

The Catholic Diocese of Nsukka, Nigeria School Facility Design Guidelines

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Introduction

The Catholic Diocese of Nsukka, Nigeria, in partnership with the Catholic Archdiocese of Chicago, Schools for the Children of the World, and the Prairie Group, adopted a *3-Year Education Improvement Program* in May of 2009. That three year program included many individual objectives including;

- Establish a Relationship with Loyola University for Nsukka Diocese Center for Catholic Effectiveness for Education and Training for Catholic School Leadership.
- Establish Diocese of Nsukka Teacher Professional Development Center for 21st Century Education
- Build & Sustain Institutional Partnerships in Nigeria, USA & Elsewhere.
- Create a School Model that Exemplifies 21st Century Standard of Education in the Classroom
- Improve All Catholic Schools Based on School Model Standards to Include Teaching & Learning, Environmental Supports & Cleanliness
- Provide Professional Development Resources at Diocesan & Local Levels: Library and Technology Centers.
- Initiate Technology Infrastructure & Equipment Improvements for All Schools
- Collaborate with Government for Effective School Infrastructure: Roads, Water, Energy, etc.
- Address Salary Issues Moving toward Diocesan Policies for Greater Equity & Just Wages.
- Establish a Student Health Care Program to include Physical, Emotional & Psychological Health Care.
- Provide Holistic Learning Programs in All Schools: The Arts, Cultural Development, Physical Education, etc.
- Establish Effective Parent Organizations to Support and Promote 21st Century Education in all Schools.
- At Nursery and Primary Levels: Create and Sustain Developmentally Sound Teaching and Learning.
- At Secondary Level: Build And Equip Technology Based Labs For Research Based Education.
- At Secondary Level: Develop Specializations Based on Research & Development Issues, such as: Renewable Energy Production, Environmentally Sound Agri-Business, & Locally Sustainable Economic Development.
- Address Transportation Issues.
- Develop the Full Human & Spiritual Potential of the Student, Preparing Them as Responsible Christian Stewards & Leaders in the 21st Century Global Society.

It was clear that many of these objectives are dependent on adequate educational facilities to be successfully implemented. It is with that in mind that new educational facility design guidelines were established to facilitate the implementation of the *3-Year Education Improvement Program* of the Catholic Diocese of Nsukka, Nigeria.

These *Catholic Diocese of Nsukka School Facility Design Guidelines* have been prepared to establish *minimum* planning and design standards for all new school construction within the Catholic Diocese of Nsukka. Parishes are encouraged to use these guidelines whether interested in improving their existing school facilities and/or planning, designing, and constructing new facilities.



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On behalf of the Catholic Diocese of Nsukka and the entire Diocese of Nsukka School Planning Team, we welcome your efforts to improve school facilities throughout the Catholic Diocese of Nsukka and encourage the use of the *Catholic Diocese of Nsukka School Facility Design Guidelines* throughout Nigeria.

Charles R Newman

Charles R. Newman, AIA, REFP
Architect
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FORWARD



Most Reverend Bishop Francis E. Okobo
The Catholic Diocese of Nsukka, Nigeria

The *Catholic Diocese of Nsukka School Facility Design Guidelines* were developed as an answer to the *3-Year Education Improvement Program* adopted by the Future Search Conference held by the Diocese in May of 2009. The list of goals established during that conference provides basic guidelines for school facility improvement throughout the Catholic Diocese of Nsukka. *Schools for the Children of the World*, who had participated in the Future Search Conference and had previously developed the Honduras School Facility Design Guidelines in 2004, was requested to develop these guidelines for the Catholic Diocese of Nsukka, Nigeria.

These guidelines are meant to be a tool that can be used by design professionals and local parish communities to plan new schools and renovate their existing educational facilities, and to assist with the establishment of a minimum standard for all of our rural and urban schools.

The Catholic Diocese of Nsukka looks forward to sharing this manual with institutions throughout Nigeria that wish to raise educational standards and guarantee thousands of Nigerian children a quality education by constructing school facilities that meet the needs of a 21st century education.

