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EXPERIENCES OF STUDENTS WITH PHYSICAL DISABILITIES IN ACCESSING KEY FACILITIES IN THE UNIVERSITY OF EDUCATION, WINNEBA

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EXPERIENCE OF STUDENTS WITH PHYSICAL DISABILITIES IN ACCESSING KEY FACILITIES IN THE UNIVERSITY OF EDUCATION, WINNEBA

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A thesis in the Department of Special Education, Faculty of Educational Studies, submitted to the School of Graduate Studies in partial fulfillment

of the requirements for the award of the degree of Master of Philosophy (Special Education) in the University of Education, Winneba

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DECLARATION

Student's Declaration

I, Eric Worlanyo Ador, declare that this thesis, with the exception of quotations and references contained in published works which have all been identified and acknowledged, is entirely my own original work, and it has not been submitted, either in part or whole, for another degree elsewhere.

Signature……..

Date……

Supervisor's Declaration

I, hereby certify that the preparation and presentation of this thesis was supervised in accordance with guidelines and supervision of thesis laid down by the University of Education, Winneba

Supervisor's Name: Professor Samuel K. Hayford

Signature……..

Date……

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DEDICATION

To my late father, my wife and children.

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ACKNOWLEDGEMENTS

I wish to thank my parents who raised me to believe that, education has no limit. Special thanks to my wife, Justina, and my children, Mawudinam, Yesutor, and Akpedze for the support and encouragement they have given me and for their sacrifice in my new academic endeavour. Without you it would not have been possible to reach this far.

I owe special thanks to my supervisor Professor Samuel K. Hayford, who did not only provided endless hours of leadership, and support, but also made his office available for me to research whenever I needed it. Thanks to Dr. Awini Adam for his encouragement and assistance as well as reading and shaping the work. To Dr. Selete Avoke, thank you for your tireless contribution to make the work a success. To all my course mates thank you for critiquing the topic in class.

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ABSTRACT

The purpose of the study is to explore the experiences of students with physical disabilities in accessing key facilities in the University of Education, Winneba. It is qualitative research that adopted a phenomenological case study research design. A purposive sample size of nine students with physical disabilities was used for the study. The method for data collection was an interview. Data were analyzed using a content analysis technique and themes from respondents. The result of the study showed that students with physical disabilities experience difficulties in accessing most of the key facilities in the University. Apart from the lecture halls and the residential facilities which they struggled to use on daily basis, they were unable to use the rest of the facilities. Students with physical disabilities face a lot of challenges when climbing the staircase with their crutches and artificial limbs to access almost all the facilities. They also depend heavily on their classmates, roommates, colleagues and friends. In some cases family members and time management to cope with the challenges. Recommendations of the study include the need to provide greater attention to the maintenance of the lift at the faculty block to reduce the challenges in using the staircase. Also the need to construct rumps and handrails to provide them with support.

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CHAPTER ONE

INTRODUCTION

1.0 Background to the Study

The issue of access to public buildings by persons with disabilities appears to have received little attention in our country, leading to the deprivation of people, especially, persons with physical disabilities from enjoying their fundamental rights as other members of society. Persons with physical disabilities are assumed to have problems at family and societal levels because they have been disadvantaged in accessing facilities in their immediate environment.

In tertiary institutions such as the University of Education, Winneba, the physical facilities that militate against students with physical disabilities are multidimensional. For example, access to the library, Information Communication Technology laboratory, lecture halls, residential facilities and washrooms. Besides, the fact that tertiary institutions are not initially and purposely built to accommodate students with physical disabilities, these students are bound to face challenges in terms of gaining physical access to these facilities.

Physical disabilities, according to Yekple and Deku (2014), is an impairment which limits the proper functioning of the physical aspects of the body. Students with physical disabilities are those whose physical limitations interfere with school attendance or learning to such an extent that special services, training equipment, materials, or facilities are required (Giardino, Kohrt, Arye & Wells, 2002). DeAngelis (2007) was also of the view that physical disabilities legally include any of the following handicaps: an impairment requiring the use of a wheelchair, an impairment causing difficulty or insecurity in walking or climbing stairs or requiring the use of braces, crutches, or other artificial support, impairment (partial or total) causing the

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likelihood of exposure to danger in public places; or impairment due to condition of aging or incoordination, all refer to physical disabilities. They cause limitations on a person‟s physical functioning, mobility, dexterity and stamina. Physical disability include people with varying types of limbs disabilities. These disabilities include upper and lower limbs disabilities (paraplegia, hemiplegia, monoplegia, and quadriplegia). The paraplegic have lower limbs paralyzed; hemiplegic have half part (lateral side or upper parts of the limp paralyzed; monoplegic have one limbs affected; the quadriplegic have all the four limbs paralyzed). Students with physical disabilities use the following assistive devices to help them in their movement: wheelchair, calipers, ramps and rails, zimmer frame or walker, crutches, artificial limbs, dennis brown shoe, tarso open toe boots, and orthopedic chair (Gadagbui, 2017).

Access to physical facilities by persons with disabilities is established in Ghana‟s Inclusive Education Policy. According to the policy (Government of Ghana, 2015), schools are mandated to improve and adopt education and related systems and structures to ensure the inclusion of all learners particularly learners with special educational needs and also promote a learner-friendly school environment to enhance the quality of education for all learners.

Soyingbe, Ogundairo and Adenuga (*n.d*) indicate that major facilities required by persons with physical disabilities are lacking in many public buildings. Some of the facilities recognized in few a public buildings are in a poor state of operation. However, the absence of these key facilities restricts the activities of people with physical disabilities. Hence, they cannot work and become productive as tax-paying members of the nation. Due to shortfall or perhaps total neglect the provision of these facilities, their movement, competence and talents are being restricted. These equally constitute a barrier to the development of their abilities. Society at large is deprived of

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the abilities and talents in people with disabilities. Sawyer and Bright (2007) state that the built environment presents barriers for the accessibility of the building infrastructure especially for persons with physical disabilities or for people with mobility restrictions. They further contend that characteristics of the built setting such as vastness and room for approach and use, acceptance of oversight, equitable use and flexibility of use have a significant affiliation with the access of the building and infrastructure by persons with physical disabilities.

The Disability Law of Ghana (Act, 715) of 2006, mandates that those who provide services at public places must make it easy for persons with disabilities and by providing appropriate facilities to make the place accessible to all especially those with disabilities. Persons with Disability Law 2006, (Act 715) states that within the period of ten years of the passing of the law, those who provide services at public places must make it easy for persons with disabilities, by providing appropriate facilities that make the place accessible to and available for use by people with disabilities. However, public buildings that were put up after the passage of the Act are not accessible by students or persons with physical disabilities.

Hayford and Oduro (2013) indicate that in order to make education, employment, health, and other essential services accessible to individuals with physical disabilities, the United Nations Conventions on the right of persons with disabilities have recommended the application of universal design principles (United Nations Convention, 2006). According to the convention, the universal design shall not exclude assistive devices for a particular group of persons with disabilities when this is needed. The need for the universal design principle cannot be overemphasized, as UNESCO (2009) reiterates, the first thing that meets people in most public buildings are stairs which must be climbed before an individual can enter the building.

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Stairs are often the first barrier for many children and adults to access school or other public buildings and enjoy the services these facilities offer. UNESCO advises that all public building should have alternative ways to enter. Ramps are in most cases easy and alternatively inexpensive to build for at least in a story building and benefit many. Ramps should therefore be added to existing schools and other public buildings, when new school buildings are being planned and designs are being developed, there is the need to make sure the buildings are equally accessible to all.

Arthur (2016) indicates that accessibility of the built environment by individuals with mobility challenges continue to be a challenge. The majority of people with physical disabilities still experience problems while trying to enter buildings that had not complied with the adjustment order. He went further to state that since mobility is one of the major difficulties which physically disabled children encounter, then the house, pavement, classrooms, and other structural environments should be made accessible. The area in the school and the school compound should be free from architectural barriers which can cause mobility problems and emotional disturbances.

According to Acheampong (2017), the University of Education, Winneba is one of the few universities that admits students from different backgrounds with diverse needs which include students with physical disabilities to study programmes in all faculties and departments. These students have the right to access all facilities including the key facilities on campus such as washrooms, lecture halls, halls of residence, auditorium, library, ICT (Information and Communication Technology) laboratories, offices, routes and play-grounds.

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Ajayi and Ayodele (2001), cited by Adomolafe and Adesua (2016), emphasized that access to these resources are quite important to achieving effectiveness in instructional delivery and supervision in the school system. They further buttressed the fact that that non-accessibility of basic facilities such as classrooms, office accommodation, workshops, sporting facilities, laboratories and libraries which are experienced in secondary schools is a perfect reflection of what pertains to the university system.

1.1 Statement of the Problem

The University of Education, Winneba (UEW) admits students with disabilities including those with physical disabilities. Indeed records show that the university is one of few public universities in the country that offers admission to a large proportion of students with different disabilities including physical disabilities. The University has a policy on Students with Special Needs, which outline the provision for individuals with disabilities within the institution (Academic Affairs). It also offers courses in Special Education and champions the course of inclusive education and as a result, produces the bulk of professional teachers in Special Education for the country. It is anticipated that as a pacesetter in special education, the University would have facilities that are universal by compliant and subsequently there would be minimal issues relating to access to facilities. There were some few studies done in Ghana which focused on experiences, design requirement for people with mobility impairment, designing accessibility in model vocational schools and barriers in accessing facilities and accessibility of faculty block to students with physical disabilities at the north campus (Adu, 2008; Kyei, 2010; Hayford & Oduro, 2013; Boadu, 2016). There was no study on access to key facilities in the University.

