schools may need to be self-sufficient because no central service facility is available. Complete food service, library, athletic, administrative, employee housing, facilities management, dormitories, and other support facilities may be required for schools in isolated areas.

F. With regard to replacement school construction projects, the information contained in this handbook is to be used for planning purposes. The designers and architects will, in turn, use the space criteria to make design-related decisions that are beyond the scope of this document including but not limited to the following items: optimal facility layout, size and placement of parking areas, specifications and size of electrical and mechanical equipment; and placement of restrooms facilities.

1.3 Authority. The authority for issuing this handbook is contained in the following citations:

- A. Title 25 U.S.C. §2 (Duties of Commissioner)
- B. Title 25 U.S.C. §9 (Regulations by President)
- C. Title 25 U.S.C. §13 (Expenditure of Appropriations by the Bureau)
- D. Title 25 U.S.C. §295 (Supervision of Expenditure of Appropriations for School Purposes)
- E. Title 25 U.S.C., Chapter 22, §2001 (Accreditation for the Basic Education of Indian Children in Bureau of Indian Affairs Schools)
- F. Title 25 U.S.C., Chapter 22, §2002 (National Criteria for Home-living Situations)
- G. Title 25 U.S.C., Chapter 22, §2003 (Codification of Regulations)
- H. Title 25 U.S.C., Chapter 22, §2005 (Facilities Construction)

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Chapter 1. General**

- I. Title 25 U.S.C., Chapter 22, §2006 (Bureau of Indian Affairs Education Functions)
- J. Title 25 U.S.C., Chapter 22, §2016 (Rights of Indian Students)
- K. *Title 25 U.S.C., Chapter 22, §2017 (Regulations).

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Chapter 2. Criteria Handbook Application**

2. Criteria Handbook Application

2.1 Application. The space criteria contained in this handbook have been compiled to assist the Bureau with two planning aspects: (1) to provide guidance for the design and construction of replacement schools and (2) to assess existing Bureau schools to determine if the space utilized for education is functionally adequate to conduct the Bureau's required programs. This section describes in detail both planning methods. Practical examples of each are contained in Appendices B and C.

2.2 Replacement School Space Planning. The criteria contained in this handbook must be followed during the planning and design phases of replacement school construction to ensure that the Bureau provides schools that are educationally adequate. Five steps must be followed when using these criteria for construction planning: (1) obtain certified ISEP enrollment data, (2) reconcile fractional enrollment, (3) apply criteria to determine net square footage, (4) identify eligible non-core programs, and (5) convert net square footage to gross square footage. (A *non-core program* is any program not specifically mentioned in this handbook.) Each step is described below.

A. Step 1. Obtain Certified ISEP Enrollment Data.

Accurate enrollment estimates are the cornerstone of the Bureau's education space planning program. If enrollment is overstated, the Bureau will incur unnecessary construction, operation and maintenance costs. Conversely, if enrollment is understated, classrooms will become overcrowded and student needs will not be met. Therefore, the analysis of the student design capacities must be based on accurate enrollment projections to optimize the Bureau's education programs while providing federal funding stewardship.

Using the most recent policy, the candidate school must work closely with the OIEP to determine the enrollment projection.

B. Step 2. Reconcile Fractional Enrollment.

The criteria in this handbook specify the maximum number of pupils per class for each grade level. However, the number of pupils within a grade level will rarely be exactly the same as the criteria. For example, if a school has a kindergarten enrollment of 44 pupils, the criteria dictate that no more than 20 kindergarten pupils are taught in any kindergarten classroom—so, by dividing 44 by 20, the result is 2.20. *Fractional enrollment* refers to the portion of the result that is not a whole number. In this example, there would be enough pupils for two full-size classrooms and a "fraction" (0.20) of an additional classroom.

The fractional enrollment must be reconciled for each grade level during the planning processes. If done correctly, the school will have adequate space

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Chapter 2. Criteria Handbook Application**

for all of its programs without having to build and maintain unnecessary space. From a planning perspective, the rule is as follows:

- 1) For fractional enrollment less than 0.5, a half-size classroom is warranted.
- 2) For fractional enrollment greater than or equal to 0.5, a full-size classroom is warranted.

During the design phase, the architects and engineers working on the project will determine the most appropriate configuration to account for multiple grades with fractional enrollment. Fractional spaces can be combined by the architects and engineers for the best utilization of space.

C. Step 3. Apply Criteria to Determine Net Square Footage.

After the enrollment figures are analyzed, space criteria will be utilized to determine the facility space allocations for the core programs. The preferred method of applying this criteria is to begin at the top of the spreadsheet in Appendix D and proceed line by line through the criteria to document the maximum space allowance for each program.

D. Step 4. Identify and Approve Eligible Non-Core Programs.

These criteria address only *core* programs for the Bureau; however, many schools conduct programs the Bureau does not recognize as core. A *non-core program* is any program not specifically mentioned in this handbook; i.e., Gifted and Talented, Advanced Reading and Math, Tribal Specific Cultural Classes, NASA lab, and equestrian.

When an approved non-core program is requested, the planner will recommend the amount of space needed to accommodate the non-core program. The Director, OIEP approves non-core programs and final determination of space allocation for non-core programs will be a joint concurrence of the Director, OIEP and Director, OMSS. When concurrence cannot be achieved, the Assistant Secretary, Indian Affairs will make the final determination

E. Step 5. Convert Net-to-Gross.

The maximum space allowances identified in this handbook for specific programs are specified in terms of net square footage. Additional square footage will be added to the total net square footage to provide for circulation and related non-specific program spaces, including mechanical equipment rooms, utility chases, student and public restrooms, corridors, stairwells, ramps, and wall thickness. The total gross square footage for an education facility equals the total net square footage plus circulation allowances and related non-specific program space. A detailed description of the net-to-gross conversion is included in Section 3 of this handbook.

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Chapter 2. Criteria Handbook Application**

2.3 Existing School – Adequacy Analysis. In addition to construction planning, this handbook should be used to assess existing school facilities by comparing the actual space to the criteria for each program. There are four steps that should be followed when using this handbook for adequacy analysis: (1) obtain certified ISEP enrollment data, (2) apply criteria to determine net square footage, (3) identify and quantify actual programmatic space, and (4) analyze the data. These steps are described below:

A. Step 1. Obtain Certified ISEP Enrollment Data.

Using the most recent policy, the candidate school must work closely with the OIEP to determine the projected enrollment for the existing school.

B. Step 2. Apply Criteria to Determine Net Square Footage.

Once the certified ISEP enrollment data is obtained, the criteria will be analyzed to determine space requirements for the core programs. The preferred method of applying the criteria is to begin at the top of the spreadsheet in Appendix D and proceed line by line through the criteria to document the maximum space allowance for each program.

C. Step 3. Identify and Quantify Actual Programmatic Space.

To begin identifying and quantifying actual programmatic space, a floor plan of the education facility should be obtained or developed. With this floor plan in hand, the architects and engineers involved should tour the school with the principal or some other qualified individual who is familiar with the facility and the programs taking place therein. Every space should be labeled with a programmatic code and the square footage should be quantified and verified. The level of detail should be consistent with that found in the criteria.

D. Step 4. Analyze the Data.

The preferred method of analyzing the data is to develop a spreadsheet similar to the one in Appendix C. For every applicable program, the guideline space, actual space, and variance from the criteria should be documented.

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Chapter 3. Gross Square Footage**

3. Gross Square Footage

3.1 Circulation and Non-specific Program Spaces.

- A. The maximum space allowances identified in this handbook for specific programs are specified in terms of net square footage. Additional square footage will be added to the total net square footage to provide for circulation and related non-specific program spaces including mechanical equipment rooms, utility chases, student and public restrooms, corridors, lobbies, vestibules, stairwells, ramps, elevator shafts, and wall thickness.
- B. The total gross square footage for an educational facility is calculated as the total net square footage plus circulation allowances and related non-specific program space. Gross square footage is calculated utilizing grade level, programs, and student populations as described in this handbook. Appendix B describes the process of calculating gross square footage.

3.2 Determining Gross Square Footage Using the Planning Method.

- A. The *Planning Method* utilizes the criteria in this handbook to calculate the net square footage. From this calculation, additional square footage is added to provide for circulation and related non-specific program spaces such as mechanical equipment rooms, utility chases, student and public restrooms, corridors, lobbies, vestibules, stairwells, ramps, elevator shafts, and wall thickness.
- B. Some schools will include square footage requirements for non-core programs that have been approved by the Director of OIEP. The space for these non-core programs will be added to the net square footage of all the other programs to determine the total net square footage for the school facility.
- C. If an individual program requires circulation space within its boundaries, this circulation space will be included in the net square footage allowances for that program. For example, if the criteria define a high school gym as a 50' x 84' basketball court with 10' setbacks on each side and on each end, the setbacks will be used for circulation. Therefore, the program requires 7,280 net square feet (70' x 104') to function properly. The net square footage of this program will be added to net square footage of all the other programs to determine the total net square footage for the school facility.
- D. After the programmatic space has been determined and based on the total net square footage, various factors will be applied to calculate the amount of space needed throughout the school for circulation and for non-specific programs such as mechanical equipment areas, restrooms, passageways, and wall thickness.
 - 1) *Passageways* (13%). To calculate the amount of allowable space for passageways, multiply the total net square footage of the school facility

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Chapter 3. Gross Square Footage**

by a factor of 13 percent. Passageways include such areas as corridors, lobbies, vestibules, stairwells, and interior ramps.

- 2) *Mechanical/Electrical Equipment Areas (2%)*. To calculate the amount of allowable space for mechanical/electrical equipment areas, multiply the total net square footage of the school facility by a factor of 2 percent. Mechanical/electrical equipment areas include mechanical equipment rooms, electrical closets, computer server closets, elevator shafts, and utility chases.
- 3) *Restrooms (2%)*. Program-specific restrooms such as those used for the health unit, physical education, kindergarten and first grade classes will be included in the total net square footage of the school facility. To calculate the amount of allowable space for restrooms, multiply the total net square footage of the school facility by a factor of 2 percent. Restrooms include general-use public and student facilities.
- 4) *Wall Thickness (8%)*. To calculate the amount of allowable space for wall thickness, multiply the total net square footage of the school facility by a factor of 8 percent. Wall thickness includes the floor plan area occupied by interior and exterior walls, doors and windows.

E. The following brief example describes the process of determining the gross square footage using the Planning Method. Appendix B contains more thorough examples of this principal.

Example: The Bureau is considering the construction of a replacement school to accommodate an approved Family and Child Education (FACE) program for grades K-5.

- 1) The enrollment for each grade is as follows:

FACE Children	20 Students
Kindergarten	20 Students
First Grade	22 Students
Second Grade	22 Students
Third Grade	22 Students
Fourth Grade	25 Students
<u>Fifth Grade</u>	<u>25 Students</u>
Total Enrollment	156 Students

- 2) To determine the total net square footage for the proposed school, the enrollment numbers must be applied to the space standards. The resulting space allowances are as follows:

Interdisciplinary Classrooms	6,390 SF
Dedicated Classrooms	2,378 SF
FACE	2,740 SF
Special Education	3,580 SF
Administration	1,690 SF

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Chapter 3. Gross Square Footage**

Library	1,470 SF
Physical Education	5,660 SF
Food Services / Dining	2,938 SF
<u>Support Services</u>	<u>1,350 SF</u>
Total Net Square footage	28,196 SF

- 3) To calculate the circulation and non-specific program space, the total net square footage is multiplied by each of the corresponding factors, as follows:

Passageways (13% of 28,196 SF)	3,665 SF
Mechanical/Elect Equipment Areas (2% of 28,196 SF)	564 SF
Restrooms (2% of 28,196 SF)	564 SF
<u>Wall Thickness (8% of 28,196 SF)</u>	<u>2,255 SF</u>
Total Circulation/Non-specific Program Space	7,048 SF

- 4) The total allowable gross square footage for the proposed school facility is calculated by adding the total net square footage (28,196 SF) to the circulation and non-specific program space (7,049 SF) to arrive at the total allowable gross square footage of 35,245 SF.

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK**

Chapter 4. Interdisciplinary/Standard Elementary, Middle and High School Classrooms

4. Interdisciplinary/Standard Elementary, Middle and High School Classrooms

4.1 School Grade Levels. Elementary and/or Middle Schools that have grades Kindergarten through 8, or any combination of these grades are considered day or boarding schools. This section also applies to day or boarding schools that include grade 9, but do not include other high school grades. High schools are day or boarding schools that include grades 9 through 12, or any combination of these grades.

4.2 Classrooms. The following are maximum space allowances for elementary, middle and high school classrooms in which *non-amenity specific courses* including English, Math, and Social Studies are taught. *Non-amenity specific courses* are those in which the curriculum does not require any special equipment or classroom features.

A. Maximum space allowance For Elementary, Middle and High School Classrooms are as follows:

Classroom Grade	Maximum Number of Students	Square Feet per Student	Standard Size in Square Feet
Kindergarten	20	60	1200
1	22	40	880
2	22	40	880
3	22	40	880
4	25	35	875
5	25	35	875
6	25	35	875
7	25	35	875
8	25	35	875
9	25	35	875
10	25	35	875
11	25	35	875
12	25	35	875

B. In addition to the space allocations for standard instructional space in 4.2A, storage areas, including closets and cabinets, of 80 square feet of space will be provided in each interdisciplinary classroom.

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK**

Chapter 4. Interdisciplinary/Standard Elementary, Middle and High School Classrooms

- C. A separate handicapped-accessible male and female restroom with toilet and sink of approximately 80 square feet of space will be provided for kindergarten and first grade classrooms only. To the extent possible, these restrooms shall be located between kindergarten and first grade classrooms.
- D. Multi-grade classroom space, or classroom space designed to accommodate multiple classes, will be based on the standard size of the lower grade, not to exceed 880 SF.
- E. Bilingual Education and/or Cultural Studies Programs will utilize existing interdisciplinary standard size classroom(s).