Most Reverend Bishop Francis E. Okobo
The Catholic Diocese of Nsukka, Nigeria



Site Considerations

Enrollment

Site selection is a very important part of planning for a new school. Sites must be selected to support the student population that is expected over the next 20-40 years. Sites that merely support the current need may become inadequate as the student population increases. If that happens, facilities that are otherwise in good condition may be abandoned in favor of a larger school site able to support the total student population. A single site will avoid the additional administrative staff required by two sites, which translates into significant savings to the school and parish.

The school site must be able to accommodate school buildings, future additions due to student population growth and added educational programs, support facilities, and play areas. Some communities may also want to include agricultural fields to support their local curriculum.

While planning for multiple shifts may reduce school facility requirements initially, we recommend that sites be planned for all of the facilities needed to support local schools operating on a single shift.

While **Table 1** can be used as a general guideline, each community's requirements will vary based on the local curriculum and additional space(s) desired by the community to be located on the school site. In addition, urban school site size will be affected by the available open land within the community being served.

While multi-level school buildings can reduce the total area of the site required, consideration should be given to facility accessibility by students, staff and parents with physical challenges, and the safety of staff and students while exiting the building during emergencies such as fires, etc. Students in the first grade and under should never be located more than one floor above or below the nearest ground level exit.

Consideration should also be given to the space needed to park the cars of staff on the school site. While these requirements may not be great today, they can be expected to grow as more and more teachers and staff drive to work.

Location

Site location is also a very important consideration when selecting a site.

- **Maximum Travel Distance:** Sites should be selected within population centers and should minimize the distance children must walk to go to school for student safety and to allow more students to participate in after school activities. The following guidelines should be followed where possible:
 - Pre-K – 6th Grade: 2.0 kilometers
 - 7th Grade – 12th Grade: 4.5 kilometers

Table 1 - Recommended Site Size (m²)

Number of Students	Urban	Rural
<100	5,000	8,000
100-200	7,500	11,000
200-300	10,000	14,000
300-400	12,500	17,000
400-500	15,000	20,000
Over 500	15,000 + 25m ² / student	20,000 + 30m ² / student

The minimum site size recommended is based on useable square meters. If the site is not flat or if it includes other geographical obstacles, it may need to be increased.



- **Best Location:** The best locations for schools are near residential areas, along quiet streets with low traffic volume. Locations that are too close to busy highways or railroads should be avoided in consideration of noise and student safety.
- **Environmental Conditions to be Avoided** when selecting a site include:
 - Areas subject to flooding, mudslides or other natural hazards,
 - Areas subject to distracting sights, smells or noises,
 - Areas near heavy traffic or other unsafe areas, particularly near schools for younger children, and,
 - Areas under high voltage electrical lines (when possible).
- **Site Considerations** that should be included in project selection and planning include:
 - Areas where potable water is available from either a public water supply or a well,
 - Areas having access to a public utility providing electrical service,
 - Areas exposed to full sunlight throughout the day for classroom illumination with natural light,
 - Areas open to prevailing winds for natural classroom ventilation,
 - Shaded/Landscaped outdoor study areas for outdoor classroom activities. These can be used even on the hottest days,
 - Areas that are flat enough to support playfields, and
 - Areas that can be made fully accessible to people with physical handicaps, including all buildings and fields on the school site. Where sloped walks are needed to achieve this, they should not have a slope exceeding 1:12 with flat landings of 1.5 meters long every 9 meters. Slopes between 1:16 and 1:20 are preferred. Slopes less than 1:20 do not require flat landings.

