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VISUALLY IMPAIRED ACCESS TO LIBRARY SERVICES: THE ROLE OF LIBRARY INFRASTRUCTURE

BY

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Abstract

Globally it is estimated that there are 285 million persons living with some sort of vision related difficulties. In Ghana, about 737,743 Ghanaians living with disabilities (Ghana Statistical Service, 2012). The United Nations and other international organizations have always emphasized the importance making education and educational services accessible to all. In recent times, there have been advocates for inclusive education where children with disabilities have been educated together with 'able bodied' colleagues. The purpose of this study was to examine library infrastructure for the visually impaired in the public universities in Ghana. The study adopted both qualitative and quantitative research methodologies. The descriptive survey design was adopted for the quantitative aspect of the study while case study research design for the qualitative aspect of the study. The study population comprised of visually impaired students, presidents of the Visually Impaired Students Association of Ghana and the Librarians from the three selected public universities. The main instruments for data collection were the questionnaires and a semi-structured interview. The interviews were recorded using an Olympus VN-2100PC digital voice recorder. The study revealed that most of the library facilities in academic libraries were not disability friendly. In view of this visually impaired students were compelled to seek assistance from their sighted colleagues to access the building. There is therefore the need for University authorities must re-examine the existing library infrastructures and provide the needed funding to make these library disability complaint.

Keywords: University, Visual Impaired, Infrastructure, Disability, United Nations, Ghana, inclusive, education

Introduction

The World Health Organization (WHO), (2014) estimates that there are about 285 million visually impaired people worldwide, with 39 million totally blind and 246 million having low vision. Eighty-two percent of these persons are living in developing countries like Ghana. The term ‘visually impaired’ is a general term that is used to describe people who are partially-sighted or completely blind. However, according to the United Kingdom National Health Services (NHS) (2013), visual impairment is when a person has sight loss that cannot be fully corrected using glasses or contact lenses. It is estimated that as many as 2 million people in the United Kingdom may be living with this sort of sight problem. Of these, around 365,000 are registered as blind or partially sighted. It is estimated that 737,743 of the Ghanaian populace are persons living with disabilities (Ghana Statistical Service, 2012).

The United Nations upholds education as a fundamental human right for all children and the disabled is no exception. Persons with disabilities are agents of their own destiny and equal citizens of any nation. They have the same rights and responsibilities and should enjoy equal access to education like any other citizen. However, in a majority of countries, there is a dramatic difference in the educational opportunities provided for disabled children and those provided for non-disabled children (Peters, 2004). According to Lindqvist (1999) cited in Reiser (2012), the global goal of Education for All can never be realized if there is not a complete change in the situation. For a decade, children with disabilities have been educated in separate classes or in separate schools. Henninger and Gupta (2014), are of the view that “ for children with disabilities to be fully integrated into and successful in school and life, they need opportunities to; develop positive social-emotional skills, acquire and use knowledge and skills

including early language/communication and early literacy skills and use appropriate behaviors to meet their own needs”. According to UNESCO (2009) over the past several decades many educators got used to the idea that special education meant separate education. However recent studies have shown that when children are educated together, positive academic and social outcomes occur for all the children involved. Therefore, to realize the full potential of both “able” and “disable” students, there is the need for inclusive education. This therefore means that school facilities or structures must be upgraded to accommodate the needs of all persons irrespective of their ability or disability.

In Ghana, disabled persons including visually impaired students, grapple with challenges in their attempt to access library facilities and information resources in their academic pursuit. Notable among these challenges are social discrimination and cultural bias. It is a well known fact that, the library facilities in some academic institutions were constructed with very little or no attention or consideration to the needs of handicapped persons, thereby, limiting their access to library services. Since the enactment of the Ghana Disability Act, 2006 (ACT 715), there have been several calls to make public facilities, including university libraries, accessible to all people with disability. The law enjoins managers of all public facilities to make them disability compliant by the end of 2016. However, very little has been done in this regard. This study therefore sought to access the extent which academic libraries in Ghana are disability friendly.

Purpose

The purpose of this study was to examine library infrastructure for the visually impaired in the public universities in Ghana

Objectives

1. Determine the available infrastructure in the three public university libraries for visually impaired students.
2. Examine the challenges libraries face in making their facilities disability friendly.
3. Make recommendations based on the findings of the study.