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK**

Chapter 5. Dedicated/Specialized Elementary, Middle and High School Classrooms

- 5. Dedicated/Specialized Elementary, Middle and High School Classrooms**
- 5.1 School Grade Levels. Elementary and/or middle schools are considered day or boarding schools that have grades K–8, or any combination of these grades. This section also applies to day or boarding schools that include grade 9, but do not include other high school grades. High schools are day or boarding schools that include grades 9–12 or any combination of these grades.
- 5.2 Computer Labs. All schools, regardless of grade level or enrollment, will provide a minimum of one computer lab to accommodate a maximum of 24 students at 37 square feet per student for a total of 888 square feet.
- A. In addition to the space allocations for instructional space, storage areas to include closets and cabinets of 120 square feet of space will be provided in each classroom.
- 5.3 Science Laboratories.
- A. For grades 7–8, regardless of enrollment, provide at least one general lab to accommodate a maximum of 24 students at 60 square feet per student for a total of 1440 square feet.
- B. Specialized labs will be provided for approved programs. For grades 9–12, a determination will be made by the OIEP based on approved existing curriculum, staffing and funding, the type and number of the labs provided (general science, earth science, physical science, chemistry, physics, biology). At a minimum, one multi-purpose lab will be provided to accommodate a maximum of 24 students at 60 square feet per student for a total of 1440 square feet.
- C. For schools that contain both middle school and high school grades, a determination will be made by the OIEP based on approved existing curriculum, staffing and funding, whether separate science laboratories will be allowed for both groups. At a minimum, one multi-purpose lab will be provided to accommodate both groups, with a maximum of 24 students at 60 square feet per student for a total of 1440 square feet.
- D. In addition to the space allocations for instructional space and storage areas to include closets and cabinets, 120 square feet of space will be provided in each Science Lab classroom.
- E. For each Science Lab classroom, teacher preparation space is included in the instructional space.

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK**

Chapter 5. Dedicated/Specialized Elementary, Middle and High School Classrooms

5.4 Home Economics.

- A. A Home Economics classroom will only be provided for middle schools with approved, existing OIEP curriculum, staffing and funding. The Home Economics classroom will accommodate a maximum of 16 students at 60 square feet per student for a total of 960 square feet. Additional storage space will not exceed 200 square feet.

- B. Home Economics will be taught in one space for high schools with approved, existing OIEP curriculum, staffing and funding and an enrollment in grades 9 through 12 of less than 300 students. The classroom will accommodate a maximum of 16 students at 60 square feet per student for a total of 960 square feet. Additional storage space will not exceed 200 square feet.

- C. For high schools with approved, existing OIEP curriculum, staffing and funding and an enrollment in grades 9 through 12 of more than 300 students, clothing design and food preparation will be taught in separate spaces.
 - 1) *Clothing Design.* The maximum space allowance for a Clothing Design classroom to accommodate a maximum of 16 students at 65 square feet per student is 1040 square feet. Additional storage space will not exceed 200 square feet.

 - 2) *Food Preparation and Nutrition.* The maximum space allowance for a Food Preparation and Nutrition classroom to accommodate a maximum of 16 students at 75 square feet per student is 1200 square feet. Additional storage space will not exceed 200 square feet.

5.5 Practical and Fine Arts for Elementary and Middle Schools.

- A. For elementary and middle schools with an enrollment of less than 300 students, only one classroom will be provided for Practical and Fine Arts. This classroom size should be large enough to accommodate the class size for grades 4 through 8, if present at the school (1250 square feet at 50 square feet per student for a maximum of 25 students). If only grades 1 through 3 are present, the classroom must accommodate a maximum of 22 students at 50 square feet per student for a total of 1100 square feet, as per 25 CFR Part 36.11. Additional storage space will not exceed 120 square feet.

- B. For elementary/middle schools with an enrollment for grades 4 through 8 of more than 300 students, an additional/separate classroom will be provided for music appreciation, choral, and band. The maximum space allowance to accommodate a maximum of 25 students at 40 square feet per student is 1000 square feet. An additional 120 square feet for instrument and music storage will also be provided.

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK**

Chapter 5. Dedicated/Specialized Elementary, Middle and High School Classrooms

- C. For schools containing both high school grades and middle/elementary school grades, the Director of OIEP will determine whether or not the additional space for practical arts will be allowed in the lower grades, based on approved existing curriculum, staffing and funding. At a minimum, the criteria in Section 5.6 – Practical Arts for High Schools and Section 5.7 – Fine Arts for High Schools – should be followed.

5.6 Practical Arts for High Schools.

- A. At a minimum, a classroom and general storage room will be provided for Practical Arts for high schools. The minimum classroom and general storage requirements for high schools are as follows:
- 1) *Classroom.* The maximum space allowance to accommodate a maximum of 25 students at 60 square feet per student is 1500 square feet.
 - 2) *General Storage.* The maximum space allowance is 150 square feet.
- B. For a high school enrollment of more than 300 students, a determination will be made by the OIEP based on approved existing curriculum, staffing and funding, which of the following, or combination of the following, will be provided:
- 1) *Flammable Chemicals Storage.* The appropriate square footage for a fireproof storage cabinet will be provided in accordance with NFPA 30, Section 4-3.
 - 2) *Project Storage.* The maximum space allowance is 200 square feet.
 - 3) *Kiln Room.* It is permissible to use a self-contained kiln in the classroom; otherwise, a fire-rated room of no less than 100 square feet should be provided.
 - 4) *Green Ware (Pottery) Room.* The maximum space allowance is 150 square feet.

5.7 Fine Arts for High Schools.

- A. A Music/Choral classroom and instrument storage space will be provided for high schools, as follows:
- 1) *Music/Choral Classroom.* The maximum space allowance for a choral room is 900 square feet at 30 square feet per student for up to 30 students plus 25 square feet for each additional student.

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK**

Chapter 5. Dedicated/Specialized Elementary, Middle and High School Classrooms

2) *Instrument Storage.* The maximum space allowance is 150 square feet or 5 square feet per program participant, whichever is greater.

B. For an enrollment of more than 300 students, a determination will be made by the OIEP based on approved existing curriculum, staffing, and funding which of the following, or combination of the following, will be provided:

1) *Band Room and/or Choral Room.* The maximum space allowance for a band room or a band and choral room to accommodate up to 30 students at 40 square feet per student is 1200 square feet plus 30 square feet for each additional student.

2) *Uniform and Music Storage.* The maximum space allowance is 150 square feet or 3 square feet per student, whichever is greater.

3) *Instrument Repair Area.* The maximum space allowance is 80 square feet.

4) *Practice Rooms.* The maximum space allowance is 75 square feet per room for a maximum of two rooms.

5) *Instructor's Office and Library.* The maximum space allowance is 250 square feet.

5.8 Vocational Education.

A. Vocational education will only be provided for middle schools with approved, existing OIEP curriculum, staffing and funding. The approved middle schools will provide a classroom to accommodate a maximum of 16 students at 120 square feet per student for a total of 1920 square feet. Additional material storage space of not to exceed 600 square feet will be provided. Tool and project storage of 200 square feet, and ventilated paint storage as per Uniform Building Code requirements will be provided.

B. At a minimum for high schools, provide one multi-use vocational program space to accommodate a maximum of 16 students at 120 square feet per student not to exceed 1920 square feet. Additional material storage space will be provided, not to exceed 600 square feet. Tool and project storage of not to exceed 200 square feet, and ventilated paint storage as per Uniform Building Code requirements will be provided. A determination will be made by the Director of OIEP based on curriculum, staffing and funding which of the following, or combination of the following, will be provided. Specialized rooms based on approved programs will be provided.

C. For Industrial Arts, Electrical, Metal, Wood, and Auto Shops only, the following maximum space allowances apply.

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK**

Chapter 5. Dedicated/Specialized Elementary, Middle and High School Classrooms

- 1) *Industrial Arts Shop.* The maximum space allowance is 2240 square feet at 140 square feet per student to accommodate a maximum of 16 students.
- 2) *Electrical Shop.* The maximum space allowance is 1680 square feet at 105 square feet per student to accommodate a maximum of 16 students.
- 3) *Metal Shop.* The maximum space allowance is 2080 square feet at 130 square feet per student to accommodate a maximum of 16 students.
- 4) *Wood Shop.* The maximum space allowance is 1920 square feet at 120 square feet per student to accommodate a maximum of 16 students.
- 5) *Auto Shop.* The maximum space allowance is 2400 square feet at 150 square feet per student to accommodate a maximum of 16 students. In addition, an auto parts storage area of 300 square feet will be provided.
- 6) *Tool and Project Storage.* The maximum space allowance is 200 square feet.
- 7) *Paint Storage.* Paint storage areas will be ventilated and will meet Uniform Building Code requirements.
- 8) *Computer Aided Design (CAD).* The maximum space allowance is 888 square feet at 37 square feet per student for a maximum of 24 students.
- 9) *Agriculture/Economic Development.* The maximum space allowance is 1000 square feet at 40 square feet per student for a maximum of 25 students. In addition, material storage space of 200 square feet will be provided.
- 10) *Business Program.* The maximum space allowance is 925 square feet at 37 square feet per student for a maximum of 25 students. At a minimum, the number of receptacles should match student population to accommodate use of computers in the classroom. An existing interdisciplinary classroom of standard size should be utilized for accounting, finance, and additional business programs.
- 11) *Driver's Education.* When provided within an OIEP-approved curriculum, an existing standard size interdisciplinary classroom will be utilized.

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Chapter 6. Special Programs**

6. Special Programs

6.1 Family and Child Education (FACE).

A. Under the FACE program, the size of classrooms will be determined as follows:

- 1) *Child Classroom.* To accommodate 3- and 4-year old children, classrooms will accommodate a maximum of 20 students at 60 square feet per student for a total of 1200 square feet. This space will include both wet and dry areas.
- 2) *Adult Classroom.* To accommodate adults under the program, classrooms will accommodate a maximum of 15 students at 60 square feet per student for a total of 900 square feet.
- 3) *Restroom.* A separate handicapped accessible uni-sex restroom with toilet and sink of 100 square feet will be included.
- 4) *Kitchenette.* The maximum space allowance is 80 square feet.
- 5) *Storage Space.* For education program activities, the maximum space allowance is 100 square feet.
- 6) *Adjacent Office Space.* The maximum space allowance is 360 square feet to include files/record storage and counseling area.

B. Outdoor Play Area. For new construction, provide a separate enclosed/fenced area of 1500 square feet located adjacent to classroom space. Playground design should meet the ASTM Standard F 1487-98 and the handbook for Public Playground Safety published by the U.S. Consumer Product Safety Commission.

6.2 Special Education. In accordance with the Title I Amendments to the Individuals with Disabilities Education Act, the programs and size of classrooms will be determined as follows:

A. Therapy Classroom. The maximum space allowance is 880 square feet, a standard interdisciplinary classroom size, for a maximum of 12 students.

- 1) A separate handicapped accessible uni-sex restroom of 100 square feet, equipped with lifts or shower hardware will be provided.
- 2) A kitchenette not to exceed 80 square feet will be included in the classroom square footage.

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Chapter 6. Special Programs**

- B. Resource Classroom. A standard interdisciplinary classroom will be provided as needed for the grade level being educated in the space. The number of Resource Classrooms per school is dependent on enrollment and grade level.
- 1) *Grade Level*. Separate Resource classrooms must be provided for grades K-5, 6-8, and 9-12. For example, if a planner is designing a K-12 school with special education needs for all grade levels, the planner would include three resource classrooms (one for K-5, one for 6-8 and one for 9-12).
 - 2) *Enrollment*. Additional Resource classrooms must be provided for every 100 students within a grade level category (K-5, 6-8, 9-12). Using the previous example, the student enrollment for K-5 is 87, 6-8 is 157 and 9-12 is 68. For this example, one Resource classroom will be provided for K-5, two Resource classrooms will be provided for 6-8 and one Resource classroom will be provided for 9-12.
- C. Office/Testing Room. The maximum space allowance for a room used for hearing tests, learning disability tests and assessment tests is 200 square feet.

6.3 Gifted and Talented.

Classrooms. When there is a demonstrated need to accommodate a Gifted and Talented program, a determination will be made by the Director of OIEP based on approved existing curriculum, staffing and funding whether to provide special classroom(s) based on grade level and student population of the school. Upon approval, interdisciplinary classroom(s) of standard size will be provided.

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Chapter 7. Administration**

7. Administration

7.1 Administration Space. The maximum space allowance for Administration includes space for the principal's office, other offices, reception area, vault, school supplies, copy room, storage, bank, health unit, faculty lounge/faculty workroom, and conference room.

A. Maximum space allowance for Administration.

Total student design capacity based on enrollment projections				
Space	<100	100-199	200-399	400+
Principal's Office	150 SF	150 SF	150 SF	150 SF
Assistant Principal's Office*	NA	NA	150 SF	150 SF
Other Offices	120 SF	120 SF	240 SF	360 SF
Counseling	120 SF	120 SF	150 SF	300 SF
Reception/Secretary	200 SF	250 SF	300 SF	400 SF
Faculty Area**	300 SF	400 SF	600 SF	800 SF
Nurse's Office	150 SF	150 SF	150 SF	150 SF
Nurse's Office Restroom	50 SF	50 SF	50 SF	50 SF
Vault/Cash/Record Storage	100 SF	100 SF	125 SF	150 SF
Copy/Mail/ School Supplies Storage Room	150 SF	150 SF	150 SF	150 SF
Conference Room	200 SF	200 SF	200 SF	200 SF

* Small schools may not have an assistant principal.

** The Faculty area includes faculty lounge, faculty, workroom and faculty restrooms.

B. School Entry Lobby. A maximum of 200 square feet of space will be provided.

C. Maximum space allowance for Grant School Administrative Offices.

Total design capacity for Grant School Administrative Offices				
Space	<100	100-199	200-399	400+
Executive Director's Office	200 SF	200 SF	200 SF	200 SF
Business Manager's Office*	150 SF	150 SF	150 SF	150 SF
Procurement Staff Office	120 SF	120 SF	120 SF	120 SF
Administrative Assistant Office	120 SF	120 SF	120 SF	120 SF

* Grant School Administrative Offices will be provided upon the Grantee's documentation showing these employees are currently on staff. The number of offices provided will be determined by current staff to a maximum number of offices of four.