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From the views and experiences of some of the students with physical disabilities, the location of most of the key facilities such as the libraries, lecture halls, ICT laboratories, residential halls and washrooms are not easily accessible to the students with physical disabilities. All these facilities are located either on the first, second and third floors of the story building and the only means to get access to them is by the use of the stair case. The situation as perceived might pose a big challenge to the students with physical disabilities in the university as result the need to research on the experience of students with physical disabilities in accessing key facilities in the University of Education, Winneba

1.2 Purpose of the Study

The purpose of the study was to describe the experiences of students with physical disabilities in accessing key facilities in the University of Education, Winneba, Ghana.

1.3 Objectives of the Study

The objectives of the study were to:

1. Describe the experiences of students with physical disabilities in accessing key facilities such as lecture halls, ICT laboratory, library, residential facilities of the University of Education, Winneba.
2. Find out about challenges students with physical disabilities face in accessing key facilities in the University of Education, Winneba.
3. Examine how students with physical disabilities cope with challenges encountered in accessing the key facilities at the University of Education, Winneba.

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4. Discuss efforts made by the University of Education, Winneba to address issues related to access for students with physical disabilities.

1.4 Research Questions

The following research questions were raised to guide the study:

1. How do students with physical disabilities access key facilities in the University of Education, Winneba?
2. What challenges do students with physical disabilities face in assessing the key facilities in the University of Education, Winneba?
3. What strategies do students with physical disabilities adapt to cope with challenges encountered in accessing the key facilities in University of Education, Winneba?
4. What strategies should be put in place to enhance access to key facilities for students with physical disabilities at the University of Education, Winneba?

1.5 Significance of the Study

The results of the study would provide empirical data on how students with physical disabilities access key facilities such as lecture halls, library, ICT laboratory, residential halls in the University of Education, Winneba. The data would help the University management to adopt pragmatic measures to make key facilities in the university accessible to students with physical disabilities and the public in general.

In addition, the results of the study would help students with physical disabilities and others who would enroll in the future would have access to key facilities in the university. This would enable them to participate successfully in learning to earn good grades as well as enjoy their studentship and feel that they are valuable members of the university community as a whole.

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Furthermore, the result of the study would help stakeholders such as parents who have children with physical disabilities to press upon the government to make the facilities accessible to their children in the University. This would enable their students to earn good grades which will lead to better employment and independence. This would make parents feel their wards would not continue to be a burden on them.

Finally, the result of the study would serve as reference material for any other researchers interested in similar studies.

1.6 Delimitation of the Study

There were nine (9) public Universities in Ghana with students with physical disabilities but the study focused on the University of Education, Winneba with an interest in exploring how students with physical disabilities access key facilities on the University campus. This is because the University is the only tertiary institution that offers Special Education programmes at the undergraduate level. It also admits students with diverse needs including those with physical disabilities. The University of Education, Winneba is also committed to inclusive education where all students are supposed to be educated under the same condition without discrimination.

1.7 Limitations

The study encountered some limitations such as reluctance of some respondents to give their time for accepting to be interviewed. The time factor also limited the study process due to the fact that some of the respondents were scattered across the various campuses and residential facilities to the extent that proper arrangement has to be made through phone calls and pre-visits to be able to get them on scheduled time. The study also observed hardship in locating respondents with physical disabilities that were willing to contribute to the study.

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1.8 Operational Definition of Term

Access: means that everyone has equal entry to the built environment with no discrimination based on one‟s level of ability. It can be defined as being the opportunity that an individual, at any given location and of any given ability, possesses to take part in a particular activity or a set of activities within the built environment. It implies that the built environment must be truly usable for all.

Disability: - is the consequence of an impairment that may be physical, cognitive, mental, sensory, emotional, developmental, or some combination of these. A disability could be a result of birth complications or it could develop along a life continuum as a consequence of a disease or accident.

Key Facilities: library, lecture halls, ICT laboratory, and residential facilities at the University of Education, Winneba.

Physical Disability: Refers to a student who is slow to do physical activities because of a problem with a certain part of the body e.g., leg or hands. Also, it is a physical condition that affects a student‟s mobility, physical capacity, stamina, or dexterity.

1.9 Organization of the Study

In line with the house style of the University of Education, Winneba (UEW) this thesis has been presented in chapters. Chapter One comprises the background to the study, statement of the problem, aim and objectives of the study, research questions, significance of the study, delimitations of the study, limitations, and operational definition of terms and general layout of the study. Chapter Two focuses on the literature review taking into account the research objectives and the theoretical framework of the study. Chapter Three deals with the methodology including sample

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and sampling techniques, research design, population, instruments used in data collection and analysis, description and distribution of instruments. Chapter Four covers the presentation and analysis of data collected and Chapter Five focuses on interpretation and discussion of results. Finally, the summary of findings, conclusions, recommendations and suggestions for further research forms the concluding chapter of the report.

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CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter presents the literature reviewed for the study. The literature review cover the theoretical framework, followed by the review on key themes raised in the research questions.

i. Theoretical framework.
ii. Individuals with physical disabilities.
iii. The concept accessibility.
iv. Challenges of students with physical disabilities in accessing key facilities at the University.
v. Coping strategies of students with physical disabilities.
vi. Strategies put in place to enhance access to key facilities in the University.
vii. Summary of literature review

2.1 Theoretical Framework

A number of theories are relevant to the access to key facilities for students with physical disabilities; however the researcher adopted the principles from the social model of disability.

2.2 Social Model Theory

The study adopted the social model of disability. The starting point for the social model was the publication of The Fundamental Principles of Disability by the Union of the Physically Impaired against Segregation (UPIAS) in 1976. It stated that in our view, it is society which disables physically impaired people. Disability is

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something imposed on top of our impairments by the way we are unnecessarily isolated and excluded from full participation in society

In the broadest sense, the social model of disability is about nothing more complicated than a clear focus on the economic, environmental, and cultural barriers encountered by people who are viewed by others as having some form of impairment – whether physical, sensory, or intellectual. The barriers encountered by people with disabilities encounter include inaccessible education systems, working environments, inadequate disability benefits, discriminatory health, and social support services, inaccessible transport, houses and public buildings and amenities, and the devaluing of disabled people through negative images in the media – films, television and newspapers. Hence, the cultural environment in which we all grow up usually sees impairment as unattractive and unwanted. Consequently, parents‟ feelings towards, and treatment of, a child born with an impairment are dependent upon what they have learned about disability from the world around them. Moreover, people who acquire impairment later in life have already been immersed in the personal tragedy viewpoint and it is not therefore surprising that many of these individuals find it difficult to know how to respond in any other way (Barnes & Mercer, 2004).

The social model was adopted to explain the relationship and influence of society and its contribution to the education of students with physical disabilities. The social model of disability challenges society to change its thinking about people with disabilities. Antwi (2013) citing Barnes (2004) observed that the social model of disability is a reflection of human right and equality in society which indicate that all must have equal access to physical facilities in the society without discrimination. The relevance of the model is its acknowledgment of the barriers society has created for persons with disabilities.

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Avoke (2005) citing Hughes and Paterson (1997) states that the social model of disability involves the process of restricting persons with impairment by the social system that hampers persons with an impairment from participating in social and academic life. Per the social model of disability the center of the problem is not within the individual but within the oppressive aspect of the society in which people with disability lived. According to Antwi (2013) citing Drake (1996), Moltzen, Ryba, (2000), Swain, French, Barnes and Thomas, (2004) the assumption is that it was not individuals that were by their physical or mental impairments as purported by the medical conceptualization of disability but rather an organization of society as designated by non-disabled people that were more significantly disabling. Fraser, et al., (2000), Brynner, (2000) cited in Antwi (2013) indicates that there is a highly unequal distribution of materials and resources, as well as uneven power relations and opportunity to participate in everyday life compared to those available to people with disabilities. Students with physical disabilities require the same access and opportunity to key facilities on campus to facilitate the participation and access to lecture halls, library, information communication technology (ICT) laboratory and science laboratory, washrooms to enhance teaching and learning activities on campus.

2.3 The Concept of Physical Disability

Mifflin (2003), states that the term physical disability is extensive and covers a range of disabilities and health issues, including both congenital and acquired disabilities. People with a physical disability, have a physical impairment which has a significant and long-term effect on their ability to carry out day-to-day activities. Someone with a moderate physical disability would have mobility problems, for example, unable to manage stairs, and need aids or assistance to walk. Someone with

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a severe physical disability would be unable to walk and dependent on care for mobility.