Scope of the Study

Three universities (University Ghana, University of Cape Coast and University of Education, Winneba) were selected for the study. These institutions were selected because they are state owned institutions and as such were expected to have the facilities and structured made disability complaint by 2016. The University of Ghana is the premier university in Ghana, established in 1948 with the clear mandate to provide university level education and research. It was originally under the supervision of University of London until 1961 when it gained full university status. Currently, the University of Ghana as a total of twenty one (21) visually impaired students.

The university of Cape Coast on the other hand was established in 1962 to train the manpower needed to manage second cycle institutions in Ghana. As at June 2019, the university has a total of thirty (30) visually impaired students constituting 0.5% of the entire student population.

The University of Education, Winneba was upgraded from a university college to a fully fledged university in 1992. With a clear mandate to trained professional educators for all levels of the Ghanaian educational system, the University was formed through the consolidation of seven diploma awarding teacher colleges. As at June, 2019, the university had a total 60 visually

impaired students at the Winneba campus where programmes of studies are offered for the visually impaired.

Literature Review

In Ghana, inclusive education began as far back as 1951 through the Accelerated Educational Plan and the 1961 Educational Act for free education which resulted in increases in basic enrolment (Gadagbui, 2008). Subsequent to this Ghana has been a signatory to various national, regional and international treaties that sought to promote inclusive education. In 2013, the Ghana's Inclusive Education Policy was drafted with the support from the United Nations International Children's Emergency Fund (UNICEF) and consultations with Ministries, the Ghana Education Service, the Girls Education Unit and the Early Childhood Education Unit of the Basic Education Division, Tertiary Institutions, Ministry of Health, National Council for Persons with Disability and the Ministry of Gender and Social Protection (UNICEF Ghana, 2013). The policy is aimed at changing the way that Ghana's marginalized children: children with disabilities, ethnic minorities, the ultra-poor are perceived, served and included in the education system. It clearly states that ' Inclusive schools must recognize and respond to the diverse needs of their students, accommodating both different styles and rates of learning and ensuring quality education to all through appropriate curricula, organizational arrangements, teaching strategies, resource use and in partnerships with their communities.'

The inclusive policy therefore seeks to be the official policy position for educating persons with disabilities in Ghana. The policy aims to change systems, create mechanisms, equip schools and, in the process, change community perceptions of children with disabilities. It seeks to promote the notion that all children can learn, achieve and contribute to their communities and the

Ghanaian society as a whole. The involvement of non-state actors such as the Ghana Blind Union, the Ghana Federation of the Disabled, the Ghana National Education Coalition Campaign, the World Education and International Council for Education of people with Visual Impairment played crucial roles in creating a policy that ensures that the rights and needs of all Ghanaian children are considered and addressed. The inclusive policy came into force in Ghana in 2015 and started with pre-service and in-service training for teachers in special needs and inclusive education to manage children with special educational needs.

Despite these laudable initiatives, many educational institutions in Ghana lack the facilities to adequately accommodate the needs of students with visual impairments. Students with visual impairments are most often forced to attend schools or use facilities whose designs makes them practically in inaccessible to them. Studies Marion and Neelima (2015) on the issues and challenges confronting inclusive education concluded that the whole idea of inclusive education will be defeated if infrastructural, curriculum and negative attitudes on the part of teachers, parents, community and classmates are not properly addressed. Drawing on data from previous research, Ofori (2018) examined the challenges and opportunities of Inclusive education in Ghana. She identified the negative attitudes of families and people towards disabled children and the lack of facilities as major challenges for the implementation and practice of inclusive education. In a mixed method study to examine teachers` attitudes in implementing Inclusive Education in primary and junior high secondary schools in two districts in Ghana (Bole and New Juaben), Alhassan (2014) recommended the need to step up awareness creation and financial support for the education of persons with special needs. According to Murphy (2015) many educational institutions globally lack the facilities to adequately accommodate students with

special needs, and local authorities lack the financial strength to help resolve the challenge. Therefore in order to have a sustainable inclusive education it's imperative that the Ghanaian society fully accept persons with special needs as an essential part of the educational system not just in acts and treaties.