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Chapter 8. Media Center (Library)**

8. Media Center (Library)

8.1 Maximum space allowance for Media Center (Library).

Total student design capacity based on enrollment projections				
Usage	25-100	101-200	201-400	400+
Reading/Browsing/Stack (K-8)*	800 SF	800 SF	800 SF, plus 30 SF per student of 15% of the total student design capacity over 200	1700 SF, plus 30 SF per student of 15% of the total student design capacity over 400
Reading/Browsing/Stack (9-12)*	1200 SF	1200 SF	1200 SF, plus 30 SF per student of 15% of the total student design capacity over 200	2100 SF, plus 30 SF per student of 15% of the total student design capacity over 400
Professional Publications	75 SF	75 SF	75 SF	75 SF
Librarian Office	120 SF	120 SF	120 SF	120 SF
Audio/Visual	100 SF	175 SF	200 SF	200 SF
Storage/Workroom (K-8)	100 SF	200 SF	300 SF	350 SF
Storage/Workroom (9-12)	100 SF	100 SF	180 SF	200 SF
Circulation/Checkout	100 SF	100 SF	100 SF	100 SF
Student Project Room (K-8)**	NA	NA	500 SF	500 SF
Student Project Room (9-12)**	NA	NA	880 SF	880 SF
Conference Room	NA	NA	250 SF	300 SF

* For a school with grades K-9, space will be based on the standard size of the lower grade. For a school with grades K-10/11/12, the grade-level populations will be separated into K-8 and 9-12 to calculate the space for Reading/Browsing/Stack. The space needed for Reading/Browsing/Stack will be calculated for each group of grade levels based on those populations and added for a total square footage. All other areas will be calculated based on the total enrollment.

** This space is to be utilized as a research room equipped for computers for the Distance Learning Program. For the schools not receiving this space, the Distance Learning Program will utilize space in the Reading/Browsing/Stack area.

BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Chapter 9. Physical Education – Indoor

9. Physical Education – Indoor

9.1 Multi-Purpose Room/Gymnasium Floor Area. The multi-purpose room will NOT be used as the Dining Room. Reference NFPA code 12.1.7.1 and 13.1.7.1 for Occupant Load for egress calculations.

A. Multi-Purpose Room. For an elementary school with a design capacity of 25 to 200 students, provide a multi-purpose room. The maximum space allowance for a multi-purpose room is 4104 square feet (54' x 76').

B. Multi-Purpose/Mini-Gymnasium. For an elementary school with a design capacity of 200 or more students or middle school with a design capacity of 200 or less students, a 42' x 74' standard basketball court will be provided with 5-foot set-backs on each side and 8-foot set-backs on each end. Total square footage for the multi-purpose/mini-gymnasium is 4680 (52' x 90'), excluding bleacher seating.

C. Gymnasium.

1) For an elementary or middle school that includes grade levels 7 through 9 with a design capacity of 200 or more students, a gymnasium will be provided with a 42' x 74' standard basketball court, 5-foot setbacks on each side, and an 8-foot setback on each end. Total square footage is 4680 (52' x 90') excluding bleacher seating space. A larger size standard basketball court will not be provided even if there is grade 9 at the school.

2) For high schools, provide a full size gymnasium with a 50' x 84' American standard basketball court and 10 feet setbacks on each side and on each end, with a total square footage of 7280 (70' x 104'), excluding bleacher seating space. A multi-purpose room or multi-purpose/mini-gymnasium need not be provided in addition to the gymnasium, except as provided under section 9.3.

9.2 Bleacher Seating. Bleacher seating space for 200% of the approved enrollment projection will be provided at 3 square feet per student. This square footage is in addition to the gym floor square footage. A ten-foot setback should be reevaluated for size of bleachers so that minimum aisle space remains after bleachers are extended as per Uniform Building and Accessibility Codes. ADA and UFAS codes should be referenced for seating capacity. Seating shall be provided in the bleacher area to comply with ADA requirements.

9.3 Auxiliary Physical Education Room. For schools with a design capacity of more than 200 students in grades 9 through 12, an auxiliary physical education room may be provided with a maximum space allowance of 1700 square feet for wrestling, weight training, etc.

BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Chapter 9. Physical Education – Indoor

- 9.4 Shower/Dressing Area. In schools with grades ranging up to 6, no shower/dressing areas will be provided. Schools that include grade levels 7 through 9 and high schools will provide two handicapped accessible shower/dressing areas, one for males and one for females. The maximum space allowance of 300 square feet each will be provided, with the number of showerheads to be determined by the Uniform Building Code.
- 9.5 Locker Rooms. In schools with grades ranging up to 6, no locker areas will be provided. Schools that include grade levels 7 through 9 and high schools will provide locker rooms as follows:
- A. Two handicapped accessible locker rooms will be provided with a maximum space allowance of 500 square feet each—one for males, one for females.
 - B. One small storage locker per student will be provided based on the total student design capacity based on enrollment projections.
 - C. Dressing lockers to be determined by the maximum number of students in a physical education class—not to exceed thirty lockers per dressing room—will be provided.
 - D. For schools with a design capacity of more than 400 students, an additional 30 dressing lockers each in male and in female locker rooms will be provided for visiting teams. Allow 100 square feet for the additional dressing lockers.
- 9.6 Restrooms. The minimum required toilets with privacy stalls and sinks per Uniform Building and Handicapped Codes will be provided in female and male shower/dressing areas or locker rooms. In addition, minimum required urinals will be provided per Uniform Building and Accessibility Codes in male shower/dressing or locker room.
- 9.7 Physical Education Staff Offices. In schools with grades ranging up to 6, one office of the size specified below will be provided in the Multipurpose Room. In middle schools that include grade levels 7 through 9 and in high schools, two offices will be provided at 120 square feet each, plus 100 square feet for a handicapped accessible toilet, shower stall and sink for each office.
- 9.8 Portable Platform/Stage.
- A. For elementary and middle schools, a portable platform/stage and 100 square feet of storage space will be provided for the portable platform/stage.
 - B. For high schools with a design capacity based on enrollment of 200 students or less for grades 9 through 12, a portable platform/stage and 100 square feet of storage space will be provided for the portable platform/stage.

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Chapter 9. Physical Education – Indoor**

- C. For high schools with a design capacity based on enrollment of more than 200 students and less than 750 students for grades 9 through 12, a fixed stage of 750 square feet will be provided.
- D. For high schools with a design capacity based on enrollment of 750 students or more for grades 9 through 12, no fixed stage will be provided. The stage will be included in the auditorium space specified in Section 12.1.

9.9 Storage. As required, provide for the following:

- A. *Physical education equipment.* The maximum space allowance is as follows for each grade level:
 - K–6: 300 square feet
 - 7–8: 600 square feet
 - 9–12: 1000 square feet.
- B. *Team equipment and uniform storage.* For high school, the maximum space allowance is 800 square feet.

9.10 Concession Area. Concession areas will not be provided to schools with a design capacity of less than 200 students, regardless of grade level.

- A. In a combined elementary/middle school with a design capacity of 201–399 students, 120 square feet of space will be provided for a concession area with 75 square feet for storage.
- B. In a combined elementary/middle school with a design capacity of more than 400 students, 200 square feet of space will be provided for a concession area with 100 square feet for storage.
- C. In high schools with a design capacity of 201–399 students, 120 square feet of space will be provided for a concession area with 80 square feet for storage.
- D. In high schools with a design capacity of more than 400 students, 200 square feet will be provided for a concession area with 120 square feet for storage.

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Chapter 10. Physical Education – Outdoors**

10. Physical Education – Outdoors

10.1 Play Area and Fields.

- A. For an elementary school, a paved area of 60' x 100' (6000 square feet) will be provided adjacent to the elementary and /or middle school as a ball court or multi-purpose play area. Based on the total student design capacity based on enrollment projections of the school, provide other areas devoted to active play to include swings, slides or other play equipment will be provided. Playground design should meet the ASTM Standard F 1487-98 and the handbook for Public Playground Safety published by the U.S. Consumer Product Safety Commission.
- B. For a middle school, a paved area of 80' x 120' (9600 square feet) will be provided adjacent to the school as a ball court or multi-purpose play area. Additional playing fields and an earthen track will be provided in accordance with the school's approved existing athletic program.

10.2 Football Field and Track.

- A. For high schools with a design capacity of 100 students or less, a paved area of 80' x 120' (9600 square feet) will be provided adjacent to the school as a ball court or multi-purpose area. Additional playing fields will be provided in accordance with the school's approved existing athletic program. Design and surfaces of athletic facilities will be provided based on state and local athletic governing requirements.
- B. For high schools with a design capacity of 100 students or more, a paved area of 80' x 120' (9600 square feet) will be provided adjacent to the school as a ball court or multi-purpose area and a football field surrounded by an oval track. Additional playing fields and ancillary facilities will be provided in accordance with the school's approved existing athletic program. Design and surfaces of athletic facilities will be provided based on state and local athletic governing requirements.

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Chapter 11. Dining Room and Kitchen Area**

11. Dining Room and Kitchen Area

11.1 Dining Room. The Dining Room will NOT be in the multi-purpose room.

- A. For schools with a design capacity of 100 students or less, the minimum space allowance is 750 square feet.
- B. For schools with a design capacity of more than 100 students, dining room seating will be provided for one-half the total student design capacity based on enrollment projections of the school.
- C. The space allowance of 15 square feet per seat/student includes seating, table and circulation space, but excludes space for the serving line.
- D. Chair/Table storage: The maximum space allowance is 250 square feet.

11.2 Kitchen Area. The maximum space allowance for a kitchen area includes space for food preparation, serving line(s), walk-in and reach-in refrigerator, walk-in and reach-in freezer, dry storage, dish washing, can washing, office, employees' room and restrooms, receiving dock, and waste holding area.

A. Maximum space allowance for kitchen area is as follows:

Meals Served Per Day	Square Footage
100 or less	856
101-250	1261
251-500	1518
501-750	1938
751-1000	2208
1001-1250	2566
1251-1500	2880
1501-1750	3360
1751-2000	3840
2001 or more	4388

Source: *Equipment Guide For On-Site School Kitchens*, United States Department of Agriculture

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Chapter 12. Auxiliary Spaces**

12. Auxiliary Spaces

12.1 Auditorium. An auditorium will not be provided for elementary and/or middle schools, even if the schools include grade level 9. Only high schools with a grade level enrollment of 750 students or more in grades 9 through 12 are eligible for an auditorium. A final determination will be made by the Director of OIEP based on approved existing curriculum, staffing and funding for the provision of an auditorium. The auditorium as well as the stage will be handicapped accessible. If an auditorium is provided, the following space allocations apply:

- A. Auditorium. A maximum of 7 square feet per student of the total student design capacity based on enrollment projections will be provided to include seating and circulation space.
- B. Stage. The maximum space allowance is a total of 3000 square feet including on-stage and off-stage area.
- C. Scenery and Prop Storage. The maximum space allowance is 1000 square feet, and will only be provided if a permanent stage is also provided.
- D. Multi-use Lobby Area. The maximum space allowance is 100 square feet or 2 square feet per seat, whichever is greater.
- E. Movie Projection. Projection capabilities will only be provided at boarding schools. A maximum space allowance of no more than 100 square feet will be added for this capability.

12.2 Swimming Pools. Swimming pools will NOT be provided.

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Chapter 13. Support Services**

13. Support Services

13.1 Bus Garages and/or Yards.

- A. Bus shelter and/or yards will be provided to protect vehicles from inclement conditions and for security purposes. Each parking space should not exceed 120% of the actual size of each bus. The number of bus shelter spaces shall not exceed 50% of the buses projected to be used based on the enrollment projection.
- B. Bus garage space for maintenance purposes will be limited to one stall and will only be provided if the school certifies that it performs its own bus maintenance. (Maintenance will include oil changes, tire rotation, lubrication, and tune ups.) The space provided will be as described in 13.1A.

13.2 Bus Loading Area. The maximum space allowance is 20 feet for bus turning radius and 120'L x 14'H x 8'W bus loading overhang. This shelter space square footage will not be included in the building gross square footage.

13.3 Facilities Maintenance Shop. Facilities maintenance shops will be provided to serve education facilities.

- A. Facility Maintenance Office. The maximum space allowance is 150 square feet.
- B. Facility Maintenance Shop. The maximum space allowances provided for each population level based on the total student design capacity is based on enrollment projections as follows:
 - 1) For 100 or fewer students: 400 square feet
 - 2) For 100–199 students: 500 square feet
 - 3) For 200–399 students: 600 square feet
 - 4) For 400 or more students: 700 square feet.
- C. Maintenance Equipment. The maximum space allowance is 250 square feet.
- D. Maintenance Material Storage. For schools located less than 100 miles roundtrip from a town with a population of more than 25,000, 200 square feet of space will be provided for material storage. For schools located more than 100 miles round trip from a town with a population of more than 25,000, 300 square feet of space will be provided for material storage.
- E. Chemical Storage. The maximum space allowance is 100 square feet.

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Chapter 13. Support Services**

- 13.4 Custodial Closets and Storage. The maximum space allowance is determined by student design capacity. Each space should include a mop sink, hot and cold water faucet, and mop hangers. The total space allocation per school facility is based on total design capacity, as follows:
- A. For 100 or fewer students: 150 square feet
 - B. For 101–199 students: 200 total square feet
 - C. For 200–399 students: 250 square feet
 - D. For 400 or more students: 300 square feet.
- 13.5 General Storage. The maximum space allowance is determined by student design capacity. This space is to be utilized for book and furniture storage for the entire school. The total space allocation per school facility is based on total design capacity, as follows:
- A. For 100 or fewer students: 150 square feet
 - B. For 101–199 students: 200 total square feet
 - C. For 200–399 students: 250 square feet
 - D. For 400–499 students: 300 square feet
 - E. For 500 or more students: 400 square feet.
- 13.6 Equipment Rooms (including Computer/Server Rooms). The square footage for equipment rooms and computer/server rooms is included in the net-to-gross conversions; see Section 3.2 D (2).

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Chapter 14. Dormitories**

14. Dormitories

14.1 Residential Area. Space in dormitories will be allocated as shown:

A. Sleeping Rooms.

- 1) For grades 1 through 8, provide sleeping rooms at 40 to 60 square feet per student exclusive of furniture (wardrobe, desks, beds, etc.) and not to exceed a maximum of four students per room. An additional 35 square feet per student will be provided for furniture and storage space to include a wardrobe, bed and desk.
- 2) For grades 9 through 12, provide sleeping rooms at 50 to 70 square feet per student exclusive of furniture (wardrobe, desks, beds, etc.) and not to exceed a maximum of four students per room. An additional 35 square feet per student will be provided for furniture and storage space to include a wardrobe, bed and desk.

B. Restrooms.

- 1) The current the Americans with Disabilities Accessibility Act Guidelines (ADAAG) and Uniform Building Code (UBC) should be applied as required for restrooms. Handicapped restrooms and dorm rooms shall be provided at 10% of the dorm capacity.
- 2) Communal type facilities may be substituted when the total space will be equal to or less than the total space that would be provided under paragraph 14.1-B(1) above.
- 3) Where restrooms are provided between rooms, the following spaces will be allowed:
 - a) Two students per room – 120 square feet
 - b) Three students per room – 140 square feet
 - c) Four students per room – 160 square feet

C. Isolation Health Care Sleeping Room. Two rooms will be provided, one for males and one for females. Each room will contain two beds and a handicapped accessible bathroom including toilet, tub/shower and sink. 300 square feet of space total for each room will be provided.

