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Human Rights of Students with Disabilities in Ghana: Accessibility of the University Built Environment

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ABSTRACT

This article addresses two important human rights issues: disability rights and the right to education. Inclusive education requires accessible built teaching environments. However, few empirical studies address the accessibility of university built environments in a human rights context. The case study involved a normative empirical approach in which questionnaires and interviews were used to ascertain the perceptions of persons with disabilities (PWDs) about the built environment of selected universities in Ghana and the priority given to persons with disabilities in administrative decision-making about accessibility. This study reveals some of the challenges many university students face in terms of communication, transportation and physical environment. The study shows that students perceive that the university administration treats the concerns of students with disabilities as an afterthought. This is arguably the result of (and made worse by) a weak legal and regulatory framework. Based on these findings, this article will provide recommendations that may help protect the rights of students with disabilities. These include the need for the universities to enact and enforce policies pertaining to persons with disabilities and for the National Accreditation Board to review its accreditation standards.

KEYWORDS

Human Rights; Students; Persons with Disabilities; Students with Disabilities; Sustainable Development Goals; Accessibility; Inclusive Education; University; Built Environment; Ghana

1. Introduction

Disability rights have become a human rights and developmental issue.¹ The social model of disability, which postulates that disability is caused by the way society is organised, underpins the human rights framework of disability.² The implication of this is that society creates barriers like those in the built environment and these ultimately create or engender disability.³ Research evidence from the world over gives credence to the

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¹Franklin Oduro, 'The Quest for Inclusion and Citizenship in Ghana: Challenges and Prospects' (2009) 13(6) *Citizenship Studies* 621; World Health Organisation (WHO), *World Report on Disability* (World Health Organisation Press 2011).

²United Nations Children's Fund (UNICEF), 'Children and Young People with Disabilities: Fact Sheet May 2013' (UNICEF 2013) <www.unicef.org/disabilities/files/Factsheet_A5_Web_NEW.pdf> accessed 27 October 2016.

³Bill Albert and Rachel Hurst, 'Disability and a Human Rights Approach to Development' (Disability Knowledge and Research, Briefing Paper, 2004) <<http://hpod.org/pdf/human-rights-approach.pdf>> accessed 17 July 2013; Department for International Development 'Disability Core Script' (DFID 2010) <www.diversity@dfid.gov.uk> accessed 5 December 2010; WHO (n 1).

idea that it is possible to remove debilitating barriers and build inclusive societies where persons with disabilities' (PWDs') rights can be realised.⁴

Disability is also closely tied to the risk of poverty.⁵ Disability may increase the risk of poverty and vice versa.⁶ Persons with disabilities tend to be among the most stigmatised, vulnerable, poor and least educated people worldwide.⁷ Over 80% of persons with disabilities fall within the poverty bracket⁸ and about 80% of the world's more than one billion persons with disabilities live in developing countries.⁹ Oyaro notes that more than a tenth of Africa's population is made up of persons with disabilities and the majority of them live in dismal conditions.¹⁰ Persons with disabilities in Ghana are classified among the poorest.¹¹ A study conducted by JKM Research Consulting in partnership with organisations in Ghana and Denmark showed that the poverty situation of persons with disabilities in Ghana was very severe.¹²

Mensah and others note that the very low level of education among persons with disabilities in Ghana explains the level of poverty among them.¹³ In Ghana, only 1.4% of persons with disabilities have a tertiary level education.¹⁴ According to article 26 of the United Nations Universal Declaration on Human Rights, access to education is a fundamental human right.¹⁵ Studies have shown that education can help improve the lives of persons with disabilities.¹⁶ The 2030 Agenda for Sustainable Development adopted by the UN in September 2015 are aimed at eradicating poverty. The fourth Sustainable Development Goal (SDG 4) identifies the need to ensure inclusive and equitable education, and

⁴UNICEF (n 2).

⁵Daniel Mont 'Measuring Disability Prevalence' (2007) SP Discussion Paper No 0706, Disability & Development Team, HDNSP, The World Bank, March 2007; Nora Groce, Maria Kett, Raymond Lang and Jean-Francois Trani 'Disability and Poverty: The Need for a More Nuanced Understanding of Implications for Development Policy and Practice' (2011) 32 (8) Third World Quarterly 1493; Lauren Graham, Jacqueline Moodley and Lisa Selipsky 'The Disability-Poverty Nexus and the Case for a Capabilities Approach: Evidence from Johannesburg, South Africa' (2013) 28(3) Disability and Society 324.

⁶WHO (n 1) 9–10.

⁷Nora Ellen Groce, 'HIV/ AIDS and Individuals with Disabilities' (2005) 8(2) Health and Human Rights 215; Groce and others (n 5).

⁸UN Department of Economic and Social Affairs (UN DESA), 'Disability Indicators for the SDGs' (UN DESA/DSPS/Secretariat for the Convention on the Rights of Persons with Disabilities, with contributions and support from the World Health Organization, 2015) <www.un.org/disabilities/documents/disability_indicators_aug_2015.docx> accessed 27 April 2016.

⁹United Nations Development Programme (UNDP), 'UN Enable: Development and Human Rights For All' (UNDP 2014) <<http://www.un.org/disabilities/default.asp?id=18>> accessed 4 October 2013.

¹⁰Louis O Oyaro, 'Africa at Crossroads: The United Nations Convention on the Rights of Persons with Disabilities' (2015) 30(2) American University International Law Review 347.

¹¹Voice Ghana (Voice of People with Disability), 'Political Governance or Persons with Disabilities: A Study on the Level of Participation of Persons with Disabilities in Local Governance' (Sponsored by Open Society Initiative for West Africa, OSIWA, 2014) <<http://voiceghana.org/downloads/Research%20on%20Political%20Governance%20for%20PWDs.pdf>> accessed 4 June 2016.

¹²Osman Mensah, Jody Williams, Richmond Atta-Ankomah and Mboje Mjomba, *Strengthening the Disability Movement in Ghana through Organizational Capacity and Advocacy: Contextual Analysis of the Disability Situation in Ghana*, Accra (JKM Research Consulting 2008) <www.gfdgh.org/Context%20analysis.pdf> accessed 23 March 2016.

¹³ibid.

¹⁴Ghana Statistical Services (GSS), *2010 Population Census, National Analytical Report* (Accra, Ghana Statistical Service 2013).

¹⁵United Nations, Universal Declaration of Human Rights, 10 December 1948, 217 A (III) <www.un.org/en/universal-declaration-human-rights/> accessed 13 October 2014.