Theoretical Framework

A theoretical framework is a foundation for the parameters, or boundaries of a study. Once these themes are established, researchers can seek answers to the topical questions they have developed on broad subjects. With a framework, researchers can resist getting off track gathering data that has nothing to do with the phenomenon being studied. Often researchers are curious about broad subjects, but with a theoretical framework they can stay tightly within the theme or topic. A theoretical framework structures the sections of the study that need to be covered. For the purpose of this study, the Social Model of Disability (SMD) was used.

The model rests on the recognition that people are disabled by social barriers. "If no barriers exist, then a person with impairment is not prevented from using services" (Robertson, 2012). The model is based on the preposition that, "it is society and its instructions that are oppressive, discriminatory and disabling and that attention therefore, needs to be focused on the removal of obstacles to the participation of disabled people in the life of society, and in changing institutions, regulations and attitudes, that create and maintain exclusion" (Campbell & Oliver, 1996). The barriers generally fall into three categories:

- The environment – include inaccessible buildings and services
- People's attitudes – stereotyping, discrimination and prejudice

- Organizations – inflexible policies, practices and procedures.

The Social Model of Disability (SMD) postulates that “disability is caused by the way society is organised, rather than by a person’s impairment or difference”. It looks at ways of removing barriers that restrict life choices or disabled people and goes further to say that “when barriers are removed, disabled people can be independently equal in society, with choice control over their own lives”.

The Social Model of Disability however, does not deny the problem of disability but locates it squarely within society. It postulates that “it is not individual limitations, of whatever kind, which are the cause of the problem but society’s failure to provide appropriate services and adequately ensure that the needs of disabled people are fully taken into account in its social organization”. (Oliver, 1990)

Using the SMD helps identify solutions to the barriers disabled people experience. It also encourages the removal of these barriers within society, or the reduction of their effects, rather than trying to fix an individual’s impairment or health condition. This is a preferred model for disabled people and encourages society to be more inclusive.

Methodology

The study adopted both qualitative and quantitative research methodologies. The descriptive survey design was adopted for the quantitative aspect of the study whiles case study research

design for the qualitative aspect of the study. The descriptive survey design was adopted because of its ability to provide accurate descriptions of real life situations (Gay & Airasain, 2000). The qualitative case study approach is a means of conducting an empirical investigation of a contemporary phenomenon within its natural context using multiple sources of evidence (Yin, 2003 cited by Hancock & Algozzine, 2016).

The population of the study consisted of the visually impaired students, Presidents of the Visually Impaired Students Association of Ghana and the Librarians from the three selected public universities, namely University of Cape Coast (UCC), University of Ghana (UG) and University of Education, Winneba (UEW). In all, a total of 119 respondents were involved in the study, comprising 116 visually impaired students and three (3) librarians selected from the three universities. The librarians were selected because they have direct contact with the issues concerning students with visual impairment. Finally, Presidents of the Visually Impaired Students Associations on each campus was targeted because they will be able to provide collective information about their colleague students and their challenges.

The main instruments for data collection were the questionnaires and a semi-structured interview. Questionnaire was chosen as the main data collection instrument because it is very effective for securing factual information about practices and conditions of which the respondents are presumed to have knowledge and for enquiring into opinions and attitudes of the subjects. Another reason for choosing the questionnaire was that it is easy to fill and takes little time as compared to other instruments like the interview. The questionnaires were converted into braille using a 4x4 Pro Braille Embosser. With the help of field assistants the brailled questionnaires were distributed to the visually impaired students. Their responses were latter

transcribed into normal text and analysed using the Statistical Package for Social Sciences (SPSS) software, version 21.0.

The interview was conducted with the librarians from the selected universities. Interviews were conducted using prepared semi-structured interview schedule. The interviews were recorded using an Olympus VN-2100PC digital voice recorder. The researcher also took notes during the interviews. The data from the interview was organised into appropriate themes and analysed accordingly.