D. Counseling. 120 square feet of office space will be provided per office, as follows:

- 1) For grades 1–8, one office for one counselor for up to 75 students
- 2) For grades 1–8, two offices for two counselors for 75–300 students
- 3) For grades 9–12, one office for one counselor for up to 100 students
- 4) For grades 9–12, two offices for two counselors for 101–300 students.

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Chapter 14. Dormitories**

- E. Dorm Secretary Office. For dormitories with at least 150 students or more, one office of 120 square feet and fire rated record storage space of 75 square feet will be provided.
- F. Intensive Residential Guidance (IRG) Counselor Offices. One counselor office for every 80 IRG students at 120 square feet per office will be provided. Space for secure file storage is included in the office space. This space shall be provided only if the dorm has an IRG program.
- G. Home Living Specialist Office. One office of 120 square feet will be provided.
- H. Conference Room. In dormitories with more than 150 students a conference room of 250 square feet will be provided.

14.2 Support Space. Space for the following areas will be provided:

- A. Living Room. For grades K–8, the maximum space allowance is 8 square feet per student. For grades 9 through 12, the maximum space allowance is 10 square feet per student.
- B. Activity Room. The maximum space allowance is 15 square feet per student where the minimum space provided is 1200 SF.
- C. Practical Arts Room. A determination will be made by the Director of OIEP based on approved existing staffing and funding whether this space will be provided. At a minimum, a room of 1250 square feet and general storage of 150 square feet will be provided.
- D. Study Rooms. Study space for 1/3 of the total student design capacity at 20 square feet per student will be provided. At a minimum, 250 square feet of space will be provided. The allocations will include space for computer stations, with the number of stations not to exceed 1/9 of the total student design capacity.
- E. Kitchen/Dining Area. A separate kitchen and dining facility will not be provided for dormitories, except for peripheral dormitories. (Dormitories must utilize the existing kitchen and dining facilities associated with the adjacent school campus.) Peripheral dormitories will be provided kitchen and dining space in accordance with Sections 11.1 and 11.2.
- F. Storage. Provide storage space as follows:
 - 1) *Linen*. The maximum space allowance is 2 square feet per student.
 - 2) *General*. The maximum space allowance is 6 square feet per student.
 - 3) *Individual (Trunk/Luggage) Storage*. The maximum space allowance is 5 square feet per student.

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Chapter 14. Dormitories**

- G. Laundry and Ironing Rooms. Thirty square feet per pair of washers and dryers will be provided, with one set for each 40 students of the total student design capacity based on enrollment projections. A double laundry sink and ironing board will be provided for every two sets of washers and dryers.
 - H. Custodial Space. Each custodial space should include a mop sink, hot and cold-water faucet, mop hangers and shelving for toilet supplies. The total space allocation per dormitory facility is based on total design capacity, as follows:
 - a) For 75 or fewer residents: 200 square feet
 - b) For 76–299 residents: 250 square feet
 - c) For 300 or more residents: 300 square feet.
 - I. Dormitory Entry Lobby. A maximum of 200 square feet will be provided.
 - J. Public Restrooms. Handicapped adult male and female restrooms will be provided at 125 square feet each.
 - K. Net-to-Gross Conversion. Net-to-Gross conversion is detailed under Section 3.2D.
- 14.3 Recreational Area. A paved play area of 60' x 100' (6,000 square feet) will be provided as a ball court or multi-purpose play area. Other areas devoted to active play to include swings, slides or other play equipment will be provided based on the total student design capacity based on enrollment projections of the dormitory. Playground design should meet the ASTM Standard F 1487-98 and the handbook for Public Playground Safety published by the U.S. Consumer Product Safety Commission.
- 14.4 Authority. In accordance with 25 CFR 36.75, Space and Privacy, "A dormitory shall be considered at capacity when the addition of one more student would put the school out of compliance with the space standard; and additional students shall not be admitted for residential purposes."

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Chapter 15. Employee Quarters**

15. Employee Quarters

15.1 Employee Quarters.

- A. Authority. OMB Circular A-45 Rental and Construction of Government Quarters; 400 Department Quarters Manual.
- B. Policy. The cost to the Government of acquiring, constructing, operating, maintaining, managing and disposing of Government Furnished Quarters (GFQ) typically far exceeds the value of rental receipts collected over the useful life of the GFQ. Therefore, new or replacement GFQ shall not be provided unless it has been determined by the appropriate program Assistant Secretary (or by the head of the Bureau or Region/Area Director if the authority has been re-delegated pursuant to 205 DM 10.1C) that the GFQ are essential to the accomplishment of the Bureau's mission and are energy efficient. The need to construct or acquire GFQ is limited to circumstances in which it is determined that the employees must live at the station or quarters installation in order to provide necessary service or protection, or that adequate housing is not available in the area.
- C. Need. Determining educational quarters needs and developing the justification is the responsibility of the users through their respective Regional Office in accordance with 400 Departmental Manual (DM), OMB Circular A-45, 41 CFR 114-51, and 43 BIAM Supplement 2. The determination should be made prior to or during the early programming and planning stages in the new school construction project.
- D. Housing Construction. New or replacement housing construction is feasible only in connection with School Replacement Projects. The following data is required to process requests for new or replacement quarters:
- 1) A Tribe or school board must provide an official resolution to support the request and need for employee housing.
 - 2) A completed Housing Requirements Analysis (HRA) is required as prescribed in 400 Departmental Manual 4.1, 4.2, and 4.3. Include a copy of the program's staffing plan showing the staff position breakdown and identifying the essential or key employee positions that require housing. In addition, the HRA should include responses to the following questions:
 - a) How many of the staff can have their housing needs satisfied either in planned or in existing tribal housing units operated by a local housing authority?
 - b) How many of the staff are local hires and do not require Bureau housing?
 - c) How many efficiency apartments or 1-bedroom/2-bedrooms/3-bedrooms are needed based on the number of essential employees and the size, normal composition, and trends of families to be housed?

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Chapter 15. Employee Quarters**

- 3) A form DI-1871, Justification for New or Replacement Quarters, must be prepared for recommended and approving signatures. This form requires approval by the Assistant Secretary of Indian Affairs.

- 4) Final approval of the Form DI-1871 serves only to acknowledge need for new or replacement housing and does not extend to approval of construction funding unless funding had been identified in advance. Upon final approval, the requesting program or school may proceed with the budget request process, including construction planning with Facility Management.

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Chapter 16. Site**

16. Site

16.1 Site.

- A. The size of an educational facility site should be based on existing and projected enrollment. The following are the recommended ranges for site sizes:

Educational Facility	Recommended Site Size
Elementary Schools (K-6)	10 acres, more or less, plus one acre for each 100 students
Middle Schools (7-9)	20 acres, more or less, plus one acre for each 100 students
High Schools (9-12)	30 acres, more or less, plus one acre for each 100 students

- B. Provide an additional two acres for any needed facility management shop and two acres for a bus garage/yard.
- C. If employee housing is on site, provide one acre each for two houses. This acreage includes space for access streets to the housing units.
- D. For dormitories at an existing location, provide 3 acres for every 100 students to be housed.
- E. If a sewer lagoon is provided with the project, it must be located at least one-quarter ($\frac{1}{4}$) mile from the nearest residence, school building or adjacent occupied building. The land area needed for the right-of-way (10 feet) and the lagoon shall be provided.

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Appendix A. Development Process**

**APPENDIX A
DEVELOPMENT PROCESS**

- A.1 Focus Group Meetings. In pursuit of the statement of work, focus group meetings were conducted with Bureau leadership to delineate the statutory mandated requirements applicable to each program and to adopt core educational functions for Bureau-funded schools and core programs by functional category. Participants were provided with key documents and current Bureau, State, Federal, and Association functional equity standards that described programs or space required by federal law. The outcome of the focus group meetings included recommendations for the use of existing criteria, development of new criteria, and rules for applying these criteria.

Based on the direction from the Focus Group meeting, a set of draft criteria was developed and reviewed by the Bureau to include the following:

- Core educational functions for Bureau-funded schools
- Core programs by functional category
- Parameters for each program by functional category including space and amenity standards, maximum class size, and student teacher ratios
- Statutory Mandated requirements applicable to each program
- Minimum criteria for each authorized program

- A.2 Functional Space Criteria. The functional space criteria process took into consideration state public school criteria, accreditation criteria, statutory mandated requirements and core educational functions of Bureau-funded schools. The 23 states in which the Bureau has schools were contacted in search of statewide criteria. Of these states only ten had statewide criteria. In addition, several other states and national organizations provided valuable information. A list of the states contacted and resources used are listed below under A.4.1 Referenced Documents.

Based on Bureau-approved functional education criteria, draft education space criteria were reviewed and approved by Bureau leadership and standardized core education specifications for construction programs were developed. From the collected resources and the list of core programs, recommendations were developed for the amount of functional space needed per program.

- A.3 Pilot Study. A pilot study was performed on five schools in the Southern Pueblos Agency to test the draft criteria. The study compared the actual programs being performed at each school with the core education programs developed. The pilot study consisted of three parts: the pre-site visit questionnaire, the classroom utilization chart, and the site visit. The pre-site visit questionnaire was used to retrieve as much information as possible about each school in order to prepare worksheets for each visit. The classroom utilization chart provided class size and classroom function information. The site visit was used to evaluate the comparison with real space and real

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Appendix A. Development Process**

programs. This information tested the usefulness of the criteria and exhibited how the criteria needed to be adjusted for real-world scenarios.

A.4 Development of Criteria. The final criteria were developed to best meet the needs of the Bureau of Indian Affairs and the Office of Indian Education Programs. The core education specifications will allow the Bureau to:

- Select the minimum education criteria and generate a set of functional requirements based on established functions and student population.
- Establish standardized Education Specifications for construction projects.
- Develop a link between resulting programmatic specifications to new and renovation construction specifications.
- Establish a standard for meeting flow through program space requirements.
- Develop a matrix of space criteria by student loading ranges

1. Reference Documents.

- 25 CFR Part 36
- Bureau of Indian Affairs Education Space Criteria dated August 17, 1995
- Indian School Equalization Program (ISEP) Final Student Membership Count 1990–2001
- Family and Child Education (FACE) Program – Participation Findings 1999 Study
- National Fire Protection Act (NFPA)
- Title I: Amendments to the Individuals with Disabilities Education Act
- 36 CFR Part 1191: American with Disabilities Act Accessibility Criteria for Buildings and Facilities; Play Areas
- ICC American National Standard: Accessible and Usable Buildings and Facilities
- ASTM F1487-98: Standard Consumer Safety Performance Specification for Playground Equipment for Public Use

2. State Standards and Accreditation. Research on the 23 states in which the Bureau has schools was conducted to identify statewide criteria for accreditation as relates to facilities and any minimum or standard maximum space allowances. The 23 states include:

Arizona*	Michigan	Oklahoma*
California*	Minnesota*	Oregon
Florida*	Mississippi	South Dakota
Idaho	Montana*	Utah
Iowa	Nevada*	Washington*
Kansas	New Mexico	Wisconsin
Louisiana	North Carolina*	Wyoming
Maine	North Dakota*	

* *Of these states, only ten had statewide program space criteria. In addition to the Bureau states, other states and districts were contacted for the depth of information available in their criteria. These additional state programs include Arkansas, Bay County (FL), Indiana, Jefferson County (CO), Kentucky, New Jersey, New York, Pennsylvania, Texas and West Virginia.*

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Appendix A. Development Process**

3. Additional Sources of state public school criteria, accreditation criteria, statutory mandated requirements and core educational functions:
 - The Thomas Jefferson Center for Educational Design at the University of Virginia
 - American Society for Quality: Education and Training Institutions
 - ERIC: Educational Resource Information Center
 - American Institute of Architects
 - National Clearinghouse for Educational Facilities
 - The Council of Education Facility Planners International
 - University of Tennessee
 - Education Commission of the States
 - Education Week
 - Department of Defense Education Division
 - University of Georgia School Design and Planning Laboratory
 - The Little Institute for School Facility Research

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Appendix B. Examples – Replacement Schools**

**APPENDIX B
EXAMPLES – REPLACEMENT SCHOOLS**

Example 1 – Replacement Elementary School

In this example, a fictitious elementary school has entered into the planning phase for the construction of a replacement facility. The steps outlined in Section 2.2 will be followed to determine the space for each individual program, as well as the overall size of the facility.

Step 1. Determine Enrollment.

The candidate school must work with the OIEP to provide an enrollment plan for the replacement facility. The OIEP will utilize the most recent directives to aid in the enrollment projection process. Ultimately, for replacement school construction the enrollment plan must specify the projected number of pupils within each approved grade level. For this example, the school has an approved FACE program and following enrollment projections have been submitted:

Enrollment Projection	
FACE	15
Kindergarten	44
First	34
Second	56
Third	44
Fourth	38
Fifth	52
Total:	283

Step 2. Reconcile Fractional Enrollment.

The criteria in this handbook specify the maximum number of students per classroom for each grade level. Unfortunately, in most cases the number of students within a grade level will rarely be equal to the criteria. The first assumption may be to round up to the next full-size classroom. Although this method would be easy, it would not necessarily reflect the best answer. The fractional enrollment can be reconciled for each grade level. If done correctly, the school will have adequate space for all of its programs, without having to build and maintain unnecessary space.

Step 2.a. Divide Proposed Enrollment Estimates by the Criteria.

For each grade level, divide the proposed enrollment estimate by the maximum allowable enrollment per classroom for the corresponding grade. For example, the proposed enrollment for kindergarten is 44 students. The criteria state that no more than twenty kindergarten students will be taught in any one class. So, by dividing 44 by 20, the result is 2.20. Therefore, at least two full-size classrooms will be required for kindergarten.

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Appendix B. Examples – Replacement Schools**

Step 2.b. Calculate the Number of Full-size and Half-size Classes.

At this point, the planner should look at classrooms in terms of either full-size or half-size. But, at what point is a full-size classroom warranted?

Regardless of the enrollment, there should be at least one full-size classroom per grade level. When the fractional enrollment is less than 0.5, a half-size classroom is warranted and when fractional enrollment is greater than or equal to 0.5, a full-size classroom is warranted.

