

Should Public Buildings Be Exclusive? A Study of Selected Institutional Buildings in Minna, Niger State.

*Oyetola, S.A¹, Adedayo, O.F², Anunobi, A.I³, Adebisi, G.O⁴, Eri, P.O⁵,
^{1, 2, 3, 4, 5} Department of Architecture Federal university of Technology, Minna

ABSTRACT: Some individuals are born with a deformity also known as disability whereas others may become permanently or temporarily disabled over the course of their lives. Buildings should not be made to judge who comes in and goes out of its spaces. A good design must be accessible to all individuals, especially when discussing public buildings. An educational building is a public building and “education for all” is a common dictum that refers to all individuals irrespective of current status. Disabled individuals especially those in wheelchairs have special needs and requirements however, most Institutional buildings do not portray this equality with regards to their design; instead these designs ostracize individuals with disabilities. A survey was carried out on the existing special educational facility and forty four (44) randomly selected institutions of learning located in Minna, the capital of Niger State. They were further categorised based on funding; Federal, state or privately funded institutions. The survey showed that individuals with physical disabilities in Minna were not attending the special educational school and even if they were, facilities were not put in place to accommodate them also, despite the support by the Nigerian government on the equalisation of opportunities for people with disabilities, the public educational system have yet to factor in or retrofit designs to suit disabled individuals in their designs. This paper further highlighted these abnormalities in design and probable causes and concluded by recommending possible solutions.

KEY WORDS: Accessible, Design, Disabilities, Functionality, Institutional Buildings

I. INTRODUCTION

Disability is a common phenomenon worldwide. According to the World health Organisation (W.H.O), about 500 million people are living with disability and 75% of that number is living in developing countries. (Mickailakis, 1997; Lang and Upah, 2008) in Amusat (2009). Although there are no credible statistical data about disability in the country, the W.H.O estimates that 19 million or about 20% of the Nigerian population are disabled (Lang and Upah, 2008). According to Bamidele (2010) the Nigerians with disability act defined a disabled person as one who has received preliminary or permanent certificate of disability to have condition which is expected to continue permanently or for a considerable length of time which can reasonably be expected to limit the persons functional ability substantially, but not limited to seeing, hearing, thinking, ambulating, climbing, descending, lifting, grasping, rising, any related function or limitation due to weakness or significantly decreased endurance so that he cannot perform his everyday routine, living and working without significant hardship and vulnerability to everyday obstacles and hazards.

The Nigerian government supported the United Nations standard rules on the equalization of opportunities for people with disability. The disability act of 1993 was promulgated to enhance the social and societal positions of people living with disability. Nigerians living with disability are said to be no better off when compared with others living in other parts of the developing world, in terms of the challenges they face- they are poor, marginalised and excluded (Lang and Upah, 2008). The promulgations of these laws was so that there can be a change in how we as Nigerians see ourselves; but unfortunately, Nigerians with disabilities are still faced with these challenges. A portion of the disability act stipulates what may be referred to as positive discrimination in favour of the disabled persons as section 6(2) of the act requires all employers of labour to reserve for the disabled not less than 10 % of the workforce (Bamidele, 2010), unfortunately, this also does not happen as most employers of labour view the disabled as the proverbial chink in the chain - a weakness that will

affect total work output. In recent years, the debate about inclusive education has moved from high-income countries like the United States and Canada to low-income countries like Nigeria, where an official policy of educating children and youth with disabilities alongside their peers without disabilities in ordinary schools has been adopted (National policy on education, 2008). The inclusion of children with disabilities in general education where they can learn in natural stimulating settings which may further lead to general acceptance and appreciation of differences has received growing recognition. This has led to a continuous debate amongst policy makers at all levels, parents and people with disability in Nigeria regarding the efficacy of inclusion and the inevitable restructuring of the general education that will need to occur to make learning meaningful in an inclusive environment.

II. SPECIAL EDUCATION

The term special education is referred to when discussing education for disabled individuals, whether it is for the blind, deaf, dumb, autistic or even physical disability. These students need special conditions and requirements for learning. Therefore, it is assumed that all necessary facilities have been put in place to aid and ease education for these set of individuals. Under ideal situations this would involve proper planning, design and construction of necessary facilities and structures to embrace these individuals in order to promote a proper learning environment. An initial visit was then made during the preliminary stages of the research to the facility for special education located in Minna, Niger state. The results are tabulated in TABLE I below.