¹⁶Peter Gibilisco, *Politics, Disability and Social Inclusion: People with Different Abilities in the 21st Century* (VDM Publishing 2010); Sophie Mitra, Aleksandra Posarac and Brandon Vick 'Disability and Poverty in Developing Countries: A Snapshot from the World Health Survey' (SP Discussion Paper No 1109, Social Protection and Labor, The World Bank Social Protection and Labor Unit, Human Development Network, HDNSP, 2011) <<http://documents.worldbank.org/curated/en/501871468326189306/Disability-and-poverty-in-developing-countries-a-snapshot-from-the-world-health-survey;jsessionid=NmOT5IPFF+Wlmykzt8BP8mwC>> accessed 23 March 2016; Kamal Lamichhane and Tomoo Okubo, 'The Nexus between Disability, Education, and Employment: Evidence from Nepal' (2014) 42(3) Oxford Development Studies 439.

clearly emphasises the need to ensure education for persons with disabilities.¹⁷ The SDGs are a marked improvement on the Millennium Development Goals (MDGs) because they devote specific attention to persons with disabilities.¹⁸ The SDGs are built on the principle that no one should be left behind.¹⁹ Accessibility refers to the degree to which an environment, service, or product allows access by as many people as possible, in particular persons with disabilities.²⁰ Accessibility requires taking measures to ensure access for persons with disabilities, on an equal basis with others, to the physical environment, to transportation and to information and communication.²¹

Inaccessible built environments are a debilitating factor for persons with disabilities' education.²² Several higher education institutions have been described as not being inclusive and for that matter are not as accessible as they ought to be for persons with disabilities.²³ There is lack of empirical research information that addresses accessibility in the university built environment as a human rights issue. This article will show how students with disabilities (SWDs) perceived the university built environment and how their right to an accessible university built environment in Ghana was being addressed. The hypothesis tested was: 'students perceive that accessibility needs of persons with disabilities are largely factored into Corporate Real Estate Management (CREM) decisions in universities in Ghana.' With regard to the hypothesis, we maintain the position that if PWDs have a right to an accessible university environment, then their needs should not be considered as an afterthought. CREM decisions are decisions that touch on various aspects of the built environment including property acquisition, design, development, maintenance, management and policy.²⁴ Addressing the education needs and accessibility rights of PWDs to inclusive built environment has usually not been in a holistic manner, hence the decision to approach the issue in this exploratory study using CREM which looks at the built environment more holistically. With the CREM approach, the property asset base of an organisation should be aligned with the organisation's corporate goals and objectives.²⁵ In this context, CREM decisions at universities, which have the objective of ensuring

¹⁷UN Enable, 'Disability-Inclusive Sustainable Development Goals: 2030 Agenda for Sustainable Development' (2016) <www.un.org/disabilities/documents/sdgs/disability_inclusive_sdgs.pdf> accessed 27 April 2016.

¹⁸Rehabilitation International, 'Sustainable Development Goals: Disability Inclusion in Development' (2015) <www.riglobal.org/sustainable-development-goals-disability-inclusion-in-development/> accessed 27 April 2016; UN Enable (n 17).

¹⁹ADD (Action on Disability and Development) International, 'The Value of Mainstreaming' (2015) <www.add.org.uk/sites/default/files/ADD_The_Value_of_Mainstreaming_2016_1.pdf> accessed 27 October 2016.

²⁰WHO (n 1).

²¹Convention on the Rights of Persons with Disabilities (CRPD) (Adopted 13 December 2006, entered into force 3 May 2008) <www.un.org/disabilities/documents/convention/convention_accessible_pdf.pdf> accessed 30 August 2011.

²²United Nations, 'From Exclusion to Equality: Realizing the Rights of Persons with Disabilities, Handbook for Parliamentarians on the Convention on the Rights of Persons with Disabilities and its Optional Protocol' (2007) <www.un.org/disabilities/documents/toolaction/ipuhb.pdf> accessed 4 August 2016.

²³Talhatu Kolapo Hamzat and OO Dada, 'Wheelchair Accessibility of Public Buildings in Ibadan, Nigeria' (2005) 16(2) Asia Pacific Disability Rehabilitation Journal 115; Lily C Fidzani, Gertrude R Mafatlane, Ndiko Sechaba and others, 'Accessibility of University of Botswana Main Campus Buildings to Wheelchair Users' (2013) 27(1) Botswana Journal of African Studies 125; Emmanuel Kofi Gavu, Eric Paul Tudzi and Siba Ahmed Shani, 'The Level of Accessibility of Tertiary Educational Facilities in Ghana after the Passage of the Persons with Disability Act 2006, Act 715' (American Real Estate Society Conference, Sanibel Harbour Marriott Fort Myers, Florida, 14–18 April 2015).

²⁴Eric Paul Tudzi, Emmanuel Kofi Gavu, Jonathan Zinzi Ayitey and Naana Amakie Boakye-Agyeman, 'Corporate Real Estate Management: A Survey of Literature' in Edward Badu, Joshua Ayarkwa, Divine Ahadzie and others (eds), *Proceedings of 4th International Conference on Infrastructure Development in Africa (ICIDA)* (Kumasi, KNUST ICIDA Secretariat 2015) 720–740.

²⁵Chris Heywood, 'Approaches to Aligning Corporate Real Estate and Organizational Strategy' (The European Real Estate Society Conference, Eindhoven, The Netherlands, 15–18 June 2011); Barry P Haynes, 'Corporate Real Estate Asset Management: Aligned Vision' (2012) 14 Journal of Corporate Real Estate 244.

inclusive education and accessible built environments, should primarily promote and support this objective.

The next section focuses on the legal human rights framework relevant to persons with disabilities in Ghana. The article will then describe the methodology used and present the research findings. Based on these findings, we will provide recommendations on the way forward.

2. Disability Rights in Ghana: An Overview

Ghana is a signatory to international protocols that protect the rights of persons with disabilities, such as the Convention on the Rights of the Child²⁶ and the African Charter on Human and Peoples' Rights.²⁷ In 2007, Ghana also signed the United Nations Convention on the Rights of Persons with Disabilities (CRPD) and ratified it in 2012.²⁸ The ratification affirms Ghana's commitment to respect the human rights of persons with disabilities.²⁹ According to article 1 of the CRPD, its purpose is to promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities, and to promote respect for their inherent dignity.

The 1992 Constitution of Ghana also guarantees equal rights hence assuring equality and non-discrimination for all people including persons with disabilities (article 17).³⁰ Article 29 addresses persons with disabilities specifically; 'As far as practicable, every place to which the public have access shall have appropriate facilities for disabled persons',³¹ which includes educational institutions. Although 'appropriate facilities' is not defined by the Constitution, when considered in the light of the CRPD, 'appropriate facilities' used here should be understood as akin to 'reasonable accommodation'. Ghana has various legislation like the Children's Act 1998 (Act 560),³² the Labour Act 2003 (Act 651)³³ and the National Health Insurance Act 2012 (Act 852)³⁴ that deal with some rights of persons with disabilities like their rights as children, conditions at the work place and access to health insurance. However, the main enabling legislation on persons with disabilities is the Persons with Disability Act of 2006 (Act 715).³⁵ The following sections of Act 715 show how public facilities and services should be made accessible for persons with disabilities:

6. The owner or occupier of a place to which the public has access shall provide appropriate facilities that make the place accessible to and available for use by a person with disability.

²⁶Convention on the Rights of the Child (CRC) (adopted 20 November 1989, entered into force 2 September 1990) 1577 UNTS 3.