Ecology, Landscaping, Natural Light for Classrooms, Play Areas

The following items should also be considered during site selection and development:

- **Surrounding Ecology and Wild Life** must be respected when planning for new school locations.
- **Tree Removal** should be avoided where possible.
 - Use new and existing trees to shade buildings from direct sunlight and minimize over-heating.
 - Trees can be used to block wind and noise from adjacent areas.
 - Trees can provide shade for outdoor study and play areas.
- Plan the **Location and Building Orientation** to take advantage of natural ventilation and natural sunlight to illuminate classrooms. Maximize natural illumination by considering the location of the sun throughout the day.
 - Sunlight bouncing off the concrete walkway in front of a classroom can provide an excellent source of natural illumination for the classroom without adding heat to the classroom.
 - Translucent roof panels selected to minimize heat radiation into the classroom can provide a great natural source of illumination without overheating students.
- The **Site Profile** must be flat enough and large enough for athletic fields (soccer fields) to be located a safe distance away from the buildings.
 - Provide separate play areas for younger children.
 - Consider a fenced-in play area for children younger than first grade to minimize staffing requirements.
- The **Site Size** should also include space for agricultural plots and any trade related workshops and training areas desired by the school to support vocational education programs.



- **Waste Storage and Disposal** facilities must be provided. Waste receptacles must be located throughout the school and site to teach staff and students to respect their environment and properly dispose of waste materials. A program should be developed to assure that the grounds are kept clear of waste materials.

Classroom Size

The standard classroom size of 72m² has been established for all classrooms at all grade levels; from Pre-Kindergarten through the 12th grade. This change in classroom size was established to:

- Accommodate a project based curriculum and a new classroom furniture design adopted by the Catholic Diocese of Nsukka.
- Standardize on a single classroom size for all grade levels so that classrooms can easily be reconfigured for different grade levels as a school’s enrollment changes and its composition changes over time.

Table 2

Size of Classrooms (m ²)	
Grade Level	Recommended
Pre-K - K	72m ²
Grades 1-6	72m ²
Grades 7-12	72m ²

Table 3

Size of Classrooms (students)	
Grade Level	Recommended
Pre-K - K	25
Grades 1-6	35
Grades 7-12	35

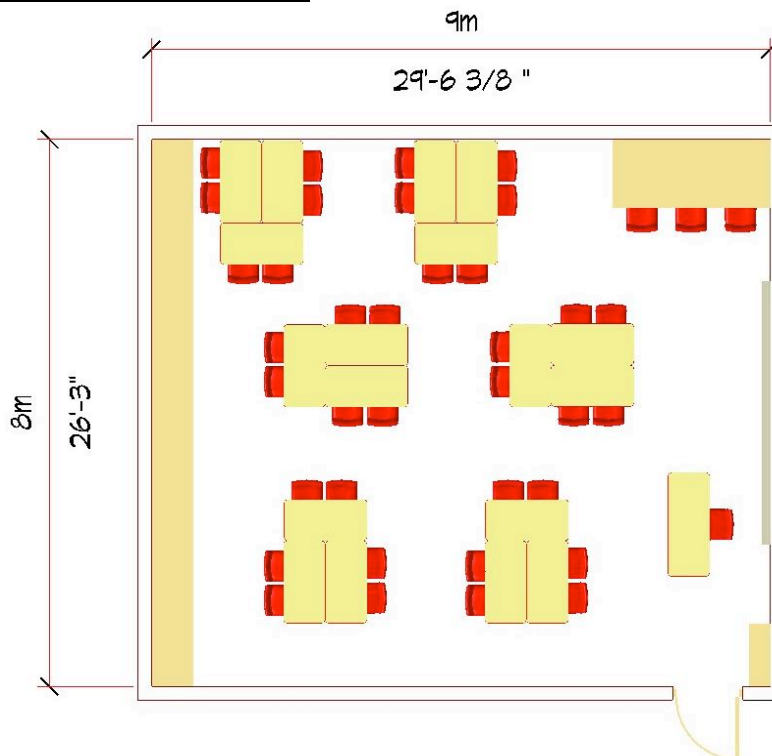


Figure 1 - Typical Classroom Floor Plan



A classroom of this size allows students to work in a variety of arrangements, supporting the new curriculum adopted by the Ministry of Education. The arrangements shown above and below are based on the new classroom furniture standards adopted by the Catholic Diocese of Nsukka. Updated project based curricula are expected to include pre-school, primary, and secondary educational programs which will be taught system-wide. The content of these programs is intended to assist students to meet performance standards in the arts, mathematics, natural science, social science, literacy, language arts, communication skills, and technology at each grade level. The new classroom is designed to support these activities.