The concept of physical disability, as the World Health Organization, WHO (2011) observes is broad and covers a range of disabilities and health issues, including both congenital and acquired disabilities. Mobility impairments range in severity from limitations on stamina to paralysis. Some mobility impairments are caused by conditions present at birth while others are the result of illness or physical injury. Injuries cause different types of mobility impairments, depending on what area of the spine is affected. Supporting this, Gadagbui (2017) indicates that other physical disabilities include impairments that limit other facets of daily living, such as respiratory disorders and epilepsy. Physical impairment refers to a range of disabilities which include orthopedic, neuromuscular, cardiovascular and pulmonary disorders. People with physical disabilities often must rely upon assistive devices such as wheelchairs, crutches, canes, walkers and artificial limbs to obtain mobility. The physical disability may either be congenital or a result of injury, muscular dystrophy, multiple sclerosis, cerebral palsy, amputation, heart disease, pulmonary disease and more. Some persons may have hidden (non-visible) disabilities which include respiratory disorder, epilepsy and other limiting condition (Gadagbui, 2017).

Yekple and Asiama (2011) state that physical disability is an umbrella or generic terminology referring to many other conditions such as poliomyelitis, amputation, spinal cord injuries, muscular dystrophy, limb deficiencies, bone tuberculosis, orthopedic, cerebral palsy, spinal bafida and many others. These conditions affect the person‟s ability to move about, use the arm and legs effectively.

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Hardman, Drew and Egan (2005) state that the concept of physical disability goes beyond those in wheelchairs alone as often reported by some people and the focus is on those who have an orthopedic impairment and cerebral palsy. Avoke (2003) citing Mysak (1980) is of the view that physical disability is a deformity due to nervous system problem with an aspect of behavour which include among others thoughts, feelings moods, structure of personality, habit, motives, neurochemical processes, sensory processes, ego and strength.

2.4 The Concept of Access

According to Bush (1988), access is the basic need to enable the disabled to share buildings and the opportunities for work, entertainment, shopping and self-sufficiency which that presents. Making that mandatory to the present limited extent has taken nearly two decades, but an extension of that can be expected to cover all parts of new buildings, and substantial extensions to buildings, having the uses now specified within the next few years. This calls for a wider understanding of designing for the physically disabled in detail, beyond the simple provision of access and sanitary accommodation.

According to the U.S. Department of Education, Office for Civil Rights (OCR) Resolution Agreement with the South Carolina Technical College System accessible means a person with a disability is afforded the opportunity to acquire the same information, engage in the same interactions, and enjoy the same services as a person without a disability in an equally effective and equally integrated manner, with substantially equivalent ease of use. The person with a disability must be able to obtain the information as fully, equal and independent as a person without a disability. In contrast, according to the Tennessee Tech University Accessibility Initiative, accommodations are reasonable academic adjustments or auxiliary aids that provide

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equal access to programs and services on an individual basis. The key words regarding accessibility are equally and independently. A person should be able to utilize materials that are truly accessible without a delay even if that use requires assistive technology (Adams, Halaychick & Mezick, 2018).

2.5 Categories of Physical Disabilities

Physical disabilities and health conditions are classified as either congenital or acquired. Students with congenital conditions are either born with physical difficulties or develop them soon after birth. Acquired disabilities are those developed through injury or disease while the child is developing normally. Neads (2019) identified types of physical disabilities as follows: Paraplegia, Quadriplegia, Multiple sclerosis (MS), Hemiplegia, Cerebral palsy, absent limb/reduced limb function, Dystrophy and Poliomyelitis. Paraplegia and Quadriplegia are what people first identify with a physical disability. Paraplegia results from injury to the spinal cord, occurring below the neck, while quadriplegia refers to damage to the spinal cord in the neck. Varying degrees of loss of limb and other mobility may result from either condition. Other forms of physical disability, such as poliomyelitis (an acquired disease), cerebral palsy (damage to brain tissue during fetal stages) and some genetic conditions can result in loss of mobility.

2.6 Accessing key Facilities by Students with Physical Disabilities

A study by Sawyer and Bright (2007) indicates that the built environment does present barriers for the accessibility of the building infrastructure especially for persons with physical disabilities or for people with mobility restrictions. They further contend that characteristics of the built setting such as vastness and room for approach and use, acceptance of oversight, equitable use and flexibility of use have a significant

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affiliation with the accessibility or inaccessibility of the building and infrastructure by persons with physical disabilities. Kerbles-Kefo (2009) states that there was an increase in the access to buildings in Slovenia by persons with physical disabilities. They distinguished that the renovation of old buildings to install ramps, grab rails in a toilet, automatic main entrance door and the creation of access ways did not make the buildings more accessible to persons with physical disabilities.

Soyingbe, Ogundairo and Adenuga (*n.d*) indicate that major facilities required by persons with physical disabilities are lacking in many public buildings. Some of the facilities recognized in a few public buildings are in a poor state of operation. However, absence of these key facilities restricts the activities of people with physical disabilities. Hence, they cannot work and become productive as tax-paying members of the nation. Due to shortfall or perhaps total neglect in the provision of these facilities, their movement, competence and talents are being restricted. These equally constitute a barrier to the development of their abilities. Society at large is deprived of the abilities and talents in people with disabilities.

Public buildings are regarded as buildings without obstructions. Public buildings must be accessible to both physically able and disabled people. In most cases, public buildings are regarded as barrier free buildings or sustainable buildings. Building types that fall under public buildings include office buildings, commercial buildings, assembly halls, hospitals and health facilities, libraries, sports buildings, public transit buildings, religious buildings, government administrative buildings, educational buildings, banks etc. (United Nations, 2003-04).

Infrastructure accessibility at higher learning institutions in a study by Kabuta (2014), which was a very sensitive area that touched the lives of the students with a physical disability. Out of five higher learning institutions involved in the study, about

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an average of 85 percent of their infrastructure was accessible with difficulty to students with physical disabilities. It was only 7.5 percent of the infrastructure that were easily accessible and 7.5 percent of all the infrastructures from five higher learning institutions were not accessible at all to students with a physical disabilities. It further indicates that students with physical disability at higher learning institutions were facing very big problems on their infrastructural accessibility at most colleges/universities visited. Many areas around colleges/universities such as classrooms, dormitories, ICT laboratory, language/science laboratory, dining halls, administrative offices, washrooms as well as playgrounds were accessible with difficulties to the students with physical disabilities. Regardless of their right to get higher level education the same as non - disabled students, the students with physical disability have not been considered by higher level institutions whereby many infrastructural systems have got barriers such as stairs, narrow paths, higher tables in laboratories and classrooms, unsupportive toilets and bathrooms that are not friendly for them as indicated. Students who were using wheelchairs and crutches encountered difficulty to reach some places due to the nature of infrastructure which was unfriendly to them.

Mwaiyande (2014) states that poor school physical infrastructure was one of the major problems constraining the teaching and learning for students with physical disabilities. The construction of school buildings, even those constructed under the Primary Education and Development Plan (PEDP), did not take into account and consideration of the needs of students with physical disabilities and other disabilities. As result, many students with disabilities, especially those with physical disabilities, struggle in their movements from one point to another within school premises. Indeed, physical infrastructure for many schools in Tanzania was found to be unfriendly and

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generally unsupportive for the needs of children with physical disabilities. The entrance to most buildings, for example, had long staircases that cannot be accessed by students with physical disabilities using wheelchairs. The inappropriately designed school physical infrastructure is partly attributable to lack of special funds allocated to cater for the needs of children with disabilities but also partly to lack of understanding amongst the local community on educational needs for children with physical disabilities.

2.7 Challenges students with Physical Disabilities faced in accessing Physical Facilities

UNESCO (2009) cited in Hayford and Oduro (2013) reiterate the first thing that meets people in most public buildings is stairs which must be climbed before an individual can enter the building which posed a challenge to people with physical disabilities. Stairs are often the first barrier or challenge for many children and adults to access school or other public buildings and enjoy the services these facilities offer.

Pierce (1998) found out that one of the commonest protests of students with physical disabilities was the access to the environment caused by architectural barriers. A lack of access to services within universities prevents functional independence and full social integration for students with physical disabilities (McClain, Cram, Wood & Taylor, 1998). Losinsky, Levi, Saffey and Jelsma (2003) found that difficulty in accessing educational institutions poses difficulties to individuals with physical disabilities as it limits their chances of developing their talent. Shevlin, Kenny and McNeela (2004) indicated that students encountered access difficulties at every level of university life. A regular survey of persons with physical disabilities and those without physical disabilities conducted by Madriaga, Hanson, Kay, Newitt and Waker (2010) established that more students with disabilities

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identified greater difficulties in gaining physical access into university buildings in the UK. Tinklin and Hall (1999), Borland and James (1999) and Holloway (2001) reported that difficult physical access constituted a major obstacle to participations at university for students with physical disabilities despite the notion that difficulties faced by students with physical and sensory impairments are the most compliant.

Fuller, Healey, Bradley and Hall (2004) and Dowrick, Anderson, Heyer, and Acosta (2005) attest to the fact that students with physical impairments had difficulty in finding out about available advice and support for learning and assessment. They also acclaimed that student support services should provide more information and greater outreach to students. These students with disabilities explain that although their disability had been disclosed, there was no mechanism in place within the institution for the information to be provided routinely to student support services.

Even when students with physical disabilities are given support, they often remain disempowered and marginalized (Holloway, 2001). Fuller et al. (2004) also noted that, together with these constraints, it is the attitudes of students with disabilities that play an influential role in their access and participation. Physical impairments can affect students in various ways in specific psychological, academic, and social environment.