Data analysis and findings

Existing library Infrastructure

The assumption underlying first objective was that existing infrastructures on the public university libraries should be easily accessible by respondents. Majority of respondents, 83 (71.6%) indicated that the existing infrastructures in their university libraries were not easily accessible as compared with 23 (20.0%) of respondents who felt that the existing infrastructures enabled them to easily access their libraries. On the part of individual universities, majority 51 (85.0%) of respondents from UEW indicted that the existing infrastructures in their university library were not easily accessible. This is to be compared with 18 (60.0%) of respondents from UCC and 14 (53.8%) of respondents from UG respectively. On the contrary, 10 (38.5%) of respondents from UG indicated that university library infrastructure was easily accessible as compared with respondents from UCC and UEW. For majority of respondents to declare that the existing infrastructures in their university libraries were not easily accessible, implies that there was the need for the university authorities to re-examine the existing infrastructures in their university libraries with special attention to respondents needs in the library.

Table 1: Accessibility of Existing library Infrastructure

Accessibility	U.C.C		U.E.W		UG		Total	
	Freq	%	Freq	%	Freq	%	Freq	%
Easily Accessible	9	30.0	4	6.7	10	38.5	23	20.0
Accessible	3	10.0	5	8.3	2	7.7	10	8.4
not easily accessible	18	60.0	51	85.0	14	53.8	83	71.6
Total	30	100.0	60	100.0	26	100	116	100.0

Field Survey Data, 2016

Additional Infrastructure Required

The assumption here was that there might have been some infrastructure that would be of great help to the respondents but were unknown to the university authorities. Table 2.0 shows a list of additional infrastructure that respondents considered would be of help to them. Results in Table 2.0 shows 11 additional infrastructure that respondents felt would help improve library accessibility. 21 (18.2%) of the respondents wished that a separate well designed library for the visually impaired would help improve library accessibility. Yet, 15 (12.9%) of respondents indicated that friendly walkways in and outside the library would be of help to them. These additional infrastructures aside, Braille books, assistive technology and a well designed car park at the library were needed to make life comfortable for them.

Table 2.0 Additional Library infrastructure

	U.C.C		U.E.W		UG		Total	
	<i>Freq</i>	<i>%</i>	<i>Freq</i>	<i>%</i>	<i>Freq</i>	<i>%</i>	<i>Freq</i>	<i>%</i>
<i>Additional infrastructure</i>								
Cannot tell	18	60.0	23	38.3	10	38.5	51	43.9
Well designed car park at the library needed	3	10.0	0	0.0	0	0.0	3	2.6
Provision of friendly walkways in and outside the library for VIS	6	20.0	7	11.7	2	7.8	15	12.9
Provision of elevator/repair of broken elevator	1	3.3	6	10.0	14	53.7	21	18.1
Extra wash room	2	6.7	0	0.0	0	0.0	2	1.7
Reading machine	0	0.0	3	5.0	0	0.0	3	0.9
Separate well designed library	0	0.0	21	35.0	0	0.0	21	18.2
Total	30	100.0	60	100.0	26	100.0	116	100.0

Challenges posed by Existing Infrastructure

Knowledge of existing infrastructures that were of special help and additional infrastructures considered helpful to respondents which the university libraries did not have were alone not enough. Therefore, the opinion of respondents with regard to the challenges that the existing infrastructures posed to respondents was investigated. Data in Table 2.0 (Multiple responses allowed) showed that various responses were listed as challenges that the existing infrastructures posed to respondents. Respondents frequently indicated no challenge and this constituted 44 (34.9%) while unfriendly environments accounted for 26 (20.6%), followed by story building/staircase 21 (16.7%).

Table 2.0: Sate of Existing Library Infrastructures

	U.C.C	U.E.W	UG	Total

<i>Existing infrastructure that pose as challenge</i>	<i>Freq</i>	<i>%</i>	<i>Freq</i>	<i>%</i>	<i>Freq</i>	<i>%</i>	<i>Freq</i>	<i>%</i>
Library car park hinders movement	5	4.0	0	0.0	0	0.0	5	4.0
The story building/staircase	5	4.0	5	4.0	11	8.7	21	16.7
Unfriendly environment	3	2.4	22	17.5	1	0.8	26	20.6
Disable unfriendly library	0	0.0	9	7.1	0	0.0	9	7.1
Photocopying centre	3	2.4	4	3.2	5	4.0	12	9.5
Computers	0	0.0	1	0.8	0	0.0	1	0.8
Recorders	0	0.0	1	0.8	0	0.0	1	0.8
Braille materials	0	0.0	1	0.8	1	0.8	2	1.6
Arrangement of books in the shelves	0	0.0	1	0.8	0	0.0	1	0.8
Assistive technology equipment	0	0.0	4	3.2	0	0.0	4	3.2
No challenge	14	14.3	21	16.7	5	4.0	44	34.9