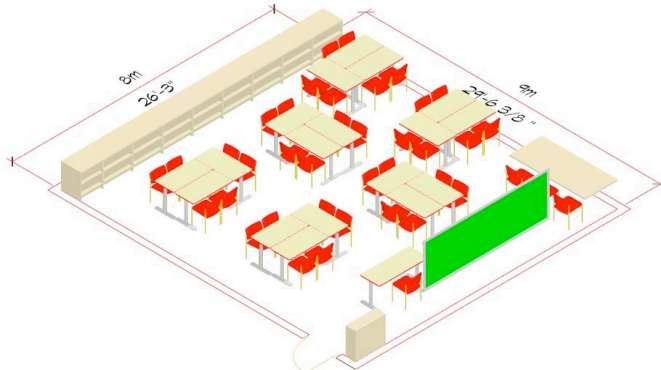


Figure 2 - Group Configuration

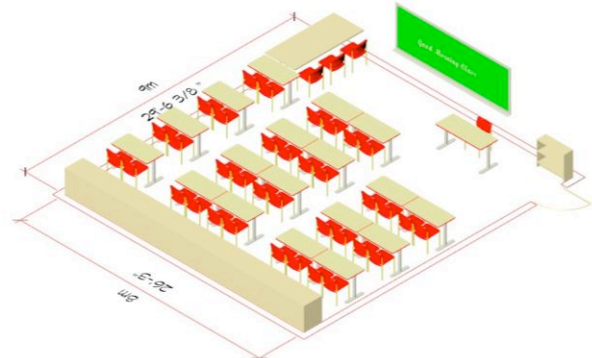


Figure 3 - Lecture Configuration

Support Space Considerations

Educational and Support Space Descriptions

Classrooms

The classroom is a teaching/learning space that must support the complete curriculum adopted by the Catholic Diocese of Nsukka. A classroom's design should be flexible enough to accommodate a variety of furniture configurations in support of a full range of classroom activities as well as potential changes in curriculum and grade level. The classroom should be comfortable for both students and staff, while taking advantage of both natural light and ventilation.

Opportunities for multiple classroom activities should also be considered when configuring several adjacent classrooms.

Designs using standardized details may simplify construction and offer cost savings, particularly when volunteer labor is used. Quality materials and construction methods that require minimum maintenance will reduce future maintenance costs while maximizing the life expectancy of the building.

Library

The library includes an instructional space for teaching students how to use the library, as well as quiet study areas for students, staff, and the community to access information.

Laboratories

Laboratories are areas where students can learn through instruction, observation and experimentation. In general, these areas need to be large enough and flexible enough to support both general instruction (such as within a normal classroom) and student experimentation. When utilities such as electricity and water are needed to support the curriculum, they can often be made available around the perimeter of the classroom. Tables and chairs within the room can be moved to these facilities during periods of experimentation. Laboratories must be



designed with adequate enclosed storage space. Usually an adjacent storage room is needed to store classroom supplies, student experiments, and permanent teaching materials and equipment. With proper planning, a single laboratory can accommodate more than one subject with adequate supporting storage space.

Technology

A school's educational programs must be supported by adequate technology, including computers, audio-visual equipment, and the associated support infrastructure.

- Each school must develop its own plan for making computers available to students and staff and provide the necessary facilities to support their plan.
- Each school must have access to the internet, for both staff and students, to facilitate staff training, research, and distance learning activities.
- Every school must include space for the safe storage, servicing, and charging of laptop computers and all other audio-visual equipment needed to support educational activities.

Through the use of laptop computers, any classroom can be used to teach students how to operate a computer and use computer applications. For that reason, a dedicated "computer lab" has not been included in the school program requirements.