According to Chiriboga (2007), other challenges students face including those with physical disabilities is high levels of stress as they begin to understand their impairment and how it influences their future. Fear, anger, and uncertainty are common reactions, and can result in psychological disorders, such as depression, low self-esteem, and anxiety. Academic problems students with physical disabilities are likely to demonstrate a decreased level of academic achievement and have a more

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difficult time. Limited time to study due to medical appointments, treatment of side effects, and physical limitations may cause them to struggle academically.

Students with physical disabilities are confronted with prejudices that make integration more difficult at school and in the public realm (Keller & Siegrist, 2010). Papasotiriou and Windle (2012) reported that students with physical disabilities having access to facilities had fairly limited social interactions at university. This was due to elusive forms of exclusion related to attitudes towards physical disabilities, while „chosen" indifferences to peers also emerged. Other barriers to social connections are connected to physical restriction. Students with physical disabilities often have fewer opportunities to socialize with their peers because of time away from campus. Without peer interaction, they could fail to develop appropriate social skills, thus making them less appealing to their peers. Access constraints experienced by students with physical disabilities at a South African higher education institution indicate that 549 higher education institutions in South Africa and in the rest of the world should be aware that students with mobility impairments experience possible psychological, academic, and social problems in addition to the obvious physical effects. Accommodations and interventions might be necessary within the environment to create a satisfactory and positive academic experience for students with physical disabilities.

Nel, Rankoana, Govender, Mothibi and Moloantoa (2015) state that students with physical disabilities generally find that there is an inadequate physical infrastructure which compromises their physical access within the institution. The participants also had to deal with discrimination from peers and staff. Furthermore, participants reported that being provided with proper amenities such as laptops and wheelchairs would help them find the environment less challenging. Educating staff

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and students without physical disabilities was also seen as necessary in order to minimize discrimination. Students indicated that they are mostly assisted by their able peers and, as a result, they depend on them for assistance. Emotional support is lacking, although the majority of the students with physical disabilities perceived this to be unnecessary. It is, however, highly likely that they do need emotional support but do not want to admit it for fear of further discrimination. The poor infrastructure at the university provides many challenges and barriers to the student with physical disability in terms of being able to move about freely which, at times, leads them to stay in their rooms.

One of the greatest challenges faced by students on campus with disabilities within higher education is physical access. Tugli, Zungu, Ramakuela, Goon and Anyanuu (2013) cited in Mwirigi (2017) assessed the perceptions of students with disabilities concerning access and support at the University of Venda. Participating students highlighted challenges pertaining to facilities, student support material and physical access within the university environment. A number of students with physical disabilities affirmed that the physical environment constituted a great barrier to their learning, and more than half maintained that the physical environment made them vulnerable or unsafe. Tugli et al., (2013) cited in Mwirigi (2017) again concluded that increased access and support services are needed at university to allow equal participation in social and academic life.

The study conducted by Muezmil (2018) on on-campus physical environment accessibility for persons with disabilities in the Ethiopian public universities explored the perception of persons with disabilities regarding the access to universities physical environment for their needs in five purposively selected public universities of Ethiopia in which students with physical disabilities were participants of the study.

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The result of the study revealed that, in general, respondents believed that the university buildings and overall campuses physical environment were inaccessible for the needs of persons with disabilities. The study also investigated the most common perceived campus physical environment barriers for persons with disabilities such as inaccessible classrooms, libraries, bookstores, auditoriums, dining halls, dormitories, circulation areas, corridors and bathrooms. In addition, campus shops, parks, museums, students‟ clinic, banks were perceived as not being barrier free to be easily accessed by persons with disabilities. Furthermore, poor ramp designs, lack of elevators and lack of accessible building entrances were also perceived as barriers to persons with disabilities (Muezmil, 2018).

A study by Losinsky et al. (2003) cited in Mutanga (2017) on access to facilities to students with physical disabilities who used wheelchairs at a university in South Africa in which access was defined both in terms of access to buildings and the added time and distance travelled by wheelchair users on the campus. Five faculties were randomly selected and typical routes traveled by a first year-student in each faculty established. The result of the study shows that two buildings were fully accessible, while three were completely inaccessible. Inaccessible toilets were the most common problem. Wheelchair users consistently had to travel further and for a longer period of time between lecture theatres in all the faculties studied. These students were therefore unable to reach their lectures within the ten minutes allocated by the university. They concluded that the inaccessibility of the buildings limits the full integration of students with physical disabilities who use wheelchairs into campus life.

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In another study by Ochien‟g1, Onyango and Wagah (2013) to assess the accessibility of students with physical disabilities to washrooms in Bungoma main bus terminal. It was established that washrooms in the area were narrow and full of barriers which hampered access to the facilities. Respondents experienced difficulty in using the washrooms due to the narrow doors, high threshold and lack of grab bars. This study concluded that the numerous barriers in the washrooms of Bungoma bus terminus hampered the safety and mobility of students with physical disabilities.

With regards to access to accommodation, Hemingway (2011) contends in a study conducted that students with disabilities including those with physical disabilities encounter access barriers with privately rented student housing, as well as university-provided accommodation. It was reported that lack of lifts in residences often restricted disabled students to the ground level only, which meant that students were substantially dependent on other people taking the initiative to establish social contact, and therefore potentially contributed to their social isolation. When asked to comment on the accessibility of their accommodation, however, six participants with mobility impairments were especially satisfied with their accommodation being on the ground floor.

Current developments in government law and policies have created the hope that people living with physical disabilities will enjoy the same rights and privileges as the nondisabled. Unfortunately, only 2.8% of persons with physical disabilities have access to higher education. The aim of this study was to determine if a group of students, living with physical disabilities, experienced constraints with regard to access to a South African higher education institution. This study, following a two-phase sequential mixed method approach, consisted of a questionnaire survey, a focus group discussion, and individual interviews. It was found that students living with a

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physical disability experienced constraints relating to the accessibility of the relevant higher education institution. Since access constraints affect the lives of students living with a disability, it is necessary to provide guidelines to universities on how to address these challenges (Engelbrecht & deBeer, 2013).

Arthur (2016) states that access to the built environment to individuals with mobility challenges continues to be a challenge. The study stated that the majority of people with physical disabilities still experienced problems while trying to enter buildings that had not complied with the adjustment order. He went further to state that since mobility is one of the major difficulties which physically challenged children encounter, then the house, pavement, classrooms, and other structural environments should be made accessible. The area of the school and the school compound should be free from architectural barriers which can cause mobility problems and emotional disturbances.

According to Tungaraza (2010), features in the built environment such as slippery floors, steps, stairways and a limited number of ramps were the major barriers to the accessibility to building structures in public universities by persons with mobility limitations (students). The study further established how narrow passageways in lecture halls restricted accessibility of wheelchair users. He further observed that the distance of lavatories from lecture halls restricted the users of wheelchair and crutch users as well. The absence of elevators made it problematic for the grab of students to access the higher floors of the libraries and lecture halls.

A study conducted by Bodaghi and Zainab (2013) examines the views of architect experts and physically disabled users on the access status of 14 public and university library buildings in Iran. The respondents rated the availability of items listed in a checklist grouped under five categories: parking, ramps, interior layout,

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exclusive space and public space for the disabled. The checklist was based on the American Disability Act and the International Federation of Library Associations and Institutions checklist for libraries for the disabled. The results indicate that the point of view of both disabled users and architects on all criteria is similar except for the ratings on the ramp and the interior layout for the disabled in library buildings. Based on the architects‟ responses, 53.8 percent of libraries did not provide ramps and 63.0 percent had no exclusive space for the disabled. Disabled users who rated higher on library accessibility were frequent visitors to the library. The provision of access and equipment met minimum compliant standards on the standard checklist, but there is room for improvements (Bodaghi & Zainab, 2013).

Qualitative research by Moatoana (2012) to investigate the challenges experienced by students with physical disabilities at the University of Limpopo, used thematic content analysis as both a framework and a mode of data analysis in the study. Interviews using a semi-structured questionnaire were used to investigate the phenomena. Themes found in the data of the present study indicated that disabled students generally find that there is an inadequate physical infrastructure which compromises their physical access within the institution. The participants also had to deal with discrimination from peers and staff. Furthermore, participants reported that being provided with proper amenities such as laptops and wheelchairs would help them find the environment less challenging. Educating staff and students without physical disabilities was also seen as necessary in order to combat discrimination. The poor infrastructure at the university provides many challenges and barriers to the disabled being able to move freely which, at times, leads them to stay in their rooms thus increasing their isolation.

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Maotoana (2012) indicates that students with physical disabilities in higher institutions includes the physical environment they find themselves in accessing Information regarding physical access for students with physical disabilities at tertiary institutions in South Africa is not available but it is unlikely that all tertiary facilities are completely not user-friendly for students with physical disabilities The university should provide access to classrooms, toilets and any other facilities that are required to ensure there is an enabling environment at the institution. In the present study the students with physical disability faced difficulties with access to buildings because of the stony floor (cobble stones), lack of lifts in some buildings, no cover between lecture halls meaning students with physical disabilities are unable to walk to classes on crutches holding an umbrella thus either get wet (and possibly sick) or do not go to class when it is raining and no access for students in wheelchairs to some lecture halls. Students with physical disability often become very tired trying to find their way around campus particularly if they are using crutches, they expend more energy than able-bodied students. This can lead to problems like focusing during lecture periods.