²⁷African Charter on Human and Peoples' Rights (also known as the Banjul Charter, adopted 27 June 1981, entered into force 21 October 1986).

²⁸Government of Ghana, 'Ghana ratifies UN Convention on Rights of PWDs' (2012) <www.ghana.gov.gh/index.php/news/general-news/11587-ghana-ratifies-un-convention-on-rights-of-pwds> accessed 14 November 2012.

²⁹Human Rights Watch, 'Ghana: Disability Rights Convention Ratified' (HRW, 2012) <www.hrw.org/news/2012/08/22/ghana-disability-rights-convention-ratified> accessed 7 October 2016.

³⁰Constitution of the Republic of Ghana (1992) art 17.

³¹Ibid, art 29.

³²Children's Act 1998 (Act 560) (GH).

³³Labour Act 2003 (Act 651) (GH).

³⁴National Health Insurance Act 2012 (Act 852) (GH).

³⁵Persons with Disability Act 2006 (Act 715) (GH).

7. A person who provides service to the public shall put in place the necessary facilities that make the service available and accessible to a person with disability.³⁶

Furthermore, the Act also asserts that there is a timeline for making public buildings accessible:

60. The owner or occupier of an existing building to which the public has access shall within ten years of the commencement of this Act [by 2016] make that building accessible to and available for use by a person with disability.³⁷

Ghana also has a constitutionally mandated Commission on Human Rights and Administrative Justice (CHRAJ), which investigates issues on human rights including those of persons with disabilities. The police and the courts are also required by law to defend the rights of citizens. Yet, a cursory visit to several university campuses in Ghana reveals that the built environment does not look accessible and is indicative of disability rights violations. This is further supported by the findings of Gavu and others who approached the issue of accessibility of the university environment through a physical audit of structures in one university in Ghana using the Americans with Disability Act Accessibility Guidelines (ADAAG).³⁸

3. Methodology

3.1 Research design

This exploratory study used a normative empirical approach to evaluate the rights of students with disabilities to accessible university built environments. It was a case study of universities that involved the use of mixed methods. Questionnaires and interviews were used to collect data which was subsequently analysed with the aid of relevant statistical analysis software.

3.2 Sampling and data collection

The purpose of the data collection was to obtain information on persons with disabilities, the accessibility of the university's built environment, the legal and regulatory framework in the light of issues pertaining to persons with disabilities and CREM decisions regarding the university built environment.

Based on maximal variation sampling, six universities in Ghana were selected as the study sites, based on differences in their built environments. With maximal variation sampling the researcher samples cases that differ on some characteristic – in this case – the built environment. The researcher then identifies sites that demonstrate different scopes of that characteristic.³⁹ In order to ensure various perspectives and an in-depth understanding of accessibility of universities, the following universities were selected: Ashesi University College (AUC); Catholic University College of Ghana (CUCG);

³⁶Act 715, arts 6–7.

³⁷*Ibid*, art 60.

³⁸Gavu and others (n 23); US Architectural and Transportation Barriers Compliance Board, 'Americans with Disabilities Act Accessibility Guidelines (ADAAG) for Buildings and Facilities' <www.access-board.gov/attachments/article/1350/adaag.pdf> accessed 17 June 2014.

³⁹John W Creswell, *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research* (Pearson Education 2012) 145.

Table 1. Characteristics of the selected universities

Name of university	Location	Region(s)	Name of Campus Areas studied	Number of buildings	Nature of built environment	Other characteristics
AUC	Southern Ghana	Eastern	Berekusu	Less than 30	Buildings designed with a lot of ramps	New private university
CSUC	Mid Ghana	Ashanti	Kumasi	Less than 30	Mix of old and new buildings	Old institution upgraded to university
CUCG	Mid Ghana	Brong Ahafo	Fiapre	Less than 30	Faculty area buildings knitted together as one unit	New private university
KNUST	Mid Ghana	Ashanti	Kumasi	More than 30	Noted for multi-level buildings	Premier institution training professionals in the built environment
UDS	Northern Ghana	Northern, Upper East, Upper West	Tamale, Nyankpala, Navrongo, Wa	More than 30	Very old and new buildings	Relatively new public University. Inherited campuses of some old institutions
UG	Southern Ghana	Greater Accra	Lagon	More than 30	Most buildings not going above third floor except very new ones	Premier University. Has an Office of Students with Special Needs

Christian Service University College (CSUC); Kwame Nkrumah University of Science and Technology (KNUST); University for Development Studies (UDS); and University of Ghana (UG). The first three are private universities and the rest are public universities. The universities are spread across the southern, middle and northern belts of Ghana (Table 1).

Snowball and convenience sampling were used in the collection of the quantitative data. Convenience sampling relies on available subjects.⁴⁰ In convenience sampling, the researcher selects participants because they are willing and available for study. In this situation, it is difficult to assess whether the individuals are representative of the population. As such, the sample may provide useful information for answering questions and hypotheses though are not suited for generalisation.⁴¹ Although the probability sampling gives better accuracy in terms of confidence level of the inferences of the study, Panneerselvam notes that there are many practical difficulties in fully executing probability sampling.⁴² For example, the sampling units may be distributed sparsely; respondents may refuse to answer the questionnaires or may not cooperate in answering the questionnaires. In order to overcome such difficulties, this study chose to rely on convenience sampling. In effect, non-probability sampling was used in this study to collect the data.

Questionnaires were administered to SWDs in the universities by the researchers supported by a team of four trained research assistants. There was only one registered student with disability at both CSUC and CUCG respectively, but both students agreed to respond to the questionnaires. At KNUST and UDS, there were no available records on the numbers of students with disabilities so the snowball approach was used to

⁴⁰Bruce L Berg, *Qualitative Research Methods for the Social Sciences* (Pearson Education 2007).

⁴¹Creswell (n 39).

⁴²R Panneerselvam, *Research Methodology* (Prentice-Hall of India 2008).

reach 11 and 12 students with disabilities respectively who responded to the questionnaires. At UG, notwithstanding the availability of the records on students with disabilities, many of the students were reluctant to participate in the survey. They attributed their reluctance to the fact that they had not benefited from similar surveys in the past. This led to the use of convenience sampling on that campus, and a total of 28 out of a total of 75 students with disabilities became respondents. Although AUC was selected based on the uniqueness of the design of the institution's built environment, the student with disability there was not available to participate in the study. In all, questionnaires were administered to 53 students with disabilities (see Table 2). Some respondents did not answer all the questions, even after thorough explanation by the research assistants, on the basis that they did not have enough information to enable them respond. Hence there was a response rate of 74% on procurement/CREM decisions (Tables 6 and 7) and 85% response rate on restrictiveness of the built environment (Table 5). The training of the research assistants enabled them to adopt the instruments to cater to the students with disabilities. The questionnaires were read to the students with visual impairments and a sign interpreter explained the questionnaires to the students with hearing impairments.