Workshops

Workshops provide students space for learning trade related skills including home economics, electronics, industrial trades, construction trades, or equipment or automotive repairs and maintenance. The area must provide space for the full range of student activities, training aides, current student projects, past projects as examples, tool storage and raw materials.

Storage

Storage areas are needed to store general school instructional supplies and school facility maintenance supplies. Storage space is also needed for furniture and equipment that is shared during community or other school partner activities occurring at the school.

Cafeteria / Multi-Purpose Room

The Cafeteria / Multi-Purpose Room can serve a range of functions including:

1. A space for students to eat meals,
2. A meeting space for multiple classes or groups to assemble or perform,
3. An instrumental and /or vocal music instruction classroom / performance space
4. A Public meeting area. (Public spaces should be located near the school's public entry so that public areas can be secured from the rest of the school whenever they are used by the public – both during school hours and after school hours.)

Adequate storage space must be provided to support the functions programmed for this space.

Kitchen

The kitchen should include space for cooking equipment, food preparation and storage of food supplies. It can serve both student and community activities. It should be located adjacent to the student cafeteria, outdoor eating areas and the community's multi-purpose room if they are separate facilities.

Toilet Facilities

Toilet facilities must be sanitary and comfortable. They should be located within or immediately adjacent to kindergarten and first grade classrooms so that teachers can assist younger children without leaving the classroom. They should also be located in close proximity to all other classrooms. Toilet facilities that are useable by people with physical challenges should be available throughout the school.



Toilet facilities should be designed for ease of regular cleaning and maintenance to avoid water borne and insect borne diseases. Wastewater from sinks and toilets must be connected to either a public sanitary sewer or an approved waste water treatment or septic system.

Teacher workrooms

Teacher workrooms provide an area for school staff meetings and teacher lesson planning. The space must be adequate for small group meetings as well as individual teacher preparation and dining. It should include normal equipment and supplies that can be shared by teachers to help them prepare for classroom activities, including space for a future copier if electricity is not currently available.

Administrative Offices

Depending on school size, this area may include any or all of the following spaces:

- **Reception:** This space provides a welcoming area and space for secretarial staff.
- **Principal's Office:** This office provides space for the principal to work and meet with 1-2 students, parents, teachers, staff or visitors.
- **Accounting/ Bookkeeping:** This space serves as the financial management and accounting office for the school.
- **Conference Room:** Provides space for administrative conferences or meetings.
- **Counselors Office:** Provides space for counselors who assist students with career exploration, educational options for students, social guidance, etc.

Record Storage

Record Storage is an area for the storage of administrative records and student records. This area may be adjacent to an administrative work area for copying, collating, binding, sorting of files, preparing communications for mailing, etc. The record storage area should be made as fire proof as possible to protect records in the case of a fire.

Mechanical Equipment Space

Additional space may be needed to house mechanical equipment such as:

- A water well and pump,
- Electric generator,
- Air conditioning equipment,
- Wind and/or solar equipment and battery storage,
- Maintenance workshop.

Consideration should be given to the use of **Renewable Energy Resources** whenever possible.

Optional Facilities

Community Meeting Space

A multi-purpose space for community meetings and activities. An adjacent storage space may be needed to store supplies and alternative furniture needed for community activities.

Medical Clinic

A space where visiting doctors, dentists, etc. can offer services to the students and community.



Teacher Residence

In rural areas, a residence for a teacher from a neighboring community may be needed.

Gymnasium

A gymnasium is an enclosed space for physical education and physical fitness activities. It may also serve as a competitive gymnasium for sports competitions between schools. Competitive gymnasiums normally include space for bleachers (spectator seating). Use by the community should also be planned for and encouraged.

Space Requirements

The Minimum Space Requirements noted in the following tables identify the minimum *Net Programmable Area* that should be incorporated in an educational facility.