To continue the example, the kindergarten grade (44 students / maximum 20 students per class) would warrant two full-size classrooms and one half-size classroom. Following the same logic for the remaining grade levels, the following data would be calculated:

Fractional Enrollment									
Grade Level	STD	Total Enroll.	(Enroll./ STD)	Min. Full-Size Class-Rms	Fract. Enroll.	Full-Size Due to Fract. Enroll.	Half-Size Due to Fract. Enroll.	Total Full-Size Class-Rms	Total Half-Size Class-Rms
FACE	20	15	0.75	1	0.00			1	0
Kindergarten	20	44	2.20	2	0.20		1	2	1
First	22	34	1.55	1	0.55	1		2	0
Second	22	56	2.55	2	0.55	1		3	0
Third	22	44	2.00	2	0.00			2	0
Fourth	25	38	1.52	1	0.52	1		2	0
Fifth	25	52	2.08	2	0.08		1	2	1
Total:								14	2

Therefore, fourteen full-size classrooms and two half-size classrooms would be needed.

During the design phase, the architects and engineers will determine the most appropriate configuration to account for multiple grades with fractional enrollment. Fractional spaces can be combined by the Architect/Engineer (A/E) for the best utilization of space.

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Appendix B. Examples – Replacement Schools**

Step 3. Apply Criteria to Determine Net Square Footage.

Once the enrollment figures are analyzed, the criteria in this handbook will be utilized to determine the space requirements for the core programs. Applying the data developed in Step 2 to the criteria in Appendix D, the planner will calculate the following square footages:

Classroom Type	# of Class Rooms	Square Footage Per Class	Total Square Footage
Interdisciplinary Classrooms			
Kindergarten (Full-size)	2	1200	2400
Kindergarten (Half-size)	1	600	600
Dedicated Kindergarten Restroom	6	80	480
First Grade	2	880	1760
Dedicated First Grade Restroom	4	80	320
Second Grade	3	880	2640
Third Grade	2	880	1760
Fourth Grade	2	875	1750
Fifth Grade (Full-size)	2	875	1750
Fifth Grade (Half-size)	1	438	438
Classroom Storage (80 SF per class)	16	80	1280
Dedicated Classrooms			
Computer Lab	1	888	888
Computer Lab Storage	1	120	120
Practical Arts / Fine Arts	1	1250	1250
Practical Arts / Fine Arts Storage	1	120	120
FACE			
Classroom	1	1200	1200
Adult Classroom	1	900	900
Restroom	1	100	100
Kitchenette	1	80	80
Storage	1	100	100
Office Space	1	360	360
Special Education			
Therapy Classroom	1	880	880
Therapy Classroom Restroom	1	100	100
Resource Classroom	3	1200	3600
Office/Testing Room	1	200	200
Administration			
Principal's Office	1	150	150
Assistant Principal Office	1	150	150
Other Offices	Var.	240	240
Counseling (Guidance)	1	150	150

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Appendix B. Examples – Replacement Schools**

Classroom Type	# of Class Rooms	Square Footage Per Class	Total Square Footage
Reception / Secretary	1	300	300
Faculty Area	Var.	600	600
Nurse's Office	1	150	150
Dedicated Restroom	1	50	50
Vault / Record Storage	1	125	125
Copy Room / Mail Room / Storage	1	150	150
Conference Room	1	200	200
School Entry Lobby	1	200	200
Library (Media Center)			
Reading / Browsing / Stack	1	1174	1174
Professional Publications	1	75	75
Librarian Office	1	120	120
Audio / Visual	1	200	200
Storage / Workroom	1	300	300
Circulation / Checkout	1	100	100
Student Project Room	1	500	500
Conference Room	1	250	250
Physical Education – Indoor			
Multi-purpose Space/Gym	1	4680	4680
Bleachers	Var.	1698	1698
Phys. Ed. Staff Offices and Restroom	Var.	220	220
Portable Stage	1	100	100
Storage	1	300	300
Food Services / Dining			
Dining Room	1	2123	2123
Chair and Table Storage	1	250	250
Kitchen Area (Assume two meals/day)	1	1938	1938
Support Services			
Maintenance Office	Var.	150	150
Maintenance Shop	Var.	600	600
Maintenance Equipment Storage	Var.	250	250
Maintenance Material Storage	Var.	200	200
Custodial Closets / Storage	Var.	250	250
General Storage	Var.	250	250
Chemical Storage	Var.	100	100
Grand Total			
Net Square Footage (Core Programs Only):			43,369

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Appendix B. Examples – Replacement Schools**

Step 4. Identify Eligible Non-Core Programs.

The criteria addresses only core programs for the Bureau; however, many schools conduct programs that the Bureau does not recognize as core. The amount of space for approved non-core programs must be determined. For this example, assume that the candidate school has an approved language lab. The planner has determined that the classroom is comparable to a second grade classroom or 880 square feet.

The square footage for approved non-core programs is added to the Net Square Footage calculated in Step 3 before proceeding to Step 5. For this example, the 880 square feet for the language lab is added to the Net Square Footage of 43,369 to produce Total Net Square Footage of 44,249.

Step 5. Net-to-Gross Conversion.

The maximum space allowances identified for specific programs are in terms of net square footage. Additional square footage is added to the total net square footage to provide for circulation and related non-specific program spaces such as mechanical equipment rooms, utility chases, student and public restrooms, corridors, lobbies, vestibules, stairwells, ramps, elevator shafts, and wall thickness. Using the net-to-gross factors found in Section 3 of this handbook, the following additional square footage is calculated.

	Adder Factor - % of Total Net SF (44,249 SF)	Additional Square Footage
Passageways	13%	5752
Restrooms	2%	885
Mechanical/Electrical Equipment	2%	885
Wall Thickness	8%	3540
Total:	25%	11,062

The total gross square footage is the total net square footage (44,249) plus circulation allowances and related non-specific program space (11,062), which equals 55,311 square feet. By following the steps above, the planner determines the space for each individual program, as well as the overall size of the facility.

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Appendix B. Examples – Replacement Schools**

Example 2 – Replacement Middle School

In this example, a middle school has entered into the planning phase for the construction of a replacement facility. The steps outlined in Section 2.2 will be followed to determine the space for each individual program, as well as the overall size of the facility.

Step 1. Determine Enrollment.

The candidate school must work with the OIEP to provide an enrollment plan for the replacement facility. The OIEP will utilize the most recent directives to aid in the enrollment projection process. Ultimately, for replacement school construction the enrollment plan must specify the projected number of pupils within each approved grade level. For this example, the following enrollment projection has been submitted:

Enrollment Projection	
Sixth	45
Seventh	40
Eighth	35
Total:	120

Step 2. Reconcile Fractional Enrollment.

Fractional Enrollment									
Grade Level	STD	Total Enroll.	(Enroll./ STD)	Min. Full- Size Class- Rms	Fract. Enroll.	Full- Size Due to Fract. Enroll.	Half- Size Due to Fract. Enroll.	Total Full- Size Class- Rms	Total Half- Size Class- Rms
Sixth	25	45	1.80	1	0.80	1		2	0
Seventh	25	40	1.60	1	0.60	1		2	0
Eighth	25	33	1.32	1	0.32		1	1	1
Total:								5	1

Therefore, five full-size classrooms and one half-size classrooms would be needed.

During the design phase, the architects and engineers will determine the most appropriate configuration to account for multiple grades with fractional enrollment. Fractional spaces can be combined by the A/E for the best utilization of space.

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Appendix B. Examples – Replacement Schools**

Step 3. Apply Criteria to Determine Net Square Footage.

Once the enrollment figures are analyzed, the criteria in this handbook will be utilized to determine the space requirements for the core programs. Applying the data developed in Step 2 to the criteria in Appendix D, the planner will calculate the following square footages:

	# of Class Rooms	Square Footage Per Class	Total Square Footage
Interdisciplinary Classrooms			
Sixth Grade (Full-size)	2	875	1750
Seventh Grade (Full-size)	2	875	1750
Eighth Grade (Full-size)	1	875	875
Eighth Grade (Half-size)	1	438	438
Classroom Storage (80 SF per class)	6	80	480
Dedicated Classrooms			
Computer Lab	1	888	888
Computer Lab Storage	1	120	120
Science Lab	1	1440	1440
Science Lab Storage	1	120	120
Home Economics (Assumes the school has an approved program.)	1	960	960
Home Economics Storage (Approved)	1	200	200
Practical Arts	1	1250	1250
Practical Arts Storage	1	120	120
Vocational Education (Assumes the school does not have an approved program.)	0	0	0
Special Education			
Therapy Classroom	1	880	880
Therapy Classroom Restroom	1	100	100
Resource Classroom	2	875	1750
Office/Testing Room	1	200	200
Administration			
Principal's Office	1	150	150
Other Offices	Var.	120	120
Counseling (Guidance)	1	120	120
Reception / Secretary	1	250	250
Faculty Area	Var.	400	400
Nurse's Office	1	150	150
Dedicated Restroom	1	50	50
Vault / Record Storage	1	100	100
Copy Room / Mail Room / Storage	1	150	150
Conference Room	1	200	200
School Entry Lobby	1	200	200

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Appendix B. Examples – Replacement Schools**

	# of Class Rooms	Square Footage Per Class	Total Square Footage
Library (Media Center)			
Reading / Browsing / Stack	1	800	800
Professional Publications	1	75	75
Librarian Office	1	120	120
Audio / Visual	1	175	175
Storage / Workroom	1	200	200
Circulation / Checkout	1	100	100
Physical Education – Indoor			
Multi-purpose Space/Gym	1	4680	4680
Bleachers	Var.	720	720
Phys. Ed. Staff Offices and Restroom	Var.	220	220
Portable Stage	1	100	100
Storage	1	600	600
Food Services / Dining			
Dining Room	1	900	900
Chair and Table Storage	1	250	250
Kitchen Area (Assume two meals/day)	1	1261	1261
Support Services			
Maintenance Office	Var.	150	150
Maintenance Shop	Var.	500	500
Maintenance Equipment Storage	Var.	250	250
Maintenance Material Storage	Var.	200	200
Custodial Closets / Storage	Var.	200	200
General Storage	Var.	200	200
Chemical Storage	Var.	100	100
Grand Total			
Net Square Footage (Core Programs Only)			27,012

Step 4. Identify Eligible Non-Core Programs.

The criteria address only core programs for the Bureau; however, many schools conduct programs that the Bureau does not recognize as core. The amount of space for approved non-core programs must be determined. For this example, assume that the candidate school has an approved language lab. The planner has determined that the classroom is comparable to a middle school level classroom or 875 square feet.

The square footage for approved non-core programs is added to the Net Square Footage calculated in Step 3 before proceeding to Step 5. For this example, the 875 square feet for the language lab is added to the Net Square Footage of 27,012 to produce Total Net Square Footage of 27,887.

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Appendix B. Examples – Replacement Schools**

Step 5. Net-to-Gross Conversion.

The maximum space allowances identified for specific programs are in terms of net square footage. Additional square footage is added to the total net square footage to provide for circulation and related non-specific program spaces such as mechanical equipment rooms, utility chases, student and public restrooms, corridors, lobbies, vestibules, stairwells, ramps, elevator shafts, and wall thickness. Using the net-to-gross factors found in Section 3 of this handbook, the following additional square footage is calculated.

	Adder Factor - % of Total Net SF (27,887 SF)	Additional Square Footage
Passageways	13%	3,625
Restrooms	2%	558
Mech./Electrical Equipment	2%	558
Wall Thickness	8%	2231
Total:	25%	6,972

The total gross square footage is the total net square footage (27,887) plus circulation allowances and related non-specific program space (6972), which equals 34,859 square feet. By following the steps above, the planner determines the space for each individual program, as well as the overall size of the facility.

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Appendix B. Examples – Replacement Schools**

Example 3 – Replacement High School

In this example, a fictitious high school has entered into the planning phase for the construction of a replacement facility. The steps outlined in Section 2.2 will be followed to determine the space for each individual program, as well as the overall size of the facility.

Step 1. Determine Enrollment

The candidate school must work with the OIEP to provide an enrollment plan for the replacement facility. The OIEP will utilize the most recent directives to aid in the enrollment projection process. Ultimately, for replacement school construction the enrollment plan must specify the projected number of pupils within each approved grade level. For this example, the following enrollment projection has been submitted:

Enrollment Projection	
Ninth	100
Tenth	95
Eleventh	90
Twelfth	80
Total:	365

Step 2. Reconcile Fractional Enrollment

Fractional Enrollment									
Grade Level	STD	Total Enrollment	(Enroll./ STD)	Min. Full-Size Class-Rms	Fract. Enroll.	Full-Size Due to Fract. Enroll.	Half-Size Due to Fract. Enroll.	Total Full-Size Class-Rms	Total Half-Size Class-Rms
Ninth	25	100	4.00	4	0.00			4	0
Tenth	25	95	3.80	3	0.80	1		4	0
Eleventh	25	90	3.60	3	0.60	1		4	0
Twelfth	25	85	3.40	3	0.40		1	3	1
Total:								15	1

Therefore, fifteen full-size classrooms and one half-size classrooms would be needed.

During the design phase, the architects and engineers will determine the most appropriate configuration to account for multiple grades with fractional enrollment. Fractional spaces can be combined by the A/E for the best utilization of space.

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Appendix B. Examples – Replacement Schools**

Step 3. Apply Criteria to Determine Net Square Footage.