Following the questionnaire administration, eight students with disabilities agreed to in-depth interviews. These in-depth interviews helped to enrich the information gathered quantitatively. Findings from the questionnaires and interviews were further supplemented by the responses of two graduates who were selected and interviewed at separate times through opportunistic sampling. Opportunistic sampling is a strategy that helps the researcher to take advantage of unfolding events that will help answer research questions. The two were selected for interviewing because they had recently come to the limelight in the news in Ghana on issues pertaining to persons with disabilities. In total, in-depth interviews were conducted with 10 persons with disabilities.

Using convenience sampling, data was also collected from other stakeholders, in order to provide other relevant perspectives on university built environments and access to education in Ghana. These comprised the relevant authorities of the universities under study such as Registrars, Assistant Registrars, Estate Officers and Development Officers. The others were officers of relevant stakeholders and organisations like the Ministry of Education, Ministry of Water Resources, Works and Housing, Ministry of Gender, Children and Social Protection, Ministry of Justice and Attorney General, Public Procurement Authority, National Accreditation Board (NAB), National Council for Tertiary Education (NCTE) and the National Council on Persons with Disability (NCPD). These supplementary interviews and other collected data provided insight into the legal and regulatory context, both at the national level and at the level of the institutions. In all, 20 of these stakeholders were interviewed. This resulted in a total sample size of 83 respondents for this study.

3.3 Analysis

Considering the nature of the research problem and because students were identified as the primary customers of higher education,⁴³ students with disabilities were the focus

⁴³Maimunah Sapri, Ammar Kaka and Edward Finch, 'Factors that Influence Student's Level of Satisfaction with Regards to Higher Educational Facilities Services' (2009) 4(1) Malaysian Journal of Real Estate 34; Christos Vidalakis, Ming Sun and Aspasia Papa 'The Quality and Value of Higher Education Facilities: A Comparative Study'(2013) 31 (11/12) Facilities 489.

Table 2. Respondents by institution

Institution	Number of students with disabilities
AUC	0
CUCG	1
CSUC	1
KNUST	11
UG	28
UDS	12
Total	53

of the analysis. Olanrewaju advocates for the need to focus on students since they are the major users of the buildings in universities, even though faculty members and other stakeholders use the facilities too.⁴⁴ Indeed, lumping different stakeholders in an organisation together as a homogeneous unit may be somewhat problematic.⁴⁵ The primary focus of this study was therefore students with disabilities. The other stakeholders were brought in to help provide further insights and depth to the study of the phenomenon.

The analysis was done using the Statistical Analysis System Software (SAS 9.1). Since the quantitative data was generally non-parametric, the Kolmogorov-Smirnov One-Sample Test was used to test if statistically there were differences in the proportions that came up in the frequencies before they were relied upon. The use of the Kolmogorov-Smirnov Test is advantageous when the sample size is small.⁴⁶

3.4 Ethical issues

The research problem identified was considered an issue that concerns students with disabilities in particular and may serve to enhance inclusiveness generally. The study therefore sought not to further marginalise or disempower students with disabilities. Permission was sought from all stakeholders involved in the study. In order to obtain permission from the institutions, most of them were contacted by means of introductory letters with a concept paper attached. In some cases, a Research Review Form was submitted and approved. For others, it was either a reference letter/note from the authorising institution or a verbal permission that was sought based on the authorisation from the institution. The purpose of the study was also clearly conveyed to the participants. In sum, the study was undertaken with due regard to the rights of participants in line with the Helsinki Declaration.⁴⁷

During data analysis and interpretation, codes and pseudo names were used to protect the identities of participants and ensure anonymity, unless the participant had given explicit permission to use the full name. In writing this article, a conscious effort has been made to avoid using demeaning or derogatory words to describe persons of different gender, religion, ethnicity etc. Acronyms such as 'PWDs' and 'non-PWDs' were only used as a means of convenience, not as an indicator of superiority, inferiority or in a demeaning

⁴⁴Abdul A Lateef Olanrewaju, 'Quantitative Analysis of Defects in University Buildings: User Perspective' (2012) 2(2) Built Environment Project and Asset Management 167.

⁴⁵Jenny Thomas, 'Creating Effective Learning Environments' in Keith Alexander and Ilfryn Price (eds), *Managing Organizational Ecologies: Space, Management and Organization* (Routledge 2012).

⁴⁶Israel D, *Data Analysis in Business Research: A Step-By-Step Nonparametric Approach* (Sage 2008); Panneerselvam (n 42).

⁴⁷World Medical Association Declaration of Helsinki Ethical Principles for Medical Research Involving Human Subjects <www.turkuccr.fi/files/362/Declaration_of_Helsinki.pdf> accessed 13 October 2014.

manner. The classifications were also in line with what had been used in the latest Housing and Population Census in Ghana.⁴⁸

4. Results and Discussion

4.1 Background of the persons with disabilities

Of the eight students with disabilities who availed themselves to be interviewed, two were from UDS, one was from CUCG, one was from KNUST and four were from UG. They were made up of two students with visual impairment, three with mobility impairment, one with both mobility and visual impairments and two with hearing impairment. As mentioned, this study also included interviews with two persons with disabilities who had graduated from university, and were professionals. They had wide experiences in human rights issues and non-governmental organisation issues related to persons with disabilities. One was an International and Comparative Disability Law and Policy Lawyer with special interest in accessibility. The other was an accountant and also a volunteer for an NGO that champions climate change and human rights issues related to persons with disabilities in Ghana. Both were persons with mobility impairment. Each had at least two degrees from universities in Ghana.

Out of the 53 students with disabilities from the selected universities who responded to the questionnaires, 37 were male and 16 were female (Table 3). Due to ethical concerns, respect for the rights of participants and the voluntary nature of participation in the study, it was not possible to maintain a gender balance in this study.

With regard to type of disability (Table 4), a higher proportion of respondents had mobility challenges (49.0%) followed closely by those with visual impairment (47.2%).

According to the most recent census report in Ghana, the dominant group of persons with disabilities in the country have visual impairment (40.1%).⁴⁹ The high number of respondents with mobility impairment in the present study is not unusual for this type of study, however, as other similar studies show.⁵⁰ Nonetheless, an aggregate of the respondents with visual and partial visual impairments makes them the dominant group.

4.2 General perception about the accessibility of the built environment

(i) Physical environment

We sought the general perception of the students with disabilities about the accessibility of the university's physical environment to students with disabilities. Possible responses were: not restrictive, mildly restrictive, moderately restrictive, severely restrictive and no idea. Restrictiveness was to give an indication of the perceived level of accessibility by the student with disabilities. From the questionnaires, a high proportion of students with disabilities (80.0%) had the general perception that the built environment was restrictive in varying degrees to students with disabilities (Table 5). This definitely affects the

⁴⁸GSS (n 14).

⁴⁹GSS (n 14).

⁵⁰Mehmet Emin Baris and Aysel Uslu, 'Accessibility for the Disabled People to the Built Environment in Ankara, Turkey' (2009) 4(9) African Journal of Agricultural Research 801.