The *Net Programmable Area* is the total area of all spaces needed to support the activities planned for the building, but does not include the area of circulation space (including covered walkways) and toilet facilities.

When planning for new schools or school renovations, an additional 25% of the *Net Programmable Area* should be added as an allowance for circulation space and toilet facilities.

The following tables identify the minimum *Net Programmable Area* requirements for each grade level. The areas noted for toilets are not included in the Net M² noted in the table, and are provided as a guide for planning for the minimum acceptable number of toilets for a school.

Minimum Space Requirements (M ²)	
Grades Pre-K - Kindergarten	

Number of Students / Classroom:	25
Classroom Size:	72 SqM

	Total Number of Students							
	1-25	26-50	51-75	76-100	101-125	126-150	151-300	301+
# Classrooms	1	2	3	4	5	6	7-12	13+
Classrooms	72	144	216	288	360	432	0.35 SqM/Student	0.35 SqM/Student
Office	*	*	12	12	12	12	24	36
Teachers	*	*	9	12	15	18	0.12 SqM/Student	0.12 SqM/Student
Storage	*	24	24	24	48	48	0.24 SqM/Student	0.24 SqM/Student
Kitchen	-	-	-	-	-	-	-	-
Library	*	*	*	*	*	*	*	*
Computer Lab	*	*	*	*	*	*	*	*
Science Lab	*	*	*	*	*	*	*	*
Workshop	*	*	*	*	*	*	*	*
Gymnasium/Multi-Purpose	-	-	-	-	-	-	-	-
Net M²	72	168	261	336	435	510		
Net M² / Student	2.88	3.36	3.48	3.36	3.48	3.40	3.35	3.33
Toilets	6	12	18	24	30	36	0.24 SqM/Student	
(1 Toilet / Classroom at 6.0 m ² each)								

Figure 4



Minimum Space Requirements (M²)

Grades 1-6

Number of Students / Classroom:	36
Classroom Size:	72 SqM

	Total Number of Students							
	1-36	37-72	73-108	109-144	145-180	181-216	217-432	361+
# Classrooms	1	2	3	4	5	6	7-12	13+
Classrooms	72	144	216	288	360	432	2.00 SqM/Student	2.00 SqM/Student
Office	*	*	12	12	12	12	24	36
Teachers	*		9	12	15	18	0.08 SqM/Student	0.08 SqM/Student
Storage	*	12	12	12	12	12	0.06 SqM/Student	0.06 SqM/Student
Kitchen	-	-	18	18	36	36	36	36
Library	*	*	24	24	48	48	0.28 SqM/Student	0.28 SqM/Student
Computer Lab	*	*	*	*	*	*	*	*
Science Lab	-	-	-	-	-	-	-	-
Workshop	-	-	-	-	-	-	-	-
Gymnasium/Multi-Purpose	-	-	-	-	-	-	-	-
Net M²	72	156	291	366	483	558		
Net M² / Student	2.00	2.17	2.69	2.54	2.68	2.58	2.56	2.56
Toilets (M ²)	6	12	18	24	30	36	0.17 SqM/Student	
(1 Toilet / Classroom at 6.0 M ² each)								

Figure 5

Minimum Space Requirements (M²)

Grades 7-9

Number of Students / Classroom:	36
Classroom Size:	72 SqM

	Total Number of Students							
	1-36	37-72	73-108	109-144	145-180	181-216	217-432	361+
# Classrooms	1	2	3	4	5	6	7-12	13+
Classrooms	72	144	216	288	360	432	2.00 SqM/Student	2.00 SqM/Student
Office	*	*	24	24	24	24	24	24
Teachers	*	*	9	12	15	18	0.08 SqM/Student	0.08 SqM/Student
Storage	*	12	12	12	24	24	24	0.06 SqM/Student
Kitchen	-	-	18	18	36	36	72	144
Library	*	*	24	24	48	48	0.28 SqM/Student	0.28 SqM/Student
Computer Lab	*	*	*	*	*	*	*	*
Science Lab	-	-	-	24	24	24	0.17 SqM/Student	0.17 SqM/Student
Workshop	-	-	-	-	-	-	-	-
Gymnasium/Multi-Purpose	-	-	-	-	-	-	-	-
Net M²	72	156	303	420	531	606		
Net M² / Student	2.00	2.17	2.81	2.92	2.95	2.81	2.90	2.90
Toilets	6	12	18	24	30	36	0.17 SqM/Student	
(1 Toilet / Classroom at 6.0 M ² each)								