Other existing infrastructure considered by the respondents that posed as challenges to respondents included location of the photocopying centre, disable unfriendly library, car parks in front of libraries and assistive technology equipment, all together accounted for 30 (23.8%) as evident in Table 2.0. The challenges that the existing infrastructures posed to respondents varied from one university to another. Table 2.0 shows that whilst a library car park, 5 (4.0%) was considered by respondents from UCC to hinder movements, both respondents from UEW and UG did not see it as such. Again, while respondents from UEW 9 (7.1%), saw disabled

unfriendly library as posing challenge, UCC and UG did not see same as posing challenges to respondents.

Infrastructure as a Challenge

The purpose of the Disability Act, 2006 (Act 715) is to fight and protect the rights of people who are living with disability, to make sure they enjoy their rights, as enshrined in the 1992 Constitution of Ghana. Therefore as part of action by parliament to ensure that the disabled, including the visually impaired do not suffer exclusion from visiting or accessing services at public buildings it is now a government policy that all public buildings be designed to make them disability friendly. The interviews conducted with the three librarians show infrastructure as one of the challenges the public university libraries face in their service to the visually impaired.

Infrastructural challenge of UCC Library.

The Librarian talked on the infrastructural position of the UCC library and indicated that the library has a Resource Centre that provides the normal Braille tablets, CCTV for the partially blind students which enlarges the characters for them to be able to read, computers which the library has installed JAWs software package together with embossing machines.

He went on to give a graphic presentation of how he would have wished to see the location and design of the physical structure of the library as a solution to the infrastructural challenge the library is faced with. This is what he said “...*looking at where we (the library) have the Resource Centers, the best located one is the one for the students with physical disability because the way the frontage slope was designed allows the physically disabled to easily come*

in with their wheel chairs... but with the VIS where the Resource Centre is located, in my candid opinion, was wrong, because it should have been at the ground floor of the library and not at the lower ground floor where the Centre is currently located...that would have made it easier for them to navigate their way through”. He conceded that even though the library has installed an elevator in the library building to service the VIS, the challenge still lingers on due to frequent break down of the elevator and rampant electricity failures that render the facility non functional.

Infrastructural Challenge of UEW.

On the part of UEW, the Librarian saw infrastructure as another worrying challenge facing the library in library service provision to VIS. He said the UEW library building was not visually impairment friendly and that VIS were compelled to seek assistance from their abled colleagues to enter, while others resorted to the use of their white canes to navigate their way in the library. He added that the design and construction of the stair-case to the library was also of much concern to the authorities of the library since, according to him “... it was not in compliance with the Disability Act (2006), Act 715”.

Infrastructural Challenge of UG.

The Librarian indicated that the challenge the library faced in service provision to the VIS in respect of infrastructure had to do with the space in the library building which tended to refrain easy navigation by the VIS when they were in the library to access information.

Findings and conclusion

It is common knowledge that, library facilities in some public libraries, including public academic institutions, were constructed or designed with very little or no attention or

consideration to the needs of handicapped persons, including visually impaired students. This limits their access to information in the libraries which ultimately affects their information seeking behaviour. Information seeking behaviour, in the words of Wilson (2000), are those activities a person may engage in when identifying his or her own needs for information searching for such information in any way, and using or transferring that information. Accordingly, the study sought to know whether the existing infrastructures in the public university libraries for visually impaired students, by their design or construction, limit their access to information or information searching in their respective university libraries.

The study found that majority 15 (65.2%) of VIS could not tell how the existing infrastructures were of special help to them; On institutional basis, VIS from UCC 4 (17.4%), UEW 2 (8.7%) and UG 9 (39.1%) respectively could not list any existing infrastructure that were of any help to them. However, they chose to restate the existing infrastructures that are of special help to them instead of stating how such structures help them. Similarly, most VIS could not tell any additional infrastructures that will be of great help to the VIS that were unknown to the university authorities. Many of the VIS from UCC compared with UEW and UG could not indicate any additional infrastructure. However, out of 11 additional infrastructures listed by the VIS, the most frequently cited additional infrastructure was provision of elevator/repair of broken down elevator. This was frequently indicated by most of the VIS from UG when compared with UCC and UEW.