Table 3. Respondents by gender

Gender	Number of respondents	Percentage of total number of respondents
Female	16	30.2
Male	37	69.8
Total	53	100.0

Table 4. Respondents by type of disability

Type of disability	Number of respondents	Percentage of total number of respondents
Wheelchair user	6	11.3
Limited walking abilities	20	37.7
Visual impairment	12	22.7
Partial visual impairment	13	24.5
Hearing impairment	2	3.8
Total	53	100.0

Table 5. What is your general perception about the restrictiveness of the built environment of the university to persons with disabilities? (Restrictiveness)

Restrictiveness	Number of respondents	Percentage of total number of respondents
Not restrictive	7	15.6
Mildly restrictive	11	24.5
Moderately restrictive	19	42.2
Severely restrictive	6	13.3
No idea	2	4.4
Total	45	100.0

rights of the students with disabilities. This was tested to ascertain if statistically there were differences among the responses.

The Kolmogorov-Smirnov One-Sample Test yielded p-value less than 0.01 ($D = 0.22$; $Pr > D < 0.01$). Hence the null hypothesis of no differences among responses is rejected. Accordingly it is concluded that there are differences in the frequencies obtained from the responses and therefore the conclusion on the restrictiveness of the built environment is valid.

According to one student:

The walkways on campus are not paved and the buildings are far from each other. Accessibility from one to the other is not easy. If the walkways had been paved, it would have been better. Moving around is not easy.⁵¹

Indeed at the Wa campus of the UDS where this student was schooling, many areas were not paved and the buildings were widely spaced hence students had to commute over long distances therefore making the use of wheelchairs and crutches problematic.

Attending to the needs of students with disabilities when construction activities were ongoing was also an area of concern by a student at CUCG. The CUCG was a relatively

⁵¹Interview with AKWA, 24 July 2015, Wa, Ghana.

new campus with new buildings and other ongoing construction activities at the time of the study in 2015. He noted:

Concerning the new construction activities, at first I saw that where there were gutters, the workers placed some boards over them. Unfortunately, those boards have been removed. So at the moment, it is a big challenge but I am trying to cope with it.⁵²

A student with disability at UG also expressed concern over uncovered gutters even after construction activities had been completed:

As a person with poor vision, I find it difficult moving around because some gutters are not covered. Even on my way here, I got injured. So the place is not friendly [accessible]. [The external environment] is not convenient for me.⁵³

International standards on accessibility like the ADAAG and the BS 8300: 2010 require that drains should be covered.⁵⁴ Indeed, both the external environment and the buildings are supposed to be accessible, and the testimonies of these students show that this is not their experience on campus

KNUST has a very large campus with many multi-level buildings and an undulating terrain. In an interview with a student who was in her third year of a four-year programme, the student noted:

I have been to the University library only once. Even on that occasion, I had to be carried in my wheelchair because of the stairs.⁵⁵

She added that due to the lack of ramps and lifts, she had to be carried in her wheelchair upstairs into lecture rooms and examination centres by friends and relatives, clearly illustrating the importance of social support for students with disabilities in the university setting. Our findings clearly show that social support for students with disabilities is pivotal in enabling students with disabilities to confront the challenges of the university built environment to achieve their goals.⁵⁶ This support has been from family members, friends, members of staff and colleague students, and has been in the form of encouragement, financial assistance and physical support to surmount barriers such as carrying a student with disability up or down a flight of stairs. This finding is supported by findings in another study by Campbell and Gilmore who address the importance of social support to persons with disabilities.⁵⁷

At the CSUC and the CUCG, some lecture rooms and other important places for students are located on upper floors. However, there were no ramps or lifts to grant a student with disability relative ease of access. Our research found several examples of restrictive locations on campus sites. CUCG had a three-storey building complex which had

⁵²Interview with COFT, 2 May 2015, Fiapre, Ghana.

⁵³Interview with LAJ, 29 September 2015, Accra, Ghana.

⁵⁴United States Department of Justice Civil Rights Division, '2010 Americans with Disabilities Act (ADA) Standards for Accessible Design' <www.ada.gov/2010ADAstandards_index.htm> accessed 13 October 2014; British Standards Institution, *BS 8300:2010 Design of buildings and their approaches to meet the needs of disabled people – Code of practice* (BSI 2010).

⁵⁵Interview with VAK, 17 December 2015, Kumasi, Ghana.

⁵⁶The students did not use the phrase 'social support', but gave examples of instances where friends, family members or staff assisted them in various ways. These included climbing or descending staircases, books/ bags being carried by colleagues; those with visual impairment being assisted to find their way to washrooms or lecture halls; study group meetings being relocated to a venue that is more convenient for the student(s) with disability.

⁵⁷Marilyn A Campbell and Linda Gilmore, 'The Importance of Social Support for Students with Intellectual Disability: An Intervention to Promote Mental Health and Well-being' (2014) 9(1) *Cypriot Journal of Educational Sciences* 21.

lecture halls, library, computer laboratory and offices and was so designed that once a person got to an upper floor, he or she could move around with relative ease because the upper floors were not stepped. However, there were no ramps or lifts that would allow students with mobility disabilities to access the upper floors.

At CSUC, the main administration block, which also provided rooms for lectures, was a three-storey building. The ground floor made some provision for ramps as part of the original design. However, access to other areas was challenging because of lack of ramps or lifts. There was also no wheelchair accessible washroom in the building.

One student with disability from the Navrongo campus of the UDS had a generally positive view about the accessibility of the campus environment:

The campus is not big and all the buildings are close so accessibility is not all that difficult. It is only one lecture hall, which is a two-storey building. All the rest are accessible including the offices.⁵⁸

The buildings on the Navrongo campus were indeed relatively closer to each other. Many of them were single storey and in some instances ramps had been provided as part of the original design of the buildings or as a later development. These could account for the differences in students' perceived accessibility. For example, one student said that ramps had been provided as a later development. An assessment of the building in the light of the British Standards Institution (BS 8300:2010) proved that even though two ramps had been constructed to make the building friendly to persons with disabilities, it was still quite restrictive.⁵⁹ The steps were steep even for a person without a disability. The washroom entrance had a narrow manoeuvring space (0.9m x 1.12m) such that a wheelchair could hardly enter. The drainage channels in the washroom were also uncovered. There were only overhead showers and the shower stalls were not provided with seats.

At the time of the study the UG administration had started constructing ramps at several places to make the campus accessible to students with disabilities. For example, ramps had been provided at the ground floor of Akuafo hall, one of the oldest residence halls at UG. However, there were no designated parking or dedicated washrooms for persons with disabilities. Access to an auditorium at the School of Law was restricted due to a column in the middle of the aisle. Access to the Vice Chancellor's Crescent, where the Registry, the Students Affairs section, the Great Hall and other important offices are located, were by steps.

Students with a hearing impairment were generally satisfied with accessibility at UG but were empathetic to the students with mobility impairment and hoped that the facilities could be improved for the sake of students with such impairments. One of them said: 'Construction activities should consider the physically challenged. An example is the design of the lecture halls.'⁶⁰

All these findings suggest that on a daily basis, students with disabilities have to struggle with the challenges posed by the nature of the built environment in order to pursue a degree in higher education.