Figure 6



Minimum Support Space Requirements (M²)

Grades 10-12

Number of Students / Classroom:	36
Classroom Size:	72 SqM

	Total Number of Students							
	1-36	37-72	73-108	109-144	145-180	181-216	217-432	361+
# Classrooms	1	2	3	4	5	6	7-12	13+
Classrooms	72	144	216	288	360	432	2.00 SqM/Student	2.00 SqM/Student
Office	*	*	24	24	56	56	56	56
Teachers	*	*	9	12	15	18	0.08 SqM/Student	0.08 SqM/Student
Storage	*	24	24	24	48	48	0.11 SqM/Student	0.08 SqM/Student
Kitchen	-	-	18	36	36	36	72	144
Library	*	*	24	24	24	48	0.28 SqM/Student	0.29 SqM/Student
Computer Lab	*	*	*	*	*	*	*	*
Science Lab	24	24	24	72	72	72	144	216
Workshop	*	*	*	*	*	*	*	*
Agriculture / Ecology	*	*	*	72	72	72	72	72
Gymnasium/Multi-Purpose	-	-	-	-	-	-	-	-
Net M²	96	192	339	552	683	782		
Net M² / Student	2.67	2.67	3.14	3.83	3.79	3.62	3.40	3.30
Toilets	6	12	18	24	30	36	0.17 SqM/Student	
(1 Toilet / Classroom at 6.0 M ² each)								

Figure 7

Building Layout Considerations

School Size

The following maximum school student enrollment guidelines are suggested based on unique issues associated with demographics and the lack of transportation in many areas of the Catholic Diocese of Nsukka.

Rural Schools	25 – 250 students
Urban Elementary Schools	250 – 500 students
Urban Secondary Schools	500 – 1,000 students

It is suggested that rural schools have at least 25 students to justify the cost of constructing a school. For communities with fewer than 25 students, an alternative location should be considered, such as within available church facilities or a residence.

Studies have shown that students perform better in schools of about 250 students in size. Whenever possible, it is better to have many schools with approximately 250 students per school, rather than a single very large school. Where there is a need to serve larger numbers of students, consideration should be given to arranging the school into multiple smaller schools on the same site. Each school should function as a separate school, although special subject offerings and services can be shared between schools



In a similar manner, urban schools for grades Pre-K through 9th grade with more than 500 students may result in excessive travel distances for some students. Secondary Schools (Grades 10 and higher) may support enrollments of up to 1,000 students where longer travel distances are acceptable.

For schools with multiple shifts, the school must be planned for the shift (morning or afternoon session) with the greatest projected student enrollment. In addition, school planning should be based on attendance goals adopted by the National Attendance Goals outlined in the adjacent .

National Attendance Goals (EFA)	
Grade Level	Mandatory/Optional
Pre-School	Optional
Kindergarten	Mandatory
Primary (1-6)	Mandatory
Junior Secondary (7-9)	Mandatory
Senior Secondary (10-12)	Optional

Table 4

Building Organization

Schools should be planned and designed to offer inviting and safe environments for students, staff, and community members. Public areas of the school (those shared with the community) should be separated from student occupied areas of the school for improved student safety and school security. Where practical, those separations should be with lockable doors or gates for a more controlled separation. Consideration must be given to allow safe exit from the building at all times in case of emergencies such as a fire, etc.