Other additional infrastructures listed included well designed library, provision of friendly walkways in and outside the library for VIS and assistive technology. The rest were: Well designed car parks in front of the library and extra wash rooms, even though most of the VIS

could not list any existing infrastructure that had been of help to them. This lends support to Wei, Lirong, Li and Zhao (2012) who investigated the provision of library resources for visually impaired students in the further education sector in England, Scotland and Wales and their awareness of the Special Educational Needs and Disability Act 2001. It was found out that the Act had affected each library differently. Some libraries were better equipped to implement the requirements of the Act due to the resources already in place; while some had the positive attitudes of senior management encouraging advancements in this area and having previous experience in assisting visually impaired students.

With regard to the challenges that the existing infrastructures posed to respondents, they frequently indicated that there were no challenges. On the contrary, some also indicated unfriendly environment, story building/staircase, location of photocopying centre, disable unfriendly library, car park in front of library and assistive technology equipment as challenges. At UEW; it was only the car park in front of the library which was not posing as a challenge to them. However, at UG, the car park in front of the library made movement a problem.

The above finding supports the views shared by Wilson (2000) that the library facilities in some public libraries, including public academic institutions were constructed with very little or no consideration of the needs of handicapped persons, including visually impaired students, and thus can limit their access to information seeking in the libraries. This is consistent with the responses given by respondents from UG when they said that the unfriendly design of the car park in front of the library and walkways made movement difficult. They also raised issues on the disable unfriendly design and construction of the library building as well as some equipments

and arrangement of materials in the library that tended to limit their information seeking behaviour in the library.

Again the list of materials and equipments cited by the respondents in their responses were; assistive technology equipments and this confirms the assertion made by Kapoor (2012) to the effect that, in the case of the visually impaired, it is often the use of assistive technologies, that ensured their equal participation in many social activities ranging from meetings and entertainment to the more personal activities of reading books, accessing information or enjoying recreational activities.

Concerning infrastructural challenge facing the libraries in providing library services to the visually impaired, the study revealed that the UCC Resource Center for the visually impaired students was wrongly located on the lower ground floor of the main library building instead of being at the ground floor which would have made it easier for the visually impaired to trace their way in and out of the library. The study also found that the UCC library has an elevator facility for use by the visually impaired students, but because of frequent break down of the elevator coupled with frequent power failure the visually impaired are not having the full benefit of the facility. It must be appreciated that if due consideration was taken in locating the Resource Centre at the ground floor of the library building, at least, it would have saved the university a fortune; not only the cost of the elevator but also the cost of installation, recurrent expenditure on maintenance, and the cost of electricity to power the elevator.

The study showed that UEW library building was not visually impaired friendly and due to that the visually impaired students were compelled to seek assistance from their sighted colleagues to access the building. This does not lend support to the observation made by Mercer, Mercer &

Pullen (2010) that, like anyone with disability, the person who is visually impaired wants to be treated like anyone else. Most people who are visually impaired do not seek pity or unnecessary help; in fact they can be fiercely protective of their independence.

For UG, the study showed that the interior library space was not spacious enough to allow easy navigation by the visually impaired students. UG library had a challenge relating to space area in the library which posed navigation problem for the visually impaired students. Indeed regarding design, construction and placing of a Resource Centre for the visually impaired students at UG, the study showed that all the three public university libraries fall foul to the government policy that all public buildings be designed to make them disabled friendly.

Recommendations

1. University authorities must re-examine the existing library infrastructures and provide the needed funding to make these library disability complaint.
2. Library management must ensure that the libraries are spacious enough to facilitate easy movement by the visually impaired.
3. Library management must ensure that library car parks and entrance are clear off any obstacles or impediments, properly signage and well illuminated.
4. Library management must ensure that the surroundings of the library, the entrance, restrooms, stairs, elevators and special rooms should be accessible for persons with different kinds of disabilities.