Many students with disabilities experience hindrance with their tertiary education experiences. This frustration arises from negative peer attitudes, physical barriers on campus and lack of appropriate services and support. The successful incorporation of tertiary students with disabilities requires positive institutional attitudes which begin at the top-management level and filters through to faculties, schools and departments. It is however, prone to stereotypical attitudes held by the community in which they are placed and those held by the major groups within their student body. This difficulty can be overcome by using interventions that discuss

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disability and difference during the orientation of all new students to the institution (Seal, Draffan & Wald, 2008).

One of the many negative consequences of having a chronic physical problem decreased physical mobility and difficulties in performing everyday activities. It is especially challenging for students without physical disabilities to navigate a post-secondary campus that is inaccessible. After 1994 tertiary education campuses tried to make their buildings user-friendly or accessible for persons with physical disabilities. However, although institutions have worked at improving access for persons with physical disabilities, many constraints exist. For instance, budgetary and or architectural problems. Studies suggest that students with physical disabilities often encounter physical barriers in the tertiary education environment which remain an unaddressed concern by these institutions. Students report their concerns about physical barriers within the university environment which are not readily identified by non-disabled student however, little gets changed. This may add an additional stress level for students with physical disabilities not experienced by a non-physical disability students (Healey, Pretorius & Bell, 2011).

Human beings with physical disabilities some time in their lives difficulties. Those who remain healthy and without disability all their lives are few. Thus, public buildings should be accessible. People with physical disabilities find it difficult to gain access to and operate freely without assistance in many public buildings in Nigeria. The study took an inventory of facilities available for persons with physical disabilities in public buildings. The inventory covered the identification and ascertaining the functional state of the facilities. A total of 257 public buildings were studied. The results show that major facilities required by people with physical disabilities are lacking in many public buildings. Some of the facilities identified in

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few public buildings are in poor a state of operation. However, the absence of these key facilities restricts the activities of people with physical disabilities. Hence, they cannot work and become productive as tax-paying members of the nation. Due to shortfall or perhaps total neglect in the provision of these facilities, their movement, competence and talents are being restricted. These equally constitute a barrier in the development of their abilities. Society at large is deprived of the abilities and talents in people with disabilities (Sonyingbe, Ogundaro & Adenuga, n.d).

Chan, Lee and Chan (2009), in a study found proof that most public estate buildings had very limited provision for accessibility to persons with physical disabilities they added that most of the buildings in Hong Kong have no ramp for wheelchair users, an aspect that restricted both the horizontal and vertical circulation of persons with physical disabilities and passageways were not wide enough to allow their horizontal mobility. In another study Kadir and Jumaludin (2012) were of the strong view that a strong positive relationship between certain barricades present in the construction environment and the inaccessibility of the public buildings by individuals who are persons with physical disabilities in Malaysia. The absence of ramps did in particular limit the vertical circulation of wheelchair users, the presences of heavy doors and uneven pedestrian pathways made horizontal circulation difficult and therefore denying them access to public places and services in these buildings.

Also, Evcil (2009) reported that the nature of the built environment was significantly positively correlated with the accessibility of the public in Istanbul. He contends that the presence of hefty doors and narrow doorways limit the movement of wheelchair users while the limited presence of ramps and elevators limit their movement and all these denied them equal enjoyment of state opportunities offered in those public buildings. A study by Baris and Uslu (2009) states that there exist an

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important positive association between barriers exiting in the built environment and accessibility of building by persons with physical disabilities in Ankara. They further revealed that steps step gradient ramps, narrow passageways, rough curb cuts, marginal parking space dedicated for persons with physical disabilities and heavy doors were all barriers to the accessibility of the building infrastructure by persons with physical disabilities.

According to Mehdi, Khadigeh and Meheran (2010) there is evidence that the absence of ramps, sliding doors and narrow passageways made building infrastructure inaccessible to persons with physical disabilities on a wheelchair in Iran. They also noted that most access routes were obstructed and therefore unfriendly to persons with physically handicaps. Bodaghi and Zaibab (2010) state that most building infrastructure in their public universities in Iran needed wheelchair ramps, handrails, crumb ramps and principal entrances are opened to the inside. According to Bodaghi and Zaibab (2010) access routes such as corridors were obstructed and lavatory‟ doors were not broad enough for wheelchair users as well as a steep staircase which destructively affected the accessibility of these building infrastructure by students with physical disabilities.

A study by Danso, Ayarkwa and Donsoh (2011) shows the relationship between features of the built environment and the access by persons with physical disabilities to public monumental buildings in Ghana. They also claimed that wide lavatory doors (horizontal and vertical) and grab rails made toilets not physical disabilities friendly and elevators and lifts in these buildings also made them not accessible. They also noted that the absence of ramps, heavy main entrance door, and the lock of seats for wheelchair users and obstructed access routes and corridors made these public buildings inaccessible to individuals with physical disabilities. Kportufe

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(2015) in a study indicates the evidence on the association between features in the built environment and the accessibility to public buildings by persons with physical disabilities. He further ascertain that absence of ramps, functional elevators and wheelchair accessible lavatories made these buildings inaccessible to people with physical disability.

Hamzat and Dada (2005) state that a meaningful relationship exists between some features in the built environment and persons with physical disabilities access to public buildings in Nigeria. They also observed that most lavatories had narrow doors and lacked grab rails the floors were slippery and lacked standard ramps for wheelchair users. According to Adebawole (2009), most people with physical disabilities had limited access to buildings including their residential house. The study also shows that lack of ramps, slippery floors and narrow doors makes houses inaccessible to physically handicapped on a wheelchair and steep staircases for persons with physical disabilities using crutches. This was collaborated by Helle (2013) that the current built environment poses a lot of mobility obstacles to persons with physical challenges and the elderly. Barriers in the built environment can contribute to limiting achievements of everyday activities and restrict the participation of persons with physical disabilities.

The recent past has seen an increased inquiry into the mobility of the aged and persons with physical disabilities in public buildings in Kenya. For this reason, the Government of Kenya has made it mandatory that all public buildings that do not have ramps be retrofitted with ramps. Despite this directive, many public buildings do not have accessibility ramps. The purpose of the study was to investigate the factors that hinder the incorporation of efficient ramps in some of the existing public buildings in Kisumu, Kenya. The findings showed that public buildings in the study

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area had not complied with the requirements for efficient ramp construction. Also, some factors that impeded the retrofit of efficient ramps included inadequate guides on inclusive design, space requirements, the strength of the existing building, and inadequate building inspection. The study concluded that many public buildings in the study region remain largely inaccessible to persons with mobility challenges (Mdago, 2016).

In another study by Mart (2009) states that there existed a positive relationship between definite features to the built environment and access by physically handicapped persons of building in South Africa. The study went on further to state that obstructed access routes, absence of grab rails and ramps made building inaccessible to persons with physical disabilities. This study also revealed that most toilets in the public buildings were wheelchair inaccessible, parking areas were unfriendly to persons with physical disabilities, the absence of ramps and when available were very steep made these buildings inaccessible to persons with physical disabilities (Useh, Moyoa & Munyongo, 2009).

A study by Muzemil (2018) aiming to explore the perception of persons with physical disabilities regarding the accessibility of universities‟ physical environment for their needs in five purposively selected public universities of Ethiopia. Students with physical disabilities and visual impairments were participants of the study. The study employed a survey design to answer the basic questions of the research. The questionnaire has been used as an exclusive data collection tool. In addition, a quantitative analysis method has been used to analyze the collected data. The result of the study revealed that, in general, respondents believed that the universities buildings and overall campuses physical environment were inaccessible for the needs of persons with physical disabilities. The study also investigated the most common perceived

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campus physical environment barriers for persons with physical disabilities such as inaccessible classrooms, libraries, bookstores, auditoriums, dining halls, dorms, circulation areas, corridors and bathrooms. In addition, campus shops, parks, museums, students‟ clinic and banks were perceived as not being barrier-free to be easily accessed by persons with physical disabilities. Furthermore, poor ramp designs, lack of elevators and lack of accessible building entrances were also perceived as barriers for persons with physical disabilities.

The central problem of the study conducted by Karande (2014) on the school base factors influencing participation of learners with physical disability in public primary schools in Kenya was the fact that physical disability learners under the inclusive setting in regular primary schools need support in order to learn smoothly like their able-bodied peers. The purpose of the study was to find out school-based factors influencing the participation of physical disability learners in public primary schools in Kiambu Municipality. The specific objectives were establishing whether the physical environment, teaching methodologies and exposure training of teachers in the management of learners who are physically challenged influence their participation in public primary schools. The study also sought the coping mechanisms that the learners who are physically challenged utilize in order to participate. The study utilized a descriptive research design. The target population for this study was 20 head teachers, 100 teachers and 43 learners with physical disability in 20 public primary schools in Kiambu Municipality. The study utilized questionnaires for head teachers and teachers, an observation schedule to observe the school environment and focus group discussion for the physical disability learners. The instruments piloting was done in one school to enhance content validity. The study used test-re-test

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technique to ascertain the instrument reliability. The value of the reliability coefficient obtained at 0.75 for each of the questionnaires.