Once the enrollment figures are analyzed, the criteria in this handbook will be utilized to determine the space requirements for the core programs. Applying the data developed in Step 2 to the criteria in Appendix D, the planner will calculate the following square footages:

	# of Class Rooms	Square Footage Per Class	Total Square Footage
Interdisciplinary Classrooms			
Ninth Grade (Full-size)	4	875	3500
Tenth Grade (Full-size)	4	875	3500
Eleventh Grade (Full-size)	4	875	3500
Twelfth Grade (Full-size)	3	875	2625
Twelfth Grade (Half-size)	1	375	375
Classroom Storage (80 SF per class)	16	80	1280
Dedicated Classrooms			
Computer Lab	1	888	888
Computer Lab Storage	1	120	120
Science Lab	1	1440	1440
Science Lab Storage	1	120	120
Home Economics – Clothing (Assumes the school has an approved program.)	1	1040	1040
Home Economics Storage – Clothing (Approved)	1	200	200
Home Economics – Food Prep (Assumes the school has an approved program.)	1	1200	1200
Home Economics Storage – Food Prep (Approved)	1	200	200
Practical Arts	1	1500	1500
Practical Arts Storage	1	150	150
Fine Arts	1	900	900
Fine Arts Storage	1	150	150
Vocational Education Shop	1	1920	1920
Vocational Education Material Storage	1	600	600
Vocational Education Tool and Project Storage	1	200	200
Special Education			
Therapy Classroom	1	880	880
Therapy Classroom Restroom	1	100	100
Resource Classroom	4	875	3500
Office/Testing Room	1	200	200
Administration			
Principal's Office	1	150	150
Assistant Principal Office	1	150	150
Other Offices	Var.	240	240

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Appendix B. Examples – Replacement Schools**

	# of Class Rooms	Square Footage Per Class	Total Square Footage
Counseling (Guidance)	1	150	150
Reception / Secretary	1	300	300
Faculty Area	Var.	600	600
Nurse's Office	1	150	150
Dedicated Restroom	1	50	50
Vault / Record Storage	1	125	125
Copy Room / Mail Room / Storage	1	150	150
Conference Room	1	200	200
School Entry Lobby	1	200	200
Library (Media Center)			
Reading / Browsing / Stack	1	1943	1943
Professional Publications	1	75	75
Librarian Office	1	120	120
Audio / Visual	1	200	200
Storage / Workroom	1	180	180
Circulation / Checkout	1	100	100
Student Project Room	1	880	880
Conference Room	1	250	250
Physical Education – Indoor			
Multi-purpose Space/Gym	1	7280	7280
Bleachers	Var.	2190	2190
Auxiliary Physical Education Room	1	1700	1700
Showers/Dressing Areas	2	300	600
Locker Rooms	2	500	1000
Phys. Ed. Staff Offices	2	120	240
Phys. Ed. Staff Restroom	2	100	200
Stage	1	750	750
Storage	1	1000	1000
Team Equipment Storage	1	800	800
Concession Area	1	120	120
Concession Area Storage	1	80	80
Food Services / Dining			
Dining Room	1	2738	2738
Chair and Table Storage	1	250	250
Kitchen Area (Assume two meals/day)	1	1938	1938
Support Services			
Maintenance Office	Var.	150	150
Maintenance Shop	Var.	600	600
Maintenance Equipment Storage	Var.	250	250
Maintenance Material Storage	Var.	200	200
Custodial Closets / Storage	Var.	250	250

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Appendix B. Examples – Replacement Schools**

	# of Class Rooms	Square Footage Per Class	Total Square Footage
General Storage	Var.	250	250
Chemical Storage	Var.	100	100
Grand Total			
Net Square Footage (Core Programs Only):			58,987

Step 4. Identify Eligible Non-Core Programs.

The criteria address only core programs for the Bureau; however, many schools conduct programs that the Bureau does not recognize as core. The amount of space for approved non-core programs must be determined. For this example, assume that the candidate school has an approved language lab. The planner has determined that the classroom is comparable to a high school level classroom or 875 square feet.

The square footage for approved non-core programs is added to the Net Square Footage calculated in Step 3 before proceeding to Step 5. For this example, the 875 square feet for the language lab is added to the Net Square Footage of 58,987 to produce Total Net Square Footage of 59,862.

Step 5. Net-to-Gross Conversion.

The maximum space allowances identified for specific programs are in terms of net square footage. Additional square footage is added to the total net square footage to provide for circulation and related non-specific program spaces such as mechanical equipment rooms, utility chases, student and public restrooms, corridors, lobbies, vestibules, stairwells, ramps, elevator shafts, and wall thickness. Using the net-to-gross factors found in Section 3 of this handbook, the following additional square footage is calculated.

	Adder Factor - % of Total Net SF (59,862 SF)	Additional Square Footage
Passageways	13%	7,782
Restrooms	2%	1,197
Mechanical/Electrical Equipment	2%	1,197
Wall Thickness	8%	4,789
Total:	25%	14,965

The total gross square footage is the total net square footage (59,862) plus circulation allowances and related non-specific program space (14,965), which equals 74,827 square feet. By following the steps above, the planner determines the space for each individual program, as well as the overall size of the facility.

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Appendix B. Examples – Replacement Schools**

Example 4 – Replacement K-12 School

In this example, a fictitious K-12 school has entered into the planning phase for the construction of a replacement facility. The steps outlined in Section 2.2 will be followed to determine the space for each individual program, as well as the overall size of the facility.

Step 1. Determine Enrollment

The candidate school must work with the OIEP to provide an enrollment plan for the replacement facility. The OIEP will utilize the most recent directives to aid in the enrollment projection process. Ultimately, for replacement school construction the enrollment plan must specify the projected number of pupils within each approved grade level. For this example, the following enrollment projection has been submitted:

Enrollment Projection	
Kindergarten	44
First	34
Second	56
Third	44
Fourth	38
Fifth	52
Sixth	45
Seventh	40
Eighth	35
Ninth	100
Tenth	95
Eleventh	90
Twelfth	80
Total:	753

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Appendix B. Examples – Replacement Schools**

Step 2. Reconcile Fractional Enrollment.

Fractional Enrollment									
Grade Level	STD	Total Enroll.	(Enroll./ STD)	Min. Full- Size Class- Rms	Fract. Enroll.	Full- Size Due to Fract. Enroll.	Half- Size Due to Fract. Enroll.	Total Full- Size Class- Rms	Total Half- Size Class- Rms
Kindergarten	20	44	2.20	2	0.20		1	2	1
First	22	34	1.55	1	0.55	1		2	0
Second	22	56	2.55	2	0.55	1		3	0
Third	22	44	2.00	2	0.00			2	0
Fourth	25	38	1.52	1	0.52	1		2	0
Fifth	25	52	2.08	2	0.08		1	2	1
Sixth	25	45	1.80	1	0.80	1		2	0
Seventh	25	40	1.60	1	0.60	1		2	0
Eighth	25	33	1.32	1	0.32		1	1	1
Ninth	25	100	4.00	4	0.00			4	0
Tenth	25	95	3.80	3	0.80	1		4	0
Eleventh	25	90	3.60	3	0.60	1		4	0
Twelfth	25	85	3.40	3	0.40		1	3	1
Total:								33	4

Therefore, thirty-three full-size classrooms and four half-size classrooms would be needed.

During the design phase, the architects and engineers will determine the most appropriate configuration to account for multiple grades with fractional enrollment. Fractional spaces can be combined by the A/E for the best utilization of space.

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Appendix B. Examples – Replacement Schools**

Step 3. Apply Criteria to Determine Net Square Footage

Once the enrollment figures are analyzed, the criteria in this handbook will be utilized to determine the space requirements for the core programs. Applying the data developed in Step 2 to the criteria in Appendix D, the planner will calculate the following square footages:

**Square Foot Calculation Example
Replacement K-12 School**

	# of Class Rooms	Square Footage Per Class	Total Square Footage
Interdisciplinary Classrooms			
Kindergarten (Full-size)	2	1200	2400
Kindergarten (Half-size)	1	600	600
Dedicated Kindergarten Restroom	6	80	480
Dedicated Kindergarten Restroom	3	80	240
First Grade	2	880	1760
Dedicated First Grade Restroom	4	80	320
Dedicated First Grade Restroom	2	80	160
Second Grade	3	880	2640
Third Grade	2	880	1760
Fourth Grade	2	875	1750
Fifth Grade (Full-size)	2	875	1750
Fifth Grade (Half-size)	1	438	438
Sixth Grade (Full-size)	2	875	1750
Seventh Grade (Full-size)	2	875	1750
Eighth Grade (Full-size)	1	875	875
Eighth Grade (Half-size)	1	438	438
Ninth Grade (Full-size)	4	875	3500
Tenth Grade (Full-size)	4	875	3500
Eleventh Grade (Full-size)	4	875	3500
Twelfth Grade (Full-size)	3	875	2625
Twelfth Grade (Half-size)	1	438	438
Classroom Storage (80 SF per class)	37	80	2960
Dedicated Classrooms			
Computer Lab	1	888	888
Computer Lab Storage	1	120	120
Science Lab	1	1440	1440
Science Lab Storage	1	120	120
Home Economics – Clothing (Assumes the school has an approved program.)	1	1040	1040
Home Economics Storage – Clothing (Approved)	1	200	200
Home Economics – Food Prep (Assumes the school has an approved program.)	1	1200	1200
Home Economics Storage – Food Prep (Approved)	1	200	200

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Appendix B. Examples – Replacement Schools**

	# of Class Rooms	Square Footage Per Class	Total Square Footage
Practical Arts	1	1500	1500
Practical Arts Storage	1	150	150
Fine Arts	1	900	900
Fine Arts Storage	1	150	150
Vocational Education Shop	1	1920	1920
Vocational Education Material Storage	1	600	600
Vocational Education Tool and Project Storage	1	200	200
Special Education			
Therapy Classroom	1	880	880
Therapy Classroom Restroom	1	100	100
Resource Classroom (K-5)	3	1200	3600
Resource Classroom (6-8)	2	875	1750
Resource Classroom (9-12)	4	875	3500
Office/Testing Room	1	200	200
Administration			
Principal's Office	1	150	150
Assistant Principal Office	1	150	150
Other Offices	Var.	360	360
Counseling (Guidance)	1	300	300
Reception / Secretary	1	400	400
Faculty Area	Var.	800	800
Nurse's Office	1	150	150
Dedicated Restroom	1	50	50
Vault / Record Storage	1	150	150
Copy Room / Mail Room / Storage	1	150	150
Conference Room	1	200	200
School Entry Lobby	1	200	200
Library (Media Center)			
Reading / Browsing / Stack	1	4489	4489
Professional Publications	1	75	75
Librarian Office	1	120	120
Audio / Visual	1	200	200
Storage / Workroom	1	180	180
Circulation / Checkout	1	100	100
Student Project Room	1	880	880
Conference Room	1	250	250
Physical Education – Indoor			
Multi-purpose Space/Gym	1	7280	7280
Bleachers	Var.	4518	4518
Auxiliary Physical Education Room	1	1700	1700
Showers/Dressing Areas	2	300	600

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Appendix B. Examples – Replacement Schools**

	# of Class Rooms	Square Footage Per Class	Total Square Footage
Locker Rooms	2	500	1000
Phys. Ed. Staff Offices	2	120	240
Phys. Ed. Staff Restroom	2	100	200
Stage	1	750	750
Storage	1	1000	1000
Team Equipment Storage	1	800	800
Concession Area	1	120	120
Concession Area Storage	1	80	80
Food Services / Dining			
Dining Room	1	5648	5648
Chair and Table Storage	1	250	250
Kitchen Area (Assume two meals/day)	1	3360	3360
Support Services			
Maintenance Office	Var	150	150
Maintenance Shop	Var.	700	700
Maintenance Equipment Storage	Var.	250	250
Maintenance Material Storage	Var.	200	200
Custodial Closets / Storage	Var.	300	300
General Storage	Var.	400	400
Chemical Storage	Var.	100	100
Grand Total			
Net Square Footage (Core Programs Only):			94,892

Step 4. Identify Eligible Non-Core Programs

These criteria address only core programs for the Bureau; however, many schools conduct programs that the Bureau does not recognize as core. The amount of space for approved non-core programs must be determined. For this example, assume that the candidate school has an approved language lab. The planner has determined that the classroom is comparable to a high school level classroom or 875 square feet.

The square footage for approved non-core programs is added to the Net Square Footage calculated in Step 3 before proceeding to Step 5. For this example, the 875 square feet for the language lab is added to the Net Square Footage of 94,892 to produce Total Net Square Footage of 95,767.

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Appendix B. Examples – Replacement Schools**

Step 5. Net-to-Gross Conversion.

The maximum space allowances identified for specific programs are in terms of net square footage. Additional square footage is added to the total net square footage to provide for circulation and related non-specific program spaces such as mechanical equipment rooms, utility chases, student and public restrooms, corridors, lobbies, vestibules, stairwells, ramps, elevator shafts, and wall thickness. Using the net-to-gross factors found in Section 3 of this handbook, the following additional square footage is calculated.

	Adder Factor - % of Total Net SF (95,767 SF)	Additional Square Footage
Passageways	13%	12,450
Restrooms	2%	1,915
Mechanical/Electrical Equipment	2%	1,915
Wall Thickness	8%	7,654
Total:	25%	23,934

The total gross square footage is the total net square footage (95,767) plus circulation allowances and related non-specific program space (23,934), which equals 119,701 square feet. By following the steps above, the planner determines the space for each individual program, as well as the overall size of the facility.

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Appendix C. Example – Existing School**

**APPENDIX C
Example – Existing School**

In this example, an analysis of an existing fictitious school is performed using the criteria contained in this handbook. The steps outlined in Section 2.3 will be followed to determine the space for each individual program and to document surpluses and deficiencies.

Step 1. Obtain Certified ISEP Enrollment Data.

The school's administration should be able to supply actual enrollment information for each grade level and program. For this example, the following enrollment data was submitted:

Grade Level	# of Pupils per Grade Level
FACE	0
Kindergarten	47
First	33
Second	37
Third	43
Fourth	41
Fifth	36
Sixth	21
Total:	258

Step 2. Apply Criteria to Determine Net Square Footage.

Once the enrollment data is gathered, the criteria are utilized to determine the space requirements for the core programs. The most efficient method of applying the criteria begins at the top of the spreadsheet in Appendix D and proceeds line-by-line through the maximum space allowances documenting the space for each program.

Step 3. Identify and Quantify Actual Programmatic Space.

The next step is to tour the education facility to document actual program codes. The inspector will tour the school with the principal or some other qualified individual who is familiar with the facility and the programs taking place therein. Every space is labeled with a programmatic code and the square footage is quantified and/or verified. The level of detail must be consistent with that found in the handbook.

Step 4. Analyze the Data.

Utilizing the data gathered in Steps 2 and 3, a line-item comparison is made for every program within the school. The information obtained in this exercise combined with other data, such as facility condition assessments, is vital to the long range planning efforts of the Bureau.