⁵⁸Interview with NAE, 2 May 2015, Navrongo, Ghana.

⁵⁹BS 8300: 2010 (n 54).

⁶⁰Interview with KUG, 31 March 2016, Accra, Ghana.

The situation at AUC was relatively better because the place was so designed that a student with disability could conveniently access most of the areas once he/she got to the car park, and there were accessible washrooms. There was however the need to improve upon directional signs with the International Disability Symbol so that a student with disability could easily know where to go in order to use accessible facilities. A staff member noted that the school layout and design was guided by their desire as a corporate entity to adhere to Ghana's laws and regulations. After the Disability Act was passed, AUC made sure that their architects and contractors would abide by it.⁶¹

Accessibility for students with hearing and visual impairments was very limited at the various university campuses. Most campuses did not have telecommunication devices for the hearing impaired, although some had installed good audio and amplification systems at some lecture halls, which benefitted the students with partial hearing impairment. There were no induction loop systems and other hearing aids at the libraries. Similarly, although there were sufficient signs on the different campuses for direction and communication, none of them were marked in braille. Tactile markings were also non-existent. While some facilities that depended on artificial lighting during the day had poor illumination due to burnt bulbs, others had their interior and exterior environs poorly lit at night. For the students with visual impairment, this makes lip reading and movement around the various campuses difficult.

(ii) Transportation

At the time of this study, the use of public vehicles adapted or modified to provide accessibility for persons with disabilities was generally not common in Ghana. A lack of adapted public transportation was a major inconvenience for students with disabilities, especially wheelchair users, commuting to the campuses or within the relatively larger campuses. Furthermore, none of the institutions had policies in place to ensure that public transportation reserved seats for persons with disabilities. This is not consistent with the requirement of Act 715 section 29 which states:

A person responsible for the booking of passengers on a commercial bus shall reserve at least two seats for the persons with disability except that where the bus is full without the reserved seats having been occupied, the driver or the person responsible for putting passengers on the bus may, fill the reserved seats with other passengers.⁶²

There was no evidence of this either with vehicles that drove to/from the campuses or within the campuses at the time of the study. These transportation challenges were compounded by the limits placed on commercial vehicles on the larger campuses. They were not allowed to go beyond certain points. Unlike other jurisdictions, the blue badge was not in use hence students with disabilities had to alight from commercial vehicles at certain points and continue to their destinations with much discomfort. The blue badge is a card that permits people to park closer to their intended destinations.⁶³ One of the interview respondents shared his experience as a student at two different universities, having

⁶¹Interview with LFM, 9 July 2015, Berekesu, Ghana.

⁶²Persons with Disability Act (n 35).

⁶³In places like the UK, a person with disability may obtain a badge which can be shown and a permission is accordingly given to the person as a right because he/ she is a person with disability: Disability Rights UK, 'Blue Badge Scheme' (2017) <www.disabilityrightsuk.org/blue-badge-scheme> accessed 5 June 2017.

received his first degree from CSUC and his second degree from KNUST. He spoke of his experience at KNUST as follows:

I quite remember it was the day that we were supposed to submit our final thesis. I picked a taxi and when I got to the Paa Joe Stadium [on KNUST campus] the security man stopped me. He said that the University did not allow taxis to go beyond that point. I pleaded with the man that this was my situation. However, the man insisted, 'No way'. So I had to get down. I carried my three books with me and then you can just imagine, using the wheelchair from Paa Joe stadium [for about 45 minutes] to the School of Business. It was like hell.⁶⁴

Although Act 715 in section 26 specifically stipulates that there should be demarcated special parking places which 'shall be reserved for the exclusive use of persons with disability' this was virtually absent in the universities.⁶⁵ Even where the parking spaces were provided, they were usually without clear signs, i.e. the International Symbol of Access (ISA).⁶⁶ This lack of clearly designated and reserved parking spaces meant that students with disabilities who were users of wheelchairs or vehicles had to compete with others for parking space. At CSUC and CUCG, there were no designated accessible parking places. At KNUST, one was at the Faculty of Law. At AUC, there was a security officer at post who among other duties was to ensure the exclusive use of the designated place by persons with disabilities alone. At the main campus of the UDS there was a designated parking place near a ramp at the main administration, which was strictly for persons with disabilities and the Vice Chancellor only. All of this illustrates that there are challenges with parking places, means of transportation for students with disabilities in the universities and policies on vehicular movement. These challenges or lack of facilities clearly limit the universities' ability to provide an accessible environment, and violates the student's right to an accessible education.

(iii) Information and communication

In terms of accessible information and communication, the study found that although some initiatives had been taken, the universities were a far cry from providing accessible information and communication to students with disabilities. UG was better placed in this regard than the other universities. Most libraries at KNUST, UDS, CSUC and CUCG had physical accessibility challenges because of the architectural designs and upper floor locations. This state of affairs technically restricted the student with disability in the exercise of his or her right to access relevant materials for their academic work in the University. Only the UG main library had a braille section for students with visual impairment and the section was also easy to access physically. However, there were some reading materials there that could not be accessed in braille form. The UG also had adapted computers and offered computer training for students with disabilities.

At UG, sign language was offered to students with hearing impairment. There were sign language interpreters to help such students in lecture theatres. This was not the case in any of the other institutions. There were also members of the UG staff who assisted in taking lecture notes for students who had such needs. Other students recorded the lectures using self-acquired electronic gadgets.

⁶⁴Interview with Agyenim, 3 February 2016, Kumasi, Ghana.

⁶⁵Persons with Disability Act (n 35).

⁶⁶Also known as the (International) Wheelchair Symbol.

Responding to questions about whether there was an official feedback mechanism in place for the universities to receive the views of students with disabilities on accessibility, the responses were mostly negative except at UG. There was nothing official on feedback regarding students with disabilities aside from the fact that there were general students' fora where students (with or without disabilities) could raise concerns or bring complaints about any issue or as in the case of CSUC, also make their concerns known using suggestion boxes. Only UG provided students with a special unit responsible for attending to the needs of students with disabilities, Office of Students with Special Needs (OSSN). Students could channel their concerns to that office which in turn would liaise with the appropriate authority or unit in the university to address the concern. On World Disability Day, the OSSN organises programmes for the university community where the concerns of students with disabilities are discussed for better appreciation of their needs. One student also recalled an occasion when questionnaires were sent from the University Registry to ascertain their concerns. The authorities on the other university campuses responded to the needs of the students with disabilities as and when such concerns were brought to their attention. However, there were no proactive official mechanisms in place to solicit the views and concerns of students with disabilities. In general, there was a lack of measures to allow students with disabilities to easily inform the university administrators about facilities that affected their access to education. This again points to the neglect of some rights of students with disabilities in terms of accessibility. The CRPD makes the provision of reasonable accommodation mandatory in the sphere of education for persons with disabilities and it is considered discriminatory if an individual is denied reasonable accommodation.⁶⁷ Effective communication and information flow would arguably give university officials information about the specific needs of students with disabilities and a chance to address them accordingly.