The findings got from the study revealed that the majority of public primary schools have inadequate or lack relevant physical facilities for the learners with physical disability like leveled door-steps, lowered door handles, ramps, staircase rails and adapted toilets. It was also discovered that in the majority of the public primary schools, the teaching and learning resources are inadequate. From the findings of the study, the majority of teachers in public primary schools are not trained in handling learners with physical disability therefore the teachers are unable to involve them in the learning process. The study concluded that the regular public primary schools have unfriendly environments that hinder the movement and participation of the physical disability learners. Most of the public primary schools are unable to involve the learners with physical disability in their schools due to a lack of the required teaching and materials. Most of the teachers in the regular public primary schools do not have the skills required for learners with physical disabilities. The study recommends that the Ministry of Education should step in and provide financial support in these schools in order to make the environment friendly to the learners with physical disability by constructing ramps, adapted toilets, cemented paths and other relevant physical facilities. The study recommends that the government and other related stakeholders should step in and provide the required teaching and learning resources that will aid the participation of learners with physical disabilities during the learning process. The study also recommends training regular primary school teachers on management of learners with physical disability through in-service programmes, seminars and workshops. The training will equip teachers in public primary schools

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with knowledge, skills and variety of teaching methodologies which will benefit learners with physical disabilities.

A study by Hamzat and Dada (2005), on the integration of wheelchair bound individuals into society requires access to any building, especially public buildings in any part of the world. This study assessed the wheelchair accessibility of selected public buildings in Ibadan, Nigeria. Thirty-eight public buildings housing hospital, education, social and recreation centers and government ministry/agencies were surveyed. The doorway width, height of thresholds and steps, width of routes and grade of ramps were measured and computed. Accessibility was determined using an abridged form of the Americans with Disabilities Act Accessibility Guidelines. Only 7(18.4%) of the 38 buildings, 45.1% of the entrances and 19.4% of the routes were wheelchair accessible. The most accessible buildings were the hospitals (66.7%), while none of the social/ recreation buildings was accessible. This study revealed a low level of wheelchair accessibility of public buildings in Ibadan, Nigeria, a factor that could limit opportunities for community integration of the Wheelchair users.

Danso, Ayarkwa and Donsoh (2011) in a study conducted observed that there was a connection between features of the built environment and the access by persons with mobility limitations to a public monumental building in Ghana. They also maintain that wide lavatory doors, both horizontal and vertical grab rails made toilet facilities for persons with mobility limitations friendly. Elevator lift in these buildings also made them accessible. However, they noted the absence of ramps, heavy main entrance doors, and absence of seat for wheelchair users and obstructed access route and corridors made these public buildings inaccessible for persons with physical disabilities.

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There is an evidence on the association between features in the built environment and the accessibility to public buildings by persons with mobility limitations that the absence of ramps, functional elevators and wheelchairs accessible lavatories and made these buildings inaccessible for persons with mobility limitations (Kportufe, 2015).

Crisp (2002) states that persons with physical disabilities encounter problems in going about their activities of daily living (ADL). Some of them who are students in higher institutions are not left out. One of their biggest problems is their inability to access such important places as lecture halls, cafeteria, hostels and other places of need within the school compound. Most often the school environment is not designed to be accessible to students whose needs are not the same as that of ordinary students. Coupled with this also is the issue of lack of necessary and relevant equipment or other types of support services.

2.8 Coping Strategies of Students with Physical Disabilities

According to Bindu (2018), coping is a constantly changing cognitive and behavioral effort to manage specific external and or internal demands that are appraised as exceeding the resources of the person. The findings from this study have been concluded that those children with physical disabilities are using a negative coping mechanisms for social problems related to their physical disability whereas physical and emotional problems related to physical disability most of them are using the positive coping mechanisms. The greater the person's disability is the more difficult it is for him to accept it or to achieve good adjustment. It is a fact that if the parents and others give adequate psychological support and find solutions to their problems, they can stand alone in their need.

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The coping strategies of children with physical disabilities are influenced by the child's development and use of the coping mechanism. The coping mechanisms includes problem solving, turning to others for help, support, comfort and approval, acceptance of disability, emotional control, insight, defense to seek relief, attachment with others, closed friendship with others, communicating thoughts and feeling and sharing information about disability (Bindu, 2018). One might assume that the greater the person's disability is more difficult it is for him to accept it or to achieve good adjustment. In addition to the usual developmental task, a child with physically disability must make unique, complex adjustment to himself, to his physical conditions and to his immediate world. Other adjustment must be made to parents and to a world disturbed about his conditions (Bindu, 2018).

Uzoma (2010) state that to cope with some activities of daily living, a set of four activities of daily living were considered. They are, going for lectures, fetching water, washing clothes and going to the market. The coping strategies being considered here were by way of who assists them with these activities. These strategies include; use of friends/roommates, the use of relations and relying on oneself to cope with activities of daily living. Students were of the view that they depend on the relations, friends, course-mates and roommates. Generally what stood out from the issue is that there are insufficient institutional mechanisms/facilities put in place for the student with physical disabilities at the University of Nigeria, Nsukka. They further depend on the goodwill of fellow students in order to get by. In some cases students with physical disabilities rely on their friends, roommates, relations and themselves to carry out such activities of daily living as going to lectures, fetching water, washing clothes and going to the market. It also indicates that there is

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insufficient institutional mechanism whatsoever to help students with physical disabilities to cope with ADL.

In a study by Nageswara (2015), respondents underlined the importance of support received from family members, friends, and the ones whom they were close to which could be seen as instrumental in helping the individual deal with the issues including both personal and education matters. The majority of them shared their experiences about how their parents helped and contributed to their success before and after coming to higher education. The respondents believed that they received unconditional support from their family members. For some of them, their parents expressed the importance of education and its success in their life. They always got encouragement, guidelines on how to succeed in education and other related aspects. Some of them also stated that when they failed to attain their targets, the family was there to help them move forward.

Similarly, the respondents also stressed the importance of support from the peer groups in their education. Support from classmates/roommates/other peers has been a form of encouragement to pursue higher education, physical assistance like carrying books, pushing wheelchair/tri-cycle, reading and recording material at the time of exams and getting books from the library. For example, Deepika stated that whenever she is with her friends, all her problems will get solved. She does not think about the problems. They solve her problems and divert her from them (Nageswara, 2015).

According to Dhemba (2015), minimizing social barriers by providing non-disabled individuals with practical personal experiences with those learners with physical disabilities can help them cope in their environment. This is where the non-disabled learners are given an opportunity to simulate a particular physical disability,

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not in a derogatory way, though. Simulating a disability makes the non-disabled peers directly experience what it is like to be disabled, thereby developing a better understanding of handicapping conditions and feelings one has. Children simulate wheelchair or crutch users, where they can take some time, practically using a wheelchair or crutches, as they move from one point to the other. It is hoped that such an activity makes those with no disabilities become empathic, and not sympathetic to those persons with physical disabilities. After some time in a wheel chair, or using any mobility assistive device, some children can better understand mobility rehabilitation needs for learners with physical disabilities. Role-playing helps the non-disabled to experience feelings of being restrained and being incapacitated. As the a number of contact increases through play, learners may become more positive towards their peers with physical disabilities, ultimately developing positive attitudes. If properly managed, such plays have been to help in eliminating prejudices. Once those with no physical disabilities develop positive attitudes towards those with physical disabilities, social barriers naturally fall off which can help develop coping mechanism.

2.9 Enhancing access to Key Physical Facilities for Students with Physical Disabilities

Handicap International (2008) stipulates that all public places shall be made accessible for persons with all kinds of disabilities through the installation of features such as ramps; accessory rails in the bathroom, and signs. A public place is defined as “any premises, location or building and means of transportation in either state or public or private ownership who provide services widely to the general public such as ministries, departments, institutions, leisure and cultural centers, sport centers, recreational resorts, educational establishments, hotels, hospitals, health centers,

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restaurants, and transportation networks. So, once this law will be adopted, the urban environment, public buildings as well as the means of transportation should be made accessible.

Handicap International (2008) further suggested that the modifications should be made to the following to make it accessible to persons with physical disabilities. **Stairs:** even if they are not accessible to some people with reduced mobility including wheelchair users of course, stairs are sometimes the only alternative to have access to upper floors (building a ramp can be impossible, and elevators are expensive. That is why particular attention must be paid to make them fully accessible. Some simple layouts can be used to build an accessible stair.

Building entrance: for building facilities, the accessible entrance of any building should be the main entrance used by everyone. This entrance should be coherently placed considering the paths that lead to it (from the street, from another building, from the parking area and be easily located by the use of vivid colors and appropriate signage). Sufficient space should be found in front of the doors in order for the wheelchair users to open them (Handicap International, 2008).

Handrails: Should be provided on both sides of the ramp in order to help people with reduced mobility who will use them as a help to move as well as visually impaired people. There should be both a rail at a height of 90 cm for adults and a rail at 70 cm for children and people of small stature. The shape of handrails should be cylindrical in order to facilitate the grasp. A side rail should also be provided at ground level in order to prevent the wheels of a wheelchair to get out of the ramp (Handicap International, 2008).