TABLE 1. SCHOOL FOR SPECIAL EDUCATION MINNA, NIGER STATE

STUDENT CAN HEAR BUT CAN'T SPEAK	CAN HEAR AND SPEAK BUT NO CLARITY IN THE WORDS	PHYSICALLY DISABLED	TOTAL NO. OF STUDENTS
312	35	0	347

Source: Authors Field Work

Note: The author used language used by proprietor in describing students' disabilities since no medical professional was available to clearly diagnose student's conditions

The results showed that there were no physically disabled students in the institution and even if there were, they would be impeded by physical barriers. This can be seen from on site photographs clearly shown below.



PLATE (a) Shows the entrance to the special school

PLATE (b) Showing one of three (3) stairs (access) to the corridor that leads to the classrooms and threshold of doors



Plate (c) and (d) showing the conditions of the schools central terrain and office and classroom blocks

III. INCLUSIVE EDUCATION

Inclusive education can be interpreted as the philosophy and practice for educating students with disabilities in general education setting (Bryant, smith & Bryant, 2001; Lipsky & Gartner, 1997; Rodgers, 1993; Salend, 2001). The principles are simple; a sort of symbiotic relationship whereby children with disabilities benefit from learning in a regular classroom, while their peers without disabilities gain from being exposed to children with different characters, talents and temperaments. There are obvious benefits to the inclusive education paradigm i.e. children are more likely to learn social skills in an environment that approximates to normal conditions of growth and development (Ajuwon, 2008).

According to Mitchell & Brown (1991), children during their formative years develop language more effectively if they are with children who speak normally and appropriately. Often, it is fulfilling that where school environments can be made physically accessible, children and youth with physical disabilities can function more effectively than would otherwise be the case. It is also apparent that such modifications to the environment often enable others who do not have disabilities to access their environment even more readily (Ferguson, 1996). In recent years, the principle of universal design (Centre for Universal Design, 1997; Waksler, 1996), has evolved to describe physical, curricular and pedagogical changes that must be put in place to benefit people of all learning styles without adaptation or retrofitting. Failing to accommodate the environmental and accessibility needs of persons with disabilities in the society will inevitably inhibit their participation in educational, social, recreational and economic activities (Steinfeld, Duncan, & Cardell, 1977 in Ajuwon, 2008). Therefore, architects, product designers, engineers and environmental design researchers should use their best judgment in early programming and design decisions (Ajuwon, 2008).

To further promote their involvement in the scheme, the Federal government of Nigeria launched the Universal basic Education (U.B.E) scheme in 1999, and in 2004 the law was enacted. Thus the compulsory free Universal Basic Education act 2004, which provides the legal frame work within which the Federal government supports the state's towards achieving an uninterrupted nine (9) year compulsory universal basic education for all children in primary and junior secondary levels throughout the country. The scheme also developed blocks of classrooms for children all around the country.

AIM OF STUDY

This paper sets out to assess selected institutions of learning - primary and secondary with a singular view to determine if their buildings designed prior to the enactment of the laws have been retrofitted in conformity with the enactment of the disability act and/or if recent construction are carried out with the disabled in view. According to the British Department for International Development (DFID) report, disabled people in Nigeria encounter a plethora of attitudinal, institutional and environmental barriers that impede and militate against their active social inclusion within contemporary society. These barriers are summarized in the **Table II** below.

TABLE 2. BARRIERS TO THE SOCIAL INCLUSION OF DISABLED PEOPLE IN NIGERIA

ENVIRONMENTAL	INSTITUTIONAL	ATTITUDINAL
<i>Inaccessible public buildings</i> Inaccessible transport system; Lack of access to computers & the internet Poor lighting Lack of accessible information,	Lack of disability legislation; Lack of robust and reliable disability statistics No social protection; Inadequate provision of medical and rehabilitation services; Lack of access to micro-finance and banking services Inaccessibility to mainstream public services, (especially education)	The cause of impairment often attributed to a "curse"; Disability issues are predominantly perceived in terms of charity/welfare – not in terms of human rights Lack of understanding of disability issues by the general public

Source: DFID report; April 2008.

Table 1 highlights “*inaccessible public buildings*” as one of the environmental barriers affecting the inclusion of disabled children and youth into the educational system. Hence, this forms the basis for this paper.