4.3 Decisions on procurement and the built environment

On the issue of procurement of goods, services and works for accessible built environment, a high proportion of students with disabilities (64.1%) agreed or strongly agreed that the consideration of the needs of persons with disabilities in this type of process was usually an afterthought (Table 6). 12.8% of students with disabilities felt it was not an afterthought and 23.1% were undecided.

The students with disabilities were also asked to consider the wider issue of CREM decisions which had to do with all aspects of the built environment including property acquisition, architectural design, construction, management, maintenance and policy. Most of them (69.3%) agreed or strongly agreed that their needs were considered as an afterthought while 15.3% disagreed or strongly disagreed (Table 7).

The Kolmogorov-Smirnov One-sample test was then used to test the null hypothesis of no difference among respondents' perceptions. In both cases, the probability value associated with the Kolmogorov-Smirnov value was small ($p\text{-value} < 0.01$) and thus the null hypothesis was rejected (Table 8). It is evident that there is a significant difference among the respondents' perception about the incorporation of the needs of persons with disabilities in decisions on CREM. In order words, looking at the observed cumulative

⁶⁷CRPD (n 21) 4.

Table 6. Incorporation of the needs of persons with disabilities in the procurement of goods, services and works in the university's built environment is usually an afterthought. Indicate your opinion on this statement by ticking. (Procurement Decisions)

Procurement Decisions	Number of respondents	Percentage of total number of respondents
Strongly disagree	5	12.8
Disagree	0	0
Neither agree nor disagree	9	23.1
Agree	15	38.5
Strongly agree	10	25.6
Total	39	100.0

Table 7. Incorporation of the needs of persons with disabilities in the making of CREM decisions in the university is usually an afterthought. Indicate your opinion on this statement by ticking. (CREM decisions)

CREM decisions	No	%
Strongly disagree	4	10.2
Disagree	2	5.1
Neither agree nor disagree	6	15.4
Agree	12	30.8
Strongly agree	15	38.5
Total	39	100.0

Table 8. Kolmogorov-Smirnov One-Sample Tests

S No.	Test Item	Statistic	P Value
1	Procurement decisions	D = 0.25	Pr > D <0.01
2	CREM decisions	D = 0.25	Pr > D <0.01

percentage distribution, it can be inferred that the majority of the sample respondents (i.e. 69.3%) either agreed or strongly agreed with the statement that the needs of persons with disabilities were not a primary consideration when the university officials made CREM decisions. Hence, the conclusion is that to a great extent the needs of persons with disabilities are not factored in making CREM decisions from the onset. The hypothesis that students perceive that accessibility needs of persons with disabilities are largely factored into CREM decisions at universities in Ghana is therefore rejected. This means that the students are of the opinion that the authorities in the universities in Ghana do not make accessibility concerns a major factor when they are making decisions that have to do with various aspects of the university built environment like property acquisition, architectural design, construction, management, maintenance and policy.

The comment below by one student with disability at UG epitomises the position of the students with disabilities:

They complete the construction before they realise that there is a mistake. They therefore have to spend extra money to do what they should have done at the very onset.⁶⁸

At the Navrongo campus of the UDS, one respondent held the view that some CREM decisions were considerate of persons with disabilities, while others were afterthoughts, especially when it came to making decisions regarding the old structures. This viewpoint

⁶⁸Interview with LAJ 2015, 29 September 2015, Accra, Ghana.

was not surprising, because the Navrongo campus had old structures that looked very restrictive. Some new structures had made provisions such as ramps for persons with disabilities. This nonetheless gives an erroneous impression that provision of ramps alone makes buildings accessible. However, accessibility is more than just providing a ramp.⁶⁹ The two respondents who had graduated also held the view that the consideration of the needs of persons with disabilities was usually an afterthought, based on their own experiences.

The Cochran-Mantel-Haenszel Statistics (general association) was used to test the null hypothesis of no association between incorporating the needs of persons with disabilities into decisions on CREM and procurement of goods, services and works in the university. The probability value associated with this test was small (p -value = 0.00) and therefore the null hypothesis of no association was rejected. Hence, there is an association between CREM decision-making and procurement. The Spearman Correlation Coefficient, (r) was 0.4 (with p -value = 0.03), which confirmed that there was a significantly positive association/relationship between the incorporation of the needs of persons with disabilities in decision making on CREM and procurement. Thus, we infer that as the needs of persons with disabilities are not considered in CREM decisions, their needs will also not be considered in procurement decisions and vice versa. This is further confirmed by the percentage (64.1%) of students with disabilities that agreed or strongly agreed as against those that disagreed or strongly disagreed (12.8%) on the incorporation of the needs of persons with disabilities in the procurement of goods, services and works in the university as being an afterthought (Table 6).

This is suggestive of the lack of policy at the institution level and also at the ministry level on accessible designs. The decisions on the designs of the built environment, their construction and management, are therefore subjectively made by those who wield the power to do so. The implication is that in the procurement of goods, services and works, there is the need for a policy position that will be binding on the Universities to ensure inclusiveness.

4.4 Legal and regulatory framework

This case study also investigated the political and legal context in which the universities operate. Enquiries at the Ministry of Education and the NCTE revealed that there was no policy that specifically addressed the needs of students with disabilities at the tertiary education level. Information from NAB also indicated that there was a form entitled 'the Standards for Physical Facilities for Tertiary Institutions in Ghana', which was used to assess buildings and related facilities at the universities for accreditation purposes. A study of the document showed that it did not give much attention to the needs of persons with disabilities.⁷⁰ Although the individual universities sought to promote the principle of diversity, none had a written policy on persons with disabilities. KNUST had only a draft Final

⁶⁹Kari Arrayan, and Kylene Kraft, 'Accessibility: It's More than Just a Ramp' (North Dakota Disability Health Project, North Dakota Center for Persons with Disabilities at Minot State University, 2009) <www.ndcpd.org/health/archive/publications/Accessibility_Its%20More%20than%20Just%20a%20Ramp.pdf> accessed 13 September 2016.

⁷⁰National Accreditation Board, 'National Accreditation Board Standards for physical facilities for tertiary institutions in Ghana, Revised November 2014' <www.nab.gov.gh> accessed 5 August 2015.

Committee Report, which was yet to be approved.⁷¹ The draft policy was quite comprehensive. The draft policy addressed issues such as specialised facilities and additional support to persons with disabilities, an administrative office for persons with disabilities and removal of barriers to accessibility, accommodation and infrastructure.