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2.10 Access Ramps and Handrails

As the ramp is the most inclusive way to have access to a building, if there is enough space, it should be provided instead of a stair. To make it accessible, the slope must not exceed 8%, knowing that the ideal slope is 5%. The ramp surface must be firm and not slipping, with tactile surfaces upstairs and downstairs for visually impaired persons, with in addition a colored marking. (Handicap International, 2008). According to the World Report on Disabilities (2011), access initiatives need to take into account external constraints including affordability, competing priorities, availability of technology and knowledge, and cultural differences. They should also be based on sound scientific evidence. Often, access is more easily achievable incrementally. Initial efforts should aim to build a "culture of accessibility" and focus on removing basic environmental barriers. Once the concept of accessibility has become ingrained and as more resources become available, it becomes easier to raise standards and attain a higher level of universal design. Even after physical barriers have been removed, negative attitudes can produce barriers in all domains. To overcome the ignorance and prejudice surrounding disability, education and awareness-raising are required. Such education should be a regular component of professional training in architecture, construction, design, informatics, and marketing. Policy-makers and those working on behalf of people with disabilities need to be educated about the importance of access.

To improve access and use of facilities for persons with physical disabilities according to Business Info (2017), there is the need to make alteration and changes to physical features to accommodate employers who are physically challenged. If the physical features put employees who are physically challenged at a disadvantage compared with your non-disabled employees you must adjust it to remove or reduce

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its impact. The study further suggested that making structural or physical changes to business premises such as widening doorways to allow a wheelchair to pass through easily, replacing steps with ramps, relocating light switches and door handles to a level that considers people who have difficulty in reaching, providing accessible toilet facilities for employees who are physically disabled. The study further revealed that to make access easier, allowing the person to work in a more easily place, such as by transferring a wheelchair users workstation from an inaccessible room to the ground floor, allowing a disabled job applicant to be interviewed in an accessible room and providing specialized modified equipment for the use of disabled students (Business Info, 2017).

Hergarty and Alur (2002) pointed out that intention of approach and entrance in school is to provide a level or properly ramped approach from the public footpath to the school entrance and from the school to external play areas. Level approaches are preferred where possible. If ramps are required they should reach certain minimum provisions in terms of slope, dimension and provision of handrails. According to Hergarty and Alur (2002), doors and doorways should be open enough to allow easy passage of wheelchairs. Doors should have correct handles at suitable heights. There should be acceptable clear wall space to the side of the door by the door handle to aid the wheelchair user when approaching and opening the door. Raised thresholds and doormats should be avoided. Depending on the number of persons who are physically disabled, there is a need for one or more adapted toilets accessible to wheelchair users of either gender. These should be sited so as to provide quick and easy access from teaching areas.

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A study conducted by Mwirigi (2017) on factors affecting the accessibility of public buildings infrastructure by person who are physically challenged indicates that access to both privately owned and public buildings infrastructure is still a major problem bedeviling persons with physical disabilities. The study further indicates that built environment, building regulations, and public awareness and funding resources all affected the accessibility of building infrastructure by persons with physical disabilities in Meru Town. The respondents agreed that the absence of Curb Cuts adversely affected the accessibility of building infrastructure by persons who are physically disabled. Greater number of the respondent as shown by a mean of 4.8981 agreed that accessibility of government funds for the provision of car parks for persons with disabilities in the built environment does not exist in Meru Town.

Further, the results of this research have revealed that there exist building regulations on the provision of wheelchair ramps in public housing in Meru Town as shown by a majority of the respondents by a Mean of 4.2710. About 59.3% of the respondents agreed that there exist a government fund for making building infrastructure accessible to persons with physical disabilities. The study conclude that though there exist building regulations on the provision of wheelchair ramps in public housing in Meru Town most building do not have these facilities portraying failure on the supervision role of National Construction Authority (NCA) in the enforcement of these regulations. It can also be concluded that the existence of traditional media campaign for the provision of access routes to building infrastructure and online campaigns provision of car pack for the disabled outside of building infrastructure in Meru Town could undertake a dominant role in the improved access of these buildings for persons with physical disabilities. From the findings the study recommends that effective advocacy on accessibility of building infrastructure for

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persons with physical disabilities that would improve public awareness on access, enacting of relevant building regulations and provision of financial resources should be strengthened in developing countries like Kenya through the developed unit. Additionally, the study recommended that the government with the help of other development partners should provide funding and capital grants to construct unobstructed access routes that would improve access to building infrastructure for persons with physical disabilities (Mwirigi, 2017).

Hayford and Oduro (2013) indicate that in order to make education, employment, health, and other essential services accessible to individuals with physical disabilities, the United Nations Conventions on rights of persons with disabilities have recommended the application of universal design principles (United Nation Convention, 2006). According to the United Nations, the universal design shall not exclude assistive devices for a particular group of persons with disabilities when this is needed. The need for the universal design principle cannot be overemphasized, as UNESCO (2009) reiterates, the first thing that meets people in most public buildings is stairs which must be climbed before an individual can enter the building. Stairs are often the first barrier for many children and adults to access school or other public buildings and enjoy the services these facilities offer. UNESCO advised that all public buildings should have alternative ways to enter. Ramps are in most cases easy and alternatively inexpensive to build for at least in one-story building and benefits many. Ramps should therefore be added to existing schools and other public buildings, when new school buildings are being planned and designs are being developed, there is the need to make sure the buildings are equally accessible for all.

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The disability law of Ghana (Act, 715) of 2006, mandates that those who provide services at public places must make it easy for persons with disabilities and by providing appropriate facilities to make the place accessible to all especially those with disabilities. Persons with Disability Law 2006, (Act 715), also states that within the period of ten years of the passing of the law those who provide services at public places must make it easy for persons with disabilities, by providing appropriate facilities that make the place accessible to and available for use by people with disabilities. Yet, most buildings that are put up after the passage of the Act are still not accessible.

In the United States of America, Burns and Gordon (2010) stated that disability laws such as the Fair Housing Act did lead to a more accessible buildings for persons who are physically challenged through the fixing of wheelchair ramps, sliding doors and grab rails in washrooms in old buildings. In addition, Sanderson (2006) observed that on two building regulations; the Ontarian with Disabilities Act 2001 and the Accessibility for Ontarians with Disabilities Act (2005) which required that both public and private building infrastructure be accessible to persons with physical disabilities, providing to the overhaul of all buildings for the fixing of wheelchair ramps and sliding doors. To buttress the point further, Lord (2010) borne on the use of different disability awareness creating podium; online media, youth forum and traditional media as important avenues of raising issues related to access of building infrastructure by persons with mobility limitations in Canada.

Ong‟eta (2013) observed that there is the need for a more barrier-free and disability-friendly environment to enable students with physical disabilities to have access to buildings, academic information, materials, assistive devices and other equipment. This will promote their mobility and increase their participation in

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learning activities. This could be achieved by universities administration removing all physical barriers within the institutions physical environment by the construction of ramps that are according to international standards such as 1:12 (One inch of rising to 12 inch on a slope), 3 feet width and 6 feet land width with 60" length and user-friendly pavements in all establishments within the campuses.

Ngugi (2007) states that environmental barriers to be addressed in school to ensure access for learners with physical disabilities include modifying and adapting the school and classroom environment to facilitate free movement. Replacing stairs with ramps, adapting the heights of toilet seats for easy use by learners with physical disabilities. Providing supportive bars along with the classroom, halls and toilet doors for learners to stand, walk, sit or move easily, leveling the grounds and removing obstacles to encourage the learner with physical disabilities to move freely all over the compound. Widening the verandas and aisles in buildings to allow access for all learners including those using wheelchairs and crutches and modifying classroom seating and school assembly arrangements to accommodate the learners with physical disabilities.

Community Tool Box (2017) states that there are a number of aspects to assuring access for people with physical disabilities. The obvious one is the physical: designing and building or changing structures and spaces to conform to the needs of all members of the community, including those with physical disabilities. In addition, however, there are social aspects, such as non-discrimination in employment and service delivery, and equal treatment in all situations of people with and without physical disabilities. Finally, political considerations, working to strengthen and enforce the laws that do exist and working for laws to protect people with physical disabilities in countries that do not have them. Perhaps most important is raising the

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consciousness of those who design and/or build facilities, employers, and the community and society about the rights and needs of people with physical disabilities.

2.11 Summary of Literature Review

This literature review highlighted the concept of physical disability, the meaning of access, access of some key physical facilities to students with physical disabilities, the challenges students with physical disability faced in accessing facilities and coping with challenges encountered in accessing key facilities. The rest were enhancing access to key physical facilities, which include the use of stairs, building entrances handrails, access ramps and handrails. There were some few studies done in Ghana which focused on experiences, design requirement for people with mobility impairment, designing accessibility in model vocational schools and barriers in accessing facilities (Adu, 2008; Kyei, 2010; Hayford & Oduro, 2013; Boadu, 2016). However, none of the studies explored the experiences of students with physical disabilities in a tertiary institution such as the University of Education, Winneba in accessing these facilities. This study, therefore, examined access to key facilities for students with physical disabilities in the University of Education, Winneba.

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CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter presents the methodology for the study. The areas covered were: research approach, research design, population, sample size, sampling techniques, instrumentation, validity, reliability, procedure for data collection, method of data analysis, and ethical considerations.