IV. RESEARCH METHOD

The primary data for the research were obtained in field surveys conducted in 45 randomly selected educational institutions in Minna, capital of Niger State, Nigeria. Tertiary Institutions were exempted from the study. Questionnaires were also used to get relevant information for analysis. The Schools were divided into categories; Federal, State or privately owned Institutions. The view was to determine how the introduction of the disability law changed the designs and construction of schools to suit physically disabled individuals and if institutions are retrofitting their buildings to make them disabled friendly?

The focus was on physical barriers that would affect the inclusion of disabled into the institutions; things like threshold heights, elevated levels, stairs, corridor width and conveniences. These constituted primary data and were presented using simple photograph pictures.

V. RESULTS AND DISCUSSIONS

50 Questionnaires were distributed, out of which 45 were answered, returned and analysed. The table 3 – 5 present the data obtained from the field survey. The questions are analysed and discussed making reference to the tables concerned.

TABLE 3. FEDERAL INSTITUTIONS

	S/N	School	Year Of Establishment	Number Of Students Enrolled	Number Of Physical Disabled Students	Number Of Staff	Number Of Physically Disabled Staff
Federal	1	Police Secondary School, Western Bypass, Minna	1992	1500	0	220	0
	2	Federal Government Staff College, Dutsen Kura, Minna	2003	700	3	58	0
	3	Federal University Staff School, Bosso;Minna	1987	656	0	36	0
		Total		2856	3	314	0
		%		0.11%	0%		

Source: Author's Field Work, 2012

The numbers of federally funded secondary schools in the state are few; however these do not represent the total number within the state capital but only represent the ones that granted the researcher access. They maintained a strict selection process for admitting students and sources revealed that physical disabilities were major criteria for student admissions. One of the three institutions visited showed recent modifications (introduction of ramps) which is likely the reason there are few physically disabled students there.

TABLE 4. STATE INSTITUTIONS

	S/N	School	Year Of Establishment	Number Of Students Enrolled	Number Of Physical Disabled Students	Number Of Staff	Number Of Physically Disabled Staff	
State	1	Niger State School For Special Education	1983	365	0	93	0	
	2	Government Day Junior Secondary School, Bosso Rd, Minna	1964	959	3	377	2	
	3	Gidan Kwano Primary School, Gidan Kwano, Minna	1976	648	1	19	0	
	4	Shango Primary School, Shango, Minna	1976	700	10	93	1	
	5	Government Day Junior Secondary School, Bosso Rd, Minna	1979	1250	1	120	0	
	6	Dutsen Kura Primary School, Minna	1989	825	3	107	0	
	7	Bosso Secondary School, Bosso Estate	-	738	0	92	0	
	8	Hill-Top-Model School, Maitumbi Minna	1985	6450	0	154	0	
	9	Government Day Junior Secondary School, Barkin Sale, Minna	2007	3800	36	85	0	
	10	Zarumai Model School, Taibi Quarters Bosso	1976	3885	4	121	0	
	11	Government Girl's Day Secondary, School, (A) Old Airport Rd	-	390	0	42	0	
	12	Government Girl's Day Secondary, School, (B)Old Airport Rd	-	277	0	21	0	
			Total		20287	58	1324	3
			%		0.30%	0.23%		

Source: Author's Field Work, 2012

The selection process for admitting students here is less strict and the state has literally tried to adopt the free for all education in conformity with the disability act and that's why the table shows more individuals (although still few) are being admitted. However, structures were not built to accommodate these groups of individuals and haven't been retrofitted in response to them. The research revealed that students with physical deformities especially those that cannot walk are carried over stairs and into classrooms.