References

- Alhassan, A. M. (2014). Implementation of Inclusive Education in Ghanaian Primary Schools: A Look at Teachers` Attitudes. *American Journal of Educational Research* 2 (3), 142-148.
- Campbell, J. & Oliver, M. (1996). *Disability politics: Understanding our past, changing our future*. Routledge: New York
- Gay, I. R. & Airasain, P. (2000) *Educational research: Competencies for analysis and experience (6th ed.)*. New Jersey: Prentice.
- Gadagbui, G.Y. (2008). *Inclusive Education in Ghana: Practices, challenges and the future implications for all stakeholders*. Retrieved from <http://www.schoolsandhealth.org/Shared%20Documents/Inclusive%20Education%20in%20Ghana.pdf>.
- Ghana Statistical Service (2012). *2010 Population & Housing Census : Summary report of final results*. Accra: Ghana Statistical Service.
- Hancock, D.R. & Algozzine, B. (2016). *Doing case study research: a practical guide for beginning researchers*. New York, NY: Teachers College Press.
- Henninger, W. R., & Gupta, S. S. (2014). *How Do Children Benefit from Inclusion?* Retrieved from <http://www.brookespublishing.com/first-steps-to-preschool-inclusion> on 7th January, 2016.
- Kapoor, S. (2012). *Assistive Technology for the Visually Impaired Persons in Library services for blind and visually impaired people*. New Delhi: APH Publishing Corporation.

Lindqvist, B. (1999). Education as a fundamental right. *Education Update*, 2(4).

Marion, G. & Neelima, J. (2015). *Issues, Challenges of Inclusive Education and Strategies through ODL Mode*. Research paper presented at the National Seminar on Energizing Inclusive Education through ODL Mode Organized by U P Rajarshi Tandon Open University, Shantipuram, Phaphamau, Allahabad on March 28-29, 2015. Retrieved from https://www.researchgate.net/publication/308208418_ISSUES_CHALLENGES_OF_INCLUSIVE_EDUCATION_AND_STRATEGIES_THROUGH_ODL_MODE on 15th July, 2019.

Mercer, C.D., Mercer, A.R. & Pullen (2010). *Teaching students with learning problems*. New Jersey: Prentice-Hall Inc.

Murphy, P. (2015). *The biggest barriers to inclusive education*. Retrieved from <https://www.thinkinclusive.us/barriers-to-inclusive-education/> on 15th July, 2019.

Ofori, E. A. (2018). *Challenges and opportunities for inclusive education in Ghana*. Thesis submitted to the Faculty of Education and Diversity, School of Education, University of Iceland. Retrieved from <https://skemman.is/bitstream/1946/31499/1/Challenges%20and%20Opportunities%20for%20Inclusive%20education%20in%20Ghana.pdf%20C%20number%202.pdf> on 15th July, 2019.

Oliver, M. (1990). *The individual and Social Models of Disability*. Paper presented at a joint workshop of the living options group and the research unit of the Royal College of Physicians.

- Peters, S. J. (2004). *Inclusive Education: An EFA Strategy for All Children*. Retrieved from http://siteresources.worldbank.org/EDUCATION/Resources/278200-1099079877269/547664-1099079993288/InclusiveEdu_efa_strategy_for_children.pdf
- Reiser, R. (2012). *Implementing inclusive education: A Commonwealth guide to implementing article 24 of the UN Convention to the Rights of Persons with Disabilities*. London: Commonwealth Secretariat.
- Robertson, J. (2012). *Disability and Diversity*. Retrieved from <http://www.routledhandbooks.com>
- United Nations Educational Scientific and Cultural Organization [UNESCO] (2009). *Towards Inclusive Education for Children with Disabilities: A Guideline*. Bangkok: UNESCO Bangkok.
- UNICEF Ghana (2013). *Ghana's Inclusive education policy*. Retrieved from http://www.unicef.org/ghana/media_8503.html on 10th January, 2016.
- United Kingdom National Health Services [NHS] (2013). *Visual impairment*. Retrieved from www.nhs.uk/conditions/visual-impairment/Pages/Introduction.aspx
- Wilson, T.D. (2000). Human Information Behaviour. *Information Service*, 3 (2)
- World Health Organization [WHO] (2014). *Visual impairment and blindness*. Retrieved from <http://www.who.int/mediacentre/factsheets/fs282/en/>