The following recommendations should be considered to enhance student safety and improve building control:

- Control access to the school site by installing aesthetically pleasing fencing around the site’s perimeter.
- Public areas (such as multi-purpose rooms/auditoriums, etc.) should be close to the main entry for public access yet separable from student occupied areas. When possible, public areas should be able to be physically isolated (locked off) from the rest of the building.
- Administrative offices should be designed to have good visual contact of major circulation areas (i.e. entries, corridors, parking, etc) for both public areas and student areas of the school.
- Toilets should be located near classrooms. In larger schools, several toilets may be joined together in larger “gang” type toilet rooms. Dedicated accessible toilets must be made available to students and staff with physical challenges throughout the school.
- Avoid blind spots, alcoves, or other areas that are difficult to observe. Avoid spaces that would feel unsafe to building occupants.
- Athletic fields should be located far enough away from the school building to protect students in school from noise and the building itself from physical damage.

Accessibility

Accessible Facilities are facilities that are accessible by people with physical challenges without special assistance.

Program Accessibility is the process by which programs are made available to people with physical challenges in a manner that is equal to those services offered to able bodied people.

The Catholic Diocese of Nsukka is committed to providing equal access to an educational opportunity for all people with physical challenges. Therefore:

- **School facilities must be arranged so that all students with physical challenges have equal access to all desired programs and services.** This means that all special programs may need to be located on the ground floor level since few if any schools will install a lift for people with physical challenges.



Physically carrying a person to an upper or lower floor level is not an acceptable means of achieving equal access. Special consideration should be given to include the following areas on the accessible ground floor level:

- Administration Office
 - Library
 - Laboratories
 - Workshops
 - Cafeteria
 - Assembly Spaces
 - Classrooms at the grade level of students with special needs
- **Dedicated Accessible Toilets** must be made available to students and staff with physical challenges throughout the school.

Vehicular and Pedestrian Traffic Considerations

The design should avoid conflicts between pedestrian and vehicular site access to the extent possible:

- Separate parking areas from student activity areas
- Minimize pedestrian walkways that cross vehicular roadways
- Locate the school to minimize the number of students that must cross busy streets

Building Design and Construction Considerations

When planning and designing schools, the following should be considered:

- All materials, including donated materials, must meet the high quality standards needed to maximize facility life expectancy and minimize future maintenance expenses.
- Wall surface materials must be durable, easy to clean, and easy to repair if defaced by graffiti.
- Exposed to view materials should be readily available so that they can be matched during future renovations or additions. They should also have a high resistance to impact and perform well under local weather conditions.
- Construction techniques used should be able to be duplicated by the local community so that the local community can make needed repairs or modifications without detracting from the existing construction.
- Buildings must be oriented to take advantage of the natural attributes of the site, using natural light and ventilation wherever possible, considering wind direction and strength, rainfall and humidity, etc.
- To the extent possible, consideration should also be given to other elements that might affect a site such as the potential for mudslides, availability of potable water, adjacent hills that shade the site from sunlight, higher or planned future buildings adjacent to the school site, etc.
- In all cases, schools must be designed for flexibility. The one thing everyone can be sure of is change.

New designs, materials, and construction techniques should be explored as long as they meet the objectives outlined by these and future educational facility design guidelines. The most important criteria when considering alternatives are:

- Student safety,
- Ability to meet educational objectives adopted by the Catholic Diocese of Nsukka, and
- Ability of the community to maintain facilities without excessive effort or cost.



Community Centered Schools

The local school should be a major focal point within the community. The design of the school should reflect the character of the local community. Design elements that reflect unique characteristics of the community should be incorporated into each school design.

Sacred Space

Each school must include dedicated sacred space either within the school or at the adjacent church. A Catholic school provides the environment in which students at every age and capacity engage in a total Christian education and formation process. The Catholic school is an apprenticeship in Christian living.

In support of this activity, every Catholic school must provide sacred space for learning and prayer. If there is no church adjacent to the school, the school must provide an identifiable area where the learning community can gather for prayer. This area may either be a chapel or prayer room for regular use by individuals or classes to pray. The arts should be employed to make the space beautiful and peaceful.



Notes