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Appendix D. Replacement School Space Planning**

**APPENDIX D
Replacement School Space Planning**

Program Area	Standard	Source
Interdisciplinary Classrooms - Math, Social Studies, Language Arts, Science, Health, Reading, Fine Arts, Bilingual Education, Cultural Studies		
Classrooms (Kindergarten)	1200 sf, 60 sf/student, maximum 20 students.	1995 BIA Space Guide and 25 CFR Part 36
Classrooms (1-3)	880 sf, 40 sf/student, maximum 22 students.	1995 BIA Space Guide and 25 CFR Part 36
Classrooms (4-8)	875 sf, 35 sf/student, maximum 25 students.	Recommended to match grades 1-3 and 25 CFR Part 36
Classrooms (9-12)	875 sf, 35 sf/student, maximum 25 students.	1995 BIA Space Guide and 25 CFR Part 36, updated by OFMC 2/13/2004.
Kindergarten and First Grade Restroom	Separate handicapped accessible male and female restroom with toilet and sink, 80 sf per restroom.	Required by 1995 BIA Space Guide, space change per ADA requirements
Storage areas (includes closets and cabinets)	For all interdisciplinary classrooms, 80 sf in addition to provided instructional space.	1995 BIA Space Guide
Dedicated Classrooms		
Computer Labs	For all schools, regardless of grade levels and enrollment, provide a minimum of one computer lab to accommodate a maximum of 24 students at 37 sf per student for a total of 888 sf.	Size from 1995 BIA Space Guide, distribution of space agreed upon by OFMC and OIEP
Science Lab (7-8)	Provide one general lab for a maximum of 24 students at 60 sf per student for a total of 1440 sf, plus 120 sf for storage.	1995 BIA Space Guide
Science Lab (9-12)	A determination will be made by the OIEP the labs or combination of labs that will be provided. Specialized labs will be provided upon approval. At a minimum, provide one multi-purpose lab for a maximum of 24 students at 60 sf per student for a total of 1440 sf, plus 120 sf storage.	1995 BIA Space Guide
Home Economics (7-8)	If OIEP approved, provide 960 sf at 60 sf per student to accommodate a maximum of 16 students with additional storage space not to exceed 200 sf.	1995 BIA Space Guide

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Appendix D. Replacement School Space Planning**

Program Area	Standard	Source
Home Economics (9-12)	<p>Classroom for a maximum of 16 students at 60 sf per student for a total of 960 sf. <u>Storage space</u>: not to exceed 200 sf. With OIEP approval and enrollment in grades 9-12 of more than 300 students, clothing design and food preparation will be taught in separate spaces. <u>Clothing Design</u>: 1040 sf, 65 sf per student for a max of 16 students, <u>storage</u>: not to exceed 200 sf. <u>Food Preparation and Nutrition</u>: 1200 sf, 75 sf per student for a max of 16 students, <u>storage</u>: not to exceed 200 sf.</p>	<p>1995 BIA Space Guide for size of classroom and storage amount. Referenced WV, IN, NY and PA for separate spaces. NY provided beset reference for size of space.</p>
Art (Practical/Fine) (Elementary and Middle)	<p>For schools with an enrollment of less than 300 students, provide only one classroom for Practical and Fine Arts. <u>Classroom size</u>: should be 1250 sf at 50 sf per student for a maximum of 25 students, if present at the school. If only grades 1 through 3 are present, the classroom must accommodate for a maximum of 22 students at 50 sf per student for a total of 1100 sf, as per 25 CFR Part 36.11. <u>Additional storage space</u>: not to exceed 120 sf. For schools with an enrollment for grades 4 through 8 of more than 300 students, provide an additional/ separate <u>classroom</u> for music appreciation, choral, and band for 25 students at 40 sf per student is 1000 sf. <u>Instrument and music storage</u>: an additional 120 sf.</p>	<p>1995 BIA Space Guide for 4-8 classroom size. Included same size for 1-3 for assessment and design purposes, but had to differentiate class size based on 25 CFR Part 36.</p>
Art (Practical) (High School)	<p>Minimum space requirement is a classroom and general storage. <u>Classroom</u>: 1500 sf, 60 sf per student for a max of 25 students. <u>General Storage</u>: 150 sf. For enrollment of more than 300 students, a determination will be made on a case-by-case which of the following, or combination of the following will be provided. <u>Flammable Chemicals</u>: Provide square footage for the appropriate fire proof storage cabinet in accordance with NFPA 30, Section 4-3. <u>Project Storage</u>: 200 sf <u>Kiln Room</u>: If a self-contained unit is in place, it can be used in the classroom. Otherwise, provide a fire rated room no less than 100 sf <u>Green ware Room</u>: 150 sf.</p>	<p>1995 BIA Space Guide for classroom size and general storage, NFPA 30 (1996) for flammable chemical storage, IBC Sect 417 (2000) for Kiln Room.</p>

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Appendix D. Replacement School Space Planning**

Program Area	Standard	Source
Art (Fine) (High School)	<p>At a minimum provide a Music/Choral classroom and instrument storage.</p> <p><u>Music/Choral</u>: minimum 900 sf at 30 sf per student for up to 30 students plus 25 sf for each additional student.</p> <p><u>Instrument storage</u>: 150 sf or 5 sf per program participant, whichever is greater.</p> <p>For an enrollment of more than 300 students, a determination will be made on a case-by-case basis which of the following or combination of the following will be provided.</p> <p><u>Band & Choral</u>: minimum 1200 sf at 40 sf per student for up to 30 students plus 30 sf for each additional student.</p> <p><u>Uniform and music storage</u>: 150 sf or 3 sf per program participant, whichever is greater.</p> <p><u>Instrument repair area</u>: 80 sf.</p> <p><u>Practice rooms</u>: 75 sf for two rooms.</p> <p><u>Instructor's Office and Library</u>: 250 sf</p>	<p><u>Music</u>: BIA Space Guide, NC</p> <p><u>Choral</u>: BIA Space Guide, KY, NC</p> <p><u>Band & Choral</u>: BIA Space Guide, NC</p> <p><u>Instrument storage</u>: BIA Space Guide, WV</p> <p><u>Uniform and music storage</u>: BIA Space Guide</p> <p><u>Instrument repair area</u>: BIA Space Guide</p> <p><u>Practice rooms</u>: BIA Space Guide</p> <p><u>Instructor's Office and Library</u>: WV</p>
Vocational Education (7-8)	<p>Program will only be provided with OIEP approval. Upon approval, provide a classroom to accommodate a maximum of 16 students at 120 sf per student for a total of 1920 sf.</p> <p><u>Additional material storage</u>: 600 sf</p> <p><u>Tool and project storage</u>: 200 sf</p> <p>As needed, ventilated paint storage (per UBC requirements)</p>	<p>1995 BIA Space Guide.</p>
Vocational Education (9-12) - A determination will be made on a case-by-case basis which of the following or combination of the following will be provided. Provide specialized rooms based on whether programs are approved.	<p>At a minimum, provide one multi-use vocational program space for a maximum of 16 students at 120 sf per student not to exceed 1920 sf. <u>Material Storage</u>: 600 sf. <u>Tool and Project Storage</u>: 200 sf. As needed, a ventilated paint storage area meeting Uniform Building Code requirements.</p>	<p>Size from the 1995 BIA Space Guide and additions made during Focus Group meetings.</p>
Industrial Arts Shop	2240 sf, 140 sf per student for a max of 16 students.	Size from the 1995 BIA Space Guide
Electric Shop	1680 sf, 105 sf per student for a maximum of 16 students.	Size from the 1995 BIA Space Guide
Metal Shop	2080 sf, 130 sf per student for a maximum of 16 students.	Size from the 1995 BIA Space Guide
Wood Shop	1920 sf, 120 sf per student for a maximum of 16 students.	Size from the 1995 BIA Space Guide

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Appendix D. Replacement School Space Planning**

Program Area	Standard	Source
Auto Shop	2400 sf, 150 sf per student for a maximum of 16 students. Auto parts storage of 300 sf.	Size from the 1995 BIA Space Guide
Computer Aided Design (CAD)	888 sf, 37 sf per student for a max of 24 students.	1995 BIA Space Guide
Agriculture/Economic Development	1000 sf, 40 sf per student for a maximum of 25 students. Additional material storage of 200 sf.	1995 BIA Space Guide
Business Program (Computers)	925 sf, 37 sf/student, maximum 25 students. Dedicated space only if using computerized Word processors because of the amount of outlets. Another classroom will be used for accounting, finance, etc. and will be standard size interdisciplinary classroom.	Recommendation based on Focus Group meetings
Drivers Education	When provided within OIEP approved curriculum, an existing standard size interdisciplinary classroom will be utilized.	Recommendation based on Focus Group meetings
Gifted and Talented Program	A determination will be made by the OIEP whether to provide special classrooms. The number of classrooms to be provided is based on grade level and student population of the school. Upon approval, an existing standard size interdisciplinary classroom will be utilized.	
FACE		
Child Classroom	1200 sf, 60 sf per student for a max of 20 students.	BIA FACE document
Adult Classroom	900 sf, 60 sf per student for a max of 15 students.	BIA FACE document
Restroom	100 sf, handicapped accessible, uni-sex.	BIA FACE document
Kitchenette	80 sf	BIA FACE document
Storage	100 sf, for education program activities.	Recommendation based on Focus Group meetings
Adjacent Office Space	360 sf, space is to include files/record storage and counseling area.	Recommendation based on Focus Group meetings
Outdoor Play Area - For new construction	1500 sf of enclosed space adjacent to the classroom space. Playground design must meet the ASTM Standard F 1487 – 98 and the handbook for Public Playground Safety published by the U.S. Consumer Product Safety Commission.	Recommendation based on Focus Group meetings
Special Education		
Therapy Classroom (to include kitchenette and equipment storage) Kitchenette	880 sf for a max of 12 students. If the need is presented, a kitchenette and restroom are to be included in the classroom square footage. A kitchenette not to exceed 80 sf will be included in the classroom sf.	Recommendations based on conversations with the Division of School

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Appendix D. Replacement School Space Planning**

Program Area	Standard				Source	
Restroom	A separate handicapped accessible uni-sex restroom of 100 sf, equipped with lifts or shower hardware.				Improvement about Title I - Amendments to the Individuals with Disabilities Education Act.	
Resource Classroom	Standard size classroom as needed for the grade level being educated in the space. The number of Resource Classrooms per school is both enrollment and grade level dependant.					
Office/Testing Room	200 sf, used for hearing tests, learning disability tests and assessment tests					
Administration						
	<u><100</u>	<u>100-199</u>	<u>200-399</u>	<u>400+</u>		
Principal's Office	150	150	150	150	Recommendation to break out into the individual administrative spaces. Based on total square footages provided in 1995 BIA Space Guide and sizes from referenced states. KY quoted space on suite size and individual offices.	
Assistant Principal Office	NA	NA	150	150		
Other Offices	120	120	240	360		
Counseling	120	120	150	300		
Reception / Secretary	200	250	300	400		
Faculty Area (Includes faculty lounge, faculty workroom, faculty restrooms, etc.)	300	400	600	800		
Nurse's Office	150	150	150	150		
Dedicated Restroom	50	50	50	50		
Vault / Cash / Record Storage	100	100	125	150		
Copy / Mail / School Supplies Storage Room	150	150	150	150		
Conference Room	200	200	200	200		
School Entry Lobby	200	200	200	200		
	1940	2090	2665	3260		
Grant School Administrative Offices						Grant School Administration Office's will be provided upon the Grantee's documentation showing these employees are currently on staff. The number of offices provided will be determined by current staff to a maximum number of four offices
Executive Director's Office	200	200	200	200		
Business Manager's Office	150	150	150	150		
Procurement Staff Office	120	120	120	120		
Administrative Assistant Office	120	120	120	120		
	590	590	590	590		

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Appendix D. Replacement School Space Planning**

Program Area	Standard	Source
Library / Media Center		
Reading / Browsing / Stack (K-8)	Based on total student design capacity based on enrollment projections: 25-200 students, 800 sf; 201-400 students, 800 sf plus 30 sf per student of 15% of the total student design capacity over 200; over 400 students, 1700 sf plus 30 sf per student of 15% of the total student design capacity over 400.	1995 BIA Space Guide
Reading / Browsing / Stack (9-12)	Based on total student design capacity established on enrollment projections: 25-200 students, 1200 sf; 201-400 students, 1200 sf plus 30 sf per student of 15% of the total student design capacity over 200; over 400 students, 2100 sf plus 30 sf per student of 15% of the total student design capacity over 400.	1995 BIA Space Guide
Professional Publications (not a storage area)	75 sf	Based on Focus Group meetings 1995 BIA Space Guide
Librarian Office	120 sf	
Audio / Visual	Based on total student design capacity based on enrollment projections: 25-100 students, 100 sf; 101-200 students, 175 sf; over 200 students, 200 sf.	1995 BIA Space Guide, but halved due to information gathered during pilot Study. Most schools had permanent A/V in the classrooms
Storage / Workroom (K-8)	Based on total student design capacity based on enrollment projections: 25-100 students, 100 sf; 101-200 students, 200 sf; 201-400 students, 300 sf, over 400 students, 350 sf.	1995 BIA Space Guide
Storage / Workroom (9-12)	Based on total student design capacity based on enrollment projections: 25-200 students, 100 sf; 201-400 students, 180 sf, over 400 students, 200 sf.	1995 BIA Space Guide
Circulation / Checkout	100 sf	1995 BIA Space Guide
Student Project Room (K-8)	Based on total student design capacity based on enrollment projections: under 200 students, no space required, over 200 students, 500 sf.	1995 BIA Space Guide
Student Project Room (9-12)	Based on total student design capacity based on enrollment projections: under 200 students, no space required, over 200 students, 880 sf	1995 BIA Space Guide
Conference Room	Based on total student design capacity based on enrollment projections: under 200 students, no space required, 201-400 students, 250 sf; over 400 students, 300 sf.	1995 BIA Space Guide

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Appendix D. Replacement School Space Planning**