TABLE 5. PRIVATE INSTITUTIONS

SN	School	Year Of Eatabl Ishment	Number Of Students Enrolled	Number Of Physical Disabled Students	Numbe r Of Staff	Number Of Physically Disabled Staff
1	Niger Baptist School, Minna	1911	957	0	24	0
2	Mawo International Schools, Minna	1989	960	0	67	0
3	Rhema Model Nurs& Primary School, Tunga	1996	162	0	11	0
4	Abu-Turab Islamic Schools, Bosso, Minna	1994	340	0	35	0
5	Abu-Turab Islamic Schools, Bosso, Minna	2003	628	1	36	0
6	Onward Primary School, Gidan Mangoro, Minna	2004	50	0	6	0
7	Onward Primary School, Tudun Fulani, Minna	2009	175	0	13	0
8	Umar Nursery And Primary School, Tudun Fulani	2005	375	2	11	1
9	Fountain Height Montessori School, Tunga, Minna	2006	185	0	16	0
10	Prevail International School, Gidan Kwano, Minna	2006	120	0	10	0
11	Salam Goodwill Int'l School, Minna	2008	152	1	16	0
12	Kowa Schools, Kpakungu, Minna	2010	2300	0	60	0
13	Bilal Bin Rabah Islamic Nursery/Prim School	2011	357	0	30	0
14	Faruk Bahago Int'l School, Dutsen Kura Gwari, Minna	2004	285	6	36	0
15	Himma International College	1989	600	2	110	0
16	St. Clement Sec. School Gbaiko	2005	400	0	50	1
17	Kings And Queens International School	2006	284	0	21	0
18	Hasha Model School, Bosso	1996	580	4	105	0
19	Galaxy International School, Eastern Bypass	2007	2470	0	47	0
20	Dr Yahaya Primary School, Bosso	1950	4024	2	112	2
21	Kingdom Heritage Model School	2009	252	0	26	0
22	Harmony School, London Street, Dutsen Kure	2004	634	2	32	0
23	Brighter Schools, Minna	-	390	0	42	0
24	Gbatara International Science Academy, Bosso; Minna	2007	277	0	21	0
25	New Horizons School	1984	304	0	36	0
26	Unmi Nursery And Prim School	1985	385	0	38	0
27	Jamat Islamic Primary School	2005	155	0	12	0
28	Aziziyah Model Academy	2006	58	3	11	1
29	Ar-Rayyan Academy	2003	96	0	13	0
30	Amina International School	2008	1242	0	42	0
	Total		19197	23	1089	4
	%		0.12%		0.37%	

Source: Author's Field Work, 2012

One would expect that these type of institutions would at least put design considerations and construction to meet the peculiar needs of disabled individuals, but even here there are considerable lapses and it is sad to admit but the institution of learning is gradually turning into a profit making venture with “few” or “no” consideration for disabilities. On a good note, some few private institutions seen in table 5, made peripheral provisions for children with disabilities with the introduction of ramps, increased door widths in order to accommodate wheel chairs, and elimination of door thresholds.

The tabulated data represented above for all three (3) types of institutions are succinct. The numbers of physically disabled students and staff are minuscule when compared to the number of admitted students and appointed staff. The reasons for these small numbers can be explained by a number of factors that can be explained in Table 2 but precisely, these institutions were not designed to factor in disabled individuals from their design stages and have not been retrofitted during their use to cater for these groups of individuals. The plates below will clearly provide vivid images of the barriers these few disabled individuals face, in the institutions tabulated above.



(A) E.T.F project for staff school (f.u.t) minna: The class rooms have no access to wheel chair users



(B) Bosso Primary School; all classrooms are accessed by stairs



(A) Stairs Along Corridors And To Classrooms F.G.C) Minna



(B) F.G.C Minna: door width to offices Are too small and threshold Presence In Doorways Prohibits Easy access To Disabled Users



BOSSO PRIMARY SCHOOL



(B) TUDUNWADA PRIMARY SCHOOL

Inaccessible Toilet Facilities For Wheelchair Users’ In (A) AND (B)



(A) F.G.C minna:toilets cannot be accessed by wheel chair user



(b) F.U.T staff school (staff toilet)no consideration for door swing (Problem for wheel chair users)

VI. CONCLUSIONS

The study revealed that architectural designs, especially those of educational institutions in Minna, Niger state, do not factor in disabled individuals despite the enactment of the disability act by the country. These randomly selected institutions depict the trend of institutional designs in Minna. This can be a contributory reason why a large number of disabled children can be seen roaming the streets. These individuals have been given free education, jobs, even financial assistance but cannot access the buildings due to design barriers. It has to be pointed out that the disabled people account for a recognisable size of the population and deserve the right to access and use buildings comfortably. In order to stop the designs and construction of buildings that are not disabled friendly, the government, professional regulatory bodies and the civil society, should embark on vigorous sensitisation and education for all stakeholders in the building industry on the need to adhere to the dictates of the disability Act especially with regards to buildings. The government (legislative) and civil society should create and pass laws to back its implementation and enforcement in the building Industry.

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