From the NCPD, the Ministry of Water Resources, Works and Housing, and the Ministry of Justice and Attorney General, it emerged that there was no legislative instrument in place to enforce the Persons with Disability Act which was passed in 2006. Second, at the time of the study, Ghana was working on a Draft Accessibility Standard, launched in December 2016. These findings agree with Imire and Kumar that persons with disabilities feel estranged by the nature of the built environment. Their needs continue to be poorly articulated and the regulatory controls to ensure accessible built environments are still weak.⁷²

Dion notes that the road toward the recognition of accessibility as a human right issue has been long and tortuous.⁷³ Similarly, the road towards an accessible environment in Ghana has not been easy.⁷⁴ In spite of the passage of the Persons with Disability Act, the accessibility rights of students with disabilities have not been well translated into the built environment of universities in Ghana. This is confirmed by the organisation, Voice Ghana, which stated that even though the Act is very relevant in promoting the rights of persons with disabilities, not much has been done to implement it.⁷⁵ Oduro contends that the political will on the part of government to enact the law was weak.⁷⁶ The government therefore had to be compelled to act through the use of constitutional and civil rights challenges. By implication, some force will be required to bring into reality the appropriate legal and regulatory framework for the rights of persons with disabilities with respect to accessibility.

These go to support the assertion that in the few countries in Africa, Central and Southern America and parts of Asia where accessibility codes exist, they fail to make an impact because of lack of enforcement and monitoring.⁷⁷ Furthermore, there are low levels of compliance with accessibility laws even in many of the countries where such laws exist.⁷⁸ The implication is that beyond the laws, there should be requisite technical expertise, vigorous enforcement and effective monitoring and evaluation in place. Rehabilitation International notes that – even though the SDGs are a historic first step – over the next 15 years, implementation and monitoring is key to ensure that expectations are met.⁷⁹ GSS also notes that there are still challenges in providing equal opportunities for persons with disabilities.⁸⁰ However, with appropriate and well implemented policies, persons with disabilities can live meaningful and dignified lives in society while contributing positively to it. One interview respondent explained how persons living with impairments assume the status of persons with disabilities. She said:

⁷¹Report of the Committee constituted by the Quality Assurance and Planning Unit (Vice-Chancellor's Office) to draft a Disability Policy for KNUST, April 2013.

⁷²Rob Imire and Marion Kumar, 'Focusing on Disability and Access in the Built Environment' (1998) 13(3) *Disability & Society* 357.

⁷³Betty Dion, 'International Accessibility Standards, International Commission on Technology and Accessibility (ICTA) Global' (2005) <www.un.org/esasocdev/enable/documents/> accessed 2 September 2013

⁷⁴Oduro (n 1).

⁷⁵Voice Ghana (n 11).

⁷⁶Oduro (n 1).

⁷⁷Uganda National Action on Physical Disability and Ministry of Gender, Labor and Social Development (UNAPD 2010), *Accessibility Standards: A Practical Guide to Create a Barrier-Free Physical Environment in Uganda, 2010* <<http://unapd.org/introduction.pdf>> accessed 3 December 2014.

⁷⁸WHO (n 1).

⁷⁹Rehabilitation International (n 18).

⁸⁰GSS (n 14).

persons with impairments such as myself will not have the problem of struggling to be included in society if societal structures were planned, designed and produced based on human diversity. On account of the fact that, we are not able to function efficiently in society due to the barriers created by structures in society, we assume the status of persons with disabilities. In a nutshell, the structures in society mostly and persistently impede our efforts to be educated, to compete effectively in the labour market, etcetera.⁸¹

5. Conclusion and Recommendations

Even though persons with disabilities have a right to education and a right to accessible built environments at the university level, this study has found that university students in Ghana perceive that their needs – by way of accessible built environments – are not being appropriately seen to. Eighty per cent of the respondents deemed the built environments of the universities restrictive. The perceived differences in restrictiveness varied, and this points to a lack of government policy on inclusiveness and accessibility from the Ministry of Education/NAB, which regulates the design of buildings in the institutions. This has arguably led to a situation in which administrators in the various institutions subjectively make decisions on the built environment. The challenges regarding accessibility rights of students with disabilities were most apparent in terms of transportation, communication and the physical environment. The nature of a person's disability also influenced the person's perception about the level of restrictiveness of an institution's campus. In this regard, the students with hearing impairments were, for instance, more comfortable and satisfied with the nature of the built environment. Nonetheless, they were empathetic toward other students with disabilities, especially those with mobility impairments, with respect to their accessibility to the campus facilities. Almost 70% of students with disabilities were of the view that their right to an accessible built environment were usually not given serious consideration; and that decisions about improving the built environment in order to benefit persons with disabilities were usually an afterthought. We therefore rejected the hypothesis that students perceive that accessibility needs of persons with disabilities are largely factored into CREM decisions in universities. A weak legal and regulatory framework has played a major role to perpetuate this malaise and needs to be addressed with the requisite tenacity of purpose in order to guarantee the rights of students with disabilities. These rights will remain a mirage unless conscientious efforts are made to make them a reality.

To ameliorate this situation, we propose the following recommendations:

- There should be efforts to make the legal and regulatory framework more effective. These efforts should be championed by the Ministry of Gender and Social Protection, the department directly responsible for vulnerable groups like persons with disabilities, and supported by the Ministry of Water Resources, Works and Housing, Ministry of Education, the Ministry of Justice and Attorney General. There should also be support from the NCPD, the various organisations for persons with disabilities in Ghana, the professional bodies in the built environment and legal advisers. The current state of the university built environment is indeed an indictment on such professional bodies. The Legislative Instrument that is to give effect to the Persons with Disability Act should be passed as a matter of urgency because the moratorium

⁸¹Interview with Esther, 16 December 2015, Accra, Ghana.

period of 10 years given by the Act has expired. Furthermore, the Ghana Standards on Accessibility Design (GS 1119) should be used as a reference in public discussions, and information about accessibility standards should be made available to the public. The relevant professional bodies should also make it a topical issue during their Continuing Professional Development Programmes. Relevant academic departments should also incorporate it into their curricula.

- The Ministry of Education and the NCTE should develop a policy document on students with disabilities, which should be consistent with the CRPD and the Persons with Disability Act, and which will outline guidelines for how to deal with accessibility issues at universities in Ghana. They should also ensure that every university should have a policy document on persons with disabilities.
- The NAB should incorporate in its accreditation requirements the need for each university to have an official policy on persons with disabilities. The NAB should further review its 'Standards for Physical Facilities for Tertiary Institutions in Ghana' form, which is used for granting accreditation to new universities by making them more reflective of the needs of persons with disabilities.⁸² The various sections should incorporate detailed information on the specific requirements in the built environment.
- As a policy, universities should adopt universal (inclusive) designs for constructing buildings and facilities. Such designs are usable by all people, to the greatest extent possible, without the need for adaptation or specialised design.⁸³ Furthermore, the provision of reasonable accommodation for students with disabilities should be a major priority for the universities.
- The Ministry of Education, the NCPD, the courts, and the universities should play their respective roles to ensure the implementation, monitoring, evaluation and control of activities that relate to the rights of persons with disabilities in the built environment of universities.

This study was non-probabilistic. As such, the recommendations are limited to the scope of the study. Nonetheless, we hope these recommendations will serve as guides for other universities, especially those in developing countries where tertiary education depends very much on the built environment. Such considerations will help bring attention to the needs of students with disabilities and help address their right to an accessible university education.

⁸²NAB (n 70).

⁸³CRPD (n 21) art 2.