3.1 Research Approach

The study employed the qualitative research approach to explore the access of key facilities to students with physical disabilities at University Education, Winneba. Qualitative research involves an interaction between the researcher and in the socio-cultural context (Kusi, 2012). A qualitative approach was appropriate for the study because the study sought to examine and solicit information with regards to participants‟ experience of access to key facilities, the challenges they face in accessing the facilities, the way they cope with challenges encountered in accessing key facilities and the effort made to address issues relating to access to key facilities in the university. Findings of the study were arrived at through the examination of participants‟ experiences using interviews but not by statistical procedures and quantification. In qualitative research, Bryman (2008) and Creswell (2003) suggested that participants are projected to give detailed rather than general information on the features of the specific phenomenon under investigation. The qualitative research approach considers collecting information from participants in order to understand the phenomenon under the study from the perspectives of those involved in the research (Ary, Jacobs & Sorensen, 2010). The current study, therefore, sought to use the qualitative approach, in order to have a detailed account of the experiences of students

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with physical disabilities from the students‟ own perspective and that of the Development Officer who supervises the construction of facilities for all students including those with physical disabilities in the University of Education, Winneba. Ghana.

3.2 Research Design

This research employed a phenomenological case study as the research design to discover the experience of access to key physical facilities to students with physical disabilities at the University of Education, Winneba (UEW). Phenomenology assumes that there exists in every experience a true essence or structure. A phenomenological study describes the meaning of individuals‟ lived experiences of a phenomenon. This description consists of what they experienced and how they experienced it (Creswell, 2012). Ary, Jacobs and Sorensen (2010) explained that phenomenological studies are meant to explore participants‟ perspective and experiences of a phenomenon. Creswell (2007, 2012) observed that the basic purpose of phenomenology is to reduce individual experiences with a phenomenon to a description of the universal essence, that is, a grasp of the very nature of the things.

Phenomenological research is based on the subjective experience of the individual being studied. Avoke (2005) citing Robson (2003) notes that it is aimed at essentially attempting to understand a particular phenomenon. It is an approach that has much to offer in answering certain kinds of research questions about subjective experiences that may be relevant to some real world studies.

Vanderstoep and Johnston (2009) stated that phenomenology asks for the very nature of a phenomenon, for that which makes something that it is, and without which it could not be what it is. A phenomenologist sees things as they really are and establishes the meanings of things through brilliance and explanation rather than

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through taxonomic approaches or abstractions, and develops theories through the dialogic relationships of a researcher to a researched (Cohen, Manion & Morrison, 2007). The objective of this study was to find out the experiences of access to physical facilities to students with physical disabilities at UEW. It was therefore imperative to define the students' experiences through a phenomenological case study. The researcher conducted interviews with respondents to give them the opportunity to express their experiences at the University of Education Winneba, Winneba Campus.

3.3 Population

A population is a group of elements or cases, whether individuals objects or events that conform to specific criteria and to which we intent to generalize the result of the research. This group is also referred to as the target population or universe. The specification of the population begins with a research problem and review of literature, through which a population is described conceptually in broad term (Hayford, 2013).

The population for the study was 146. Specifically they comprised 100 students with visual impairment, 37 students with hearing impairment, eight (8) students with physical disabilities and a development officer. They were undergraduate/post-graduate regular students offering courses in all Departments in the University. These were Departments of Special Education, Social Studies Education, Political Science Education, Early Childhood Education, Art Education, History Education, French Education, English Education, and Psychology and Education.

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3.4 Sample Size

The sample size for the study was eight students with physical disabilities Physical disabilities and a development officer. According to Yekple and Deku (2014) physical disabilities refer to impairment that limit the proper functioning of the physical aspect of the body. Key facilities in the study refer to the library, lecture halls ICT laboratory, residential halls and washrooms. The category of students with physical disabilities who were involved in the were those with an orthopedic impairment which involves the skeletal systems such as bones, joints, limbs and the associated muscle and were using one or two clutches and clippers. One development officer at UEW was involved. The sample further consisted of five males and four female students and one development officer between the ages of 23 and 45 years. One of the participants was a second-year students (Level 200), four were third-year students (Level 300) and two were fourth-year students (Level 400) 1 second-year postgraduate student (level 801). First-year students (Level 100) students with physical disabilities were not included in the study because there was no record on them at the Resource Centre perhaps they have not yet registered with the Centre. The participants were offering 4-year bachelor degree and postgraduate programmes in Departments of Special Education, Early Childhood Education, Art Education, Political Science and the Development Officer. Table 3.1 presents the sample size of the study.

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Table 3.1: Sample size for the Study

Department	F	M	Total
Special Education	2	1	3
Early Childhood	1	1	2
Art Education	0	1	1
Political Science	1	1	2
Development Officer	0	1	1
Total	**4**	**5**	**9**

Source: Field data, (2019).

3.5 Sampling Technique

The researcher used a purposive sampling technique to select the participants for the study. The researcher purposefully chose the sample because they have been living with physical impairments for some number of years now and have been in the using facilities of the university for more than one academic year. They were therefore in a better position to provide relevant information relating to their experiences. Avoke (2005) contended that in the purposive sampling technique the researcher"s hand-picks the cases to be included in the sample on the basis of their judgment of typicality. Fraenkel and Wallen (2009) also clarified that the purposive sampling technique is a technique in which researchers use their judgment to select a sample that they believe, based on previous information, will provide the data they need. To draw a purposive sample, a researcher begins with specific perspectives in mind that he or she wishes to examine and then seeks out research participants who cover that full range of perspectives. Creswell (2005, 2012) Gall, Gall, & Borg (2007) and Kusi (2012) argue that purposive sampling techniques are more suitable for studies located within the qualitative framework than studies that fall within the quantitative framework. The category of students with physical disabilities was

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involved in the study were those with an orthopedic impairment which involves the skeletal systems such as bones, joints, limbs, and the associated muscle and were using crutches and clippers.

3.6 Instrumentation

A semi-structured interview guide was used to elicit data from the participants for the study. The researcher chose face to face interview with the participants because of the number it also encourages participants to speak out for the researcher to learn the views of participants in order to generate an individual view of a phenomena. The face-to-face interview, also called an in-person interview, is probably the most popular and oldest form of survey data collection. It has continued to be the best form of data collection when one wants to minimize nonresponse and maximize the quality of the data collected. Face-to-face interviews are often used to solicit information in projects that can be considered to be very sensitive, for example, data collection on sexual behaviors. This entry describes the advantages and disadvantages of face-to-face interviewing along with basic operational considerations for successful interviews.

By far, the main advantage of the face-to-face interview is the presence of the interviewer, which makes it easier for the respondent to either clarify answers or ask for clarification for some of the items on the interview guide. Sometimes, interviewers can use visual aids (show cards) to assist respondents in making a decision or choice. Properly trained interviewers are always necessary lest there be problems such as interviewer bias, which can have disastrous effects on the survey data. Relatively high response rates and an almost absence of item nonresponse are also added bonuses. The opportunity for probing exists where the interviewer can get more detailed information about a particular response (Lavrakas, 2008).

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Fraenkel and Wallen (2009) noted that interview is one of the main techniques used to collect data in qualitative research. In the interviews, the researcher included probes and prompts to aid further exploration of his own line of questioning. The probes and prompts helped to explore and develop the views of respondents and to prevent respondents from going off the main-line of questioning (Rodgers, 1999). The interview questions were guided by the themes in the research questions raised, namely: access to key physical facilities to the students with physical disabilities, challenges students with physical disabilities face in accessing key facilities, the amount the university would spend in making the facilities accessible to students with physical disabilities, interim measures to be adapted to enhance access to key facilities for students with physical disabilities in the University of Education, Winneba.

3.7 Trustworthiness

To ensure that data collected remain credible during and after the collection, the researcher discussed the interview guide with the supervisor before it was administered. The suggestions from the supervisor helped the researcher to rearrange and reword the interview questions. The researcher maintained a degree of neutrality in his findings. With this, a conscious effort was made to ensure that the researcher‟s interpretations of the data collected do not skew the interpretation given by the respondents.

3.8 Procedure for Data Collection

The researcher sought permission from the various Heads of Department of participants involved in the study. Creswell (2012) maintained that it is important to respect the site where research takes place. This respect, according to Creswell, is

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shown by gaining permission before entering the site. Permission to the site was facilitated by an introductory letter that the researcher requested from the Department of Special Education, University of Education, Winneba.

A pre-visit and phone call were made by the researcher to the students with physical disabilities to explain the purpose of the study to them. Participants were assured of the necessary confidentiality of information to be gathered and to book appointments with them. This arrangement was made due to the different schedules of participants‟ academic and social activities. Appointments to meet the participants were scheduled on an individual basis where participant had time to meet the researcher. Face-to-face semi-structured interviews involving eight students with physical disabilities and one development officer were conducted on the sample interview items based on the research questions that were raised. The interviews were conducted by the researcher to the participants on an individual basis in their place of residence between 14th and 31st May 2019. Each interview session lasted from 5 to 10 minutes.

The researcher gave the participants the opportunity to express their feelings and experiences without undue pressure on them. The interview was tape recorded with the permission of the participant and transcribed for analysis. Before analysis of the data, the researcher called the participant on phone and the transcripts were read to them to confirm if the transcript represented