Program Area	Standard	Source
Physical Education - Indoor		
Multi-purpose Space/Gym - design to highest grade level standard, do not put dining rooms in multipurpose room	<p><u>Multi-purpose Room:</u> For K-6 with a design capacity of 25-200 students, 4101 sf (54'x76').</p> <p><u>Multi-purpose/Mini-gymnasium:</u> For K-6 with a design capacity of more than 200 students or 7-9 with a design capacity of 200 or less students, 42'x74' standard basketball court with 5 ft set-backs on each side and 8-ft on each end, totaling 4680 sf (52'x90') excluding bleacher seating.</p> <p><u>Gymnasium:</u> For K-9 with a design capacity of more than 200 students, 42'x74' standard basketball court with 5 ft set-backs on each side and 8-ft on each end, totaling 4680 sf (52'x90') excluding bleacher seating. A larger standard basketball court will not be provided even if there is grade 9.</p> <p>For 9-12, provide a full size gymnasium. <u>Court:</u> 50'x84' American standard basketball court with 10 ft set-backs on each side and end, totaling 7280 sf (70'x104'), excluding bleacher seating.</p>	1995 BIA Space Guide. Restriction of the multipurpose room and dining room as one was a result of the Focus Group meetings. Reduction of set backs made by Focus Group meetings. Reference NFPA code 12.1.7.1 and 13.1.7.1 for Occupant Load for egress calculations.
Bleachers	For 200% of the total student design capacity based on enrollment projections at 3 sf per student. This sf is in addition to the gym floor sf.	1995 BIA Space Guide. Reference NFPA code 12.1.7.1 and 13.1.7.1 for Occupant Load for egress calculations.
Auxiliary Space (High School Only)	For a design capacity of more than 200 students, 1700 sf provided for wrestling, weight training, etc.	1995 BIA Space Guide
Showers / Dressing Room / Restroom (For high school and elementary or middle school with 7th grade or higher)	2 handicapped accessible shower dressing areas, each 300 sf; one for males, one for females. Minimum required toilets w/ privacy stalls (and urinals) and sinks per UBC and ADA codes.	1995 BIA Space Guide
Locker Rooms (For schools with grades 7-9 and high schools)	Two (2) handicapped accessible locker rooms, each 500 sf; one for males, one for females. One small storage locker per student based on total student design capacity based on enrollment projections. Dressing lockers to be determined by the max number of students in a physical education class. For schools with a design capacity of more than 400 students, an additional 30 dressing lockers each in male and in female locker room for visiting teams. Allow 100 square feet for additional dressing lockers.	1995 BIA Space Guide
Staff Office	In schools with grades ranges up to 6, one office of 120 sf will be provided in the Multipurpose Room. In middle schools that include grade levels 7 through 9, and in high schools: two offices: 120 sf each, plus 100 sf for a handicapped accessible toilet, shower stall and sink for each office.	1995 BIA Space Guide
Portable Stage (K-8)	Provide a portable platform/stage, plus 100 sf for storage of the stage.	1995 BIA Space Guide

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Appendix D. Replacement School Space Planning**

Program Area	Standard	Source
Portable Stage (9-12)	For a design capacity of 200 students or less, provide a portable platform/stage, plus 100 sf storage. For a design capacity of 200-750 students, provide a fixed stage of 750 square feet. For a design capacity of 750 students or more, no fixed stage will be provided. The stage will be included in the auditorium space.	1995 BIA Space Guide
Storage	<u>Athletic/Physical Education Equipment</u> (K-6): 300 sf; (7-8): 600 sf; (9-12): 1000 sf <u>Team Equipment/Uniforms</u> (9-12): 800 sf.	Based on Focus Group meetings.
Concession Area (For a combined elementary/middle school)	For a design capacity of 200 or less students, concession areas will not be provided. For a design capacity of 201-399 students, provide 120 sf for a concession area with an additional 75 sf for storage. For a design capacity of 400 or more, provide 200 sf for a concession area with an additional 100 sf for storage.	1995 BIA Space Guide
Concession Area (9-12)	For a design capacity of 200 or less students, concession areas will not be provided. For a design capacity of 201-399, provide 120 sf for a concession area with an additional 80 sf for storage. For a design capacity of 400 or more, provide 200 sf for a concession area with an additional 120 sf for storage.	1995 BIA Space Guide
Physical Education - Outdoor		
Play Area and Fields (Elementary)	Provide a paved area of 60'x100' adjacent to the school as a ball court or multipurpose play area. Provide other areas for active play based on the total student design capacity based on enrollment projections.	1995 BIA Space Guide
Play Area and Fields (Middle)	Provide a paved area of 80'x120' adjacent to the school as a ball court or multipurpose play area. Provide additional playing fields and a track based on the total student design capacity established on enrollment projections.	1995 BIA Space Guide
Football Field and Track (9-12)	Provide a paved area of 80'x120' adjacent to the school as a ball court or multi-purpose area. For a design capacity of more than 100 students, provide a football field surrounded by an oval track. Additional playing fields and ancillary facilities will be provided in accordance with the school's athletic program.	1995 BIA Space Guide

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Appendix D. Replacement School Space Planning**

Program Area	Standard	Source
Food Services / Dining / The Dining Room will NOT be in the Multi-purpose Room		
Dining Room (K-12) - For schools without Auditorium, provide portable stage to be used either in dining area or multipurpose room.	For a design capacity of 100 students or less, 750 sf minimum. For a design capacity of more than 100 students, provide dining seating for 1/2 the total student design capacity based on enrollment projections. Space allowance is 15 sf per seat/student; includes seating, table and circulation space; excludes serving line space. Chair/Table Storage: 250 sf.	1995 BIA Space Guide - Modified by Focus Group 9/24/03. Restriction of the multipurpose room and dining room as one was a result of the Focus Group meetings. The smallest space is based on the square footage recommended for 300 or less students.
Kitchen Area (Food Preparation, Serving Lines, Walk-in/Reach-in Refrigerator and Freezer, Dry Storage, Dish Washing, Can Washing, Office, Employees' Room and Restroom, Receiving Dock and Waste Holding Area)	Based on meals served per day: 100 or less, 856 sf; 101-250, 1261 sf; 251-500, 1518 sf; 501-750, 1938 sf; 751-1000, 2208 sf; 1001-1250, 2566 sf; 1251-1500, 2880 sf; 1501-1750, 3360 sf; 1751-2000, 3840 sf, 2001 or more, 4388 sf.	1995 BIA Space Guide Source: Equipment Guide For On-Site School Kitchens, United States Department of Agriculture
Auxiliary Spaces		
Auditorium (9-12 only)	For a design capacity of 750 or more students, provide an auditorium. Auditorium and stage must be handicapped accessible. <u>Seating/Circulation:</u> 7 sf per student of the total student design capacity based on enrollment projections. <u>Stage:</u> 3000 sf (includes stage and off-stage area). <u>Storage:</u> Scenery and Props: 1000 sf. <u>Multi-use Lobby Area:</u> 100 sf or 2 sf per seat, whichever is greater. <u>Movie Projection:</u> Only at boarding schools - a maximum of 100 sf.	Auditorium space based on the 1995 BIA Space Guide. Lobby size based on guidelines from MN/ND and OK. Storage space based on guidelines from OK.
Commons		
Restrooms	As per building code.	As per building code
Passageways: Corridors, Lobbies, Student Commons, Stairwells	As per building code.	As per building code

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Appendix D. Replacement School Space Planning**

Program Area	Standard	Source
Support Services		
Bus Garage / Yard	<p>To protect vehicles from inclement conditions and for security purposes, provide bus garages and/or yards. Garage and/or roof shelter space will not exceed that needed to house the number of buses required for student transportation based on enrollment projections of the educational facilities and bus routes. Each parking space should not exceed 40'x12'.</p> <p>Bus space for maintenance purposes will be limited to one stall for each six vehicles or a fraction thereof. Vehicles will be housed in unheated facilities to maximum extent possible with provision for engine heaters as required. Space will not be provided if bus maintenance services are contracted out or GSA provides the maintenance.</p>	<p>1995 BIA Space Guide. Size of parking space based on information gathered from the Blue Bird Corporation and based on the use of conventional buses.</p>
Bus Loading Area	<p>20 feet for bus turning radius. 120'L x 14'H x 8"W bus loading overhang.</p>	<p>Based on guidelines from FL.</p>
Maintenance Shop	<p>Facilities maintenance shops will be provided to serve education facilities. The maximum space allowances provided for each population level based on the total student design capacity based on enrollment projections is as follows: For 100 or fewer students: 400 sf, For 100-199 students: 500 sf, For 200-399 students: 600 sf, For 400 or more students: 700 sf.</p>	<p>Based on guidelines from MN/ND</p>
Maintenance Office	<p>Provide maintenance office at a maximum allowance of 150 SF</p>	<p>Recommended based on Focus Group Meetings</p>
Maintenance Storage	<p>Maintenance Equipment: 250 sf Maintenance Material: For schools located less than 100 miles round trip from a town with a population of more than 25,000, provide 200 sf. For schools located more than 100 miles round trip from a town with a population of more than 25,000, provide 300 sf.</p>	<p>Based on 1995 BIA Space Guide and guidelines from CO</p>
Custodial Closets/Storage	<p>Space allowance is determined by student design capacity. Space to include mop sink, hot and cold-water faucet, mop hangers. The total space allocation per school facility is based on total design capacity: For 100 or fewer students: 150 sf, For 101-199 students: 200 sf, For 200-399 students: 250 sf, For 400 or more students: 300 sf.</p>	<p>Based on guidelines from CO and VA</p>

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Appendix D. Replacement School Space Planning**

Program Area	Standard	Source
General Storage	Space allowance is determined by student design capacity. The total space allocation per school facility is based on total design capacity: For 100 or fewer students: 150 sf, For 101-199 students: 200 sf, For 200-399 students: 250 sf, For 400-499 students: 300 sf For 500 or more students: 400 sf.	Based on Focus Group meetings.
Equipment Rooms (including Computer/Server Rooms)	As per building code. Square footage need is included in the net-to-gross conversions.	As per building code
Chemical Storage	Maximum space allowance is 100 sf.	Based on Focus Group meetings.
Dorms		
Sleep Rooms (1-8)	40 to 60 sf per student exclusive of furnishings and not to exceed a maximum of 4 students per room. Provide an additional 35 sf per student for furniture and storage space to include a wardrobe, bed and desk.	1995 BIA Space Guide
Sleep Rooms (9-12)	50 to 70 sf per student exclusive of furnishings and not to exceed a maximum of 4 students per room. Provide an additional 35 sf per student for furniture and storage space to include a wardrobe, bed and desk.	1995 BIA Space Guide
Restroom / Showers	Handicapped accessible restrooms will be provided at 10% of the dorm capacity. Communal type facilities may be substituted and the total space will be equal to or less than total space provided for individual restrooms. In cases where restrooms are provided between rooms the following spaces will be allowed: Two students per room 120 square feet; three students per room 140 square feet and four students per room 160 square feet.	1995 BIA Space Guide
Isolation Health Care Sleeping Room	Provide two rooms, 300 sf each, one for males and one for females, to contain two beds and a handicapped accessible bathroom including toilet, tub/shower and sink.	1995 BIA Space Guide
Counseling (1-8)	Each office 120 sf; one office for one counselor for up to 75 students and two offices for two counselors for 75 to 300 students.	1995 BIA Space Guide
Counseling (9-12)	Each office 120 sf, one office one counselor up to 100 students and two offices for two counselors for 101 to 300 students.	1995 BIA Space Guide
Dorm Secretary Office	For 150 students or more, provide one office of 120 sf and fire-rated record storage space of 75 sf.	1995 BIA Space Guide
Intensive Residential Guidance (IRG) Counselor Offices	Provide one counselor office for every 80 IRG students at 120 sf per office. Space for secure file storage is included in the office space.	OIEP
Home Living Specialist	One office of 120 sf.	1995 BIA Space Guide
Conference Room	For 150 or more students, provide 250 sf.	1995 BIA Space

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Appendix D. Replacement School Space Planning**

Program Area	Standard	Source
Living Room (K-8)	8 sf per student.	Guide 1995 BIA Space Guide
Living Room (9-12)	10 sf per student.	1995 BIA Space Guide
Activity Room	15 sf per student, minimum of 1200 sf.	1995 BIA Space Guide
Study Room	Provide space for 1/3 of the total student design capacity based on enrollment projections at 20 sf per student, minimum of 250 sf	1995 BIA Space Guide
Kitchen/Dining Area	A separate Kitchen and Dining Facility will not be provided for dormitories. Dormitories must utilize the existing Kitchen and Dining facilities associated with the adjacent school campus.	Based on meetings with the OFMC and OIEP.
Practical Arts Room	A determination will be made by the OIEP based on approved existing staffing and funding where this space will be provided. At a minimum, provide 1250 sf and general storage of 150 sf.	Based on meetings with the OFMC and OIEP.
Storage	<u>Linen</u> : 2 sf per student. <u>General</u> : 6 sf per student. <u>Individual storage</u> : (trunk/luggage) 5 sf per student.	1995 BIA Space Guide
Laundry	30 sf per pair of washers and dryers, one set for each 40 students of the total design capacity. Provide a double laundry sink and ironing board for every 2 sets of washers/dryers.	1995 BIA Space Guide
Recreational Area	Provide a paved play area of 60'x100' as a ball court or multi-purpose play area. Provide other areas for playground equipment based on the total student design capacity based on enrollment projections of the dormitory - must meet playground equipment safety standards by grade level and ADA (current standards: ASTM F4187-98, 36 CFR Part 1191) A recreation area will only be provided if the school is not in reasonable association with the dormitories.	1995 BIA Space Guide
Custodial Space	Each space should include a mop sink, hot and cold-water faucet, and mop hangers. The total space allocation per dormitory facility is based on total design capacity: For 75 or fewer residents: 200 sf, For 76-299 residents: 250 sf, For 300 or more residents: 300 sf.	Based on meetings with the OFMC and OIEP.
Dormitory Entry Lobby	Provide maximum of 200 square feet	Based on meetings with OFMC and OIEP
Public Restrooms	Provide handicapped adult male and female restrooms at 125 square feet each	Based on meetings with OFMC and OIEP
Peripheral Amenities: Kitchen, Dining Facility, Library, Nurses Station	See handbook as it applies to these spaces.	See guidelines as they apply to these spaces
Net-to-Gross Conversion	Net-to-Gross is covered under Section 3.3 D of the handbook.	

**BUREAU OF INDIAN AFFAIRS
EDUCATION SPACE CRITERIA HANDBOOK
Appendix D. Replacement School Space Planning**

Program Area	Standard	Source
Site		
Size (gross acre) (K-6) For new construction only	Minimum of 4 acres to a maximum of 10 acres, more or less, plus one acre for each 100 students.	1995 BIA Space Guide and new WY standards.
Size (gross acre) (7-9) For new construction only	Minimum of 10 acres to a maximum of 20 acres, more or less, plus one acre for each 100 students.	1995 BIA Space Guide and new WY standards.
Size (gross acre) (10-12) For new construction only	Minimum of 20 acres to a maximum of 30 acres, more or less, plus one acre for each 100 students.	1995 BIA Space Guide and new WY standards.
Facility Management Shop	2 acres.	1995 BIA Space Guide
Bus Garage / Yard	2 acres.	1995 BIA Space Guide
Employee Housing	One acre for every two houses.	1995 BIA Space Guide
Dormitory Housing	Three acres for every 100 students to be housed.	Based on Focus Group meetings.
Sewer Lagoon	If a sewer lagoon is provided with the project it must be located at least 1/4 mile from the nearest residence, school building or adjacent occupied building. The land area needed for the right-of-way (10) feet and the lagoon shall be provided.	Based on Focus Group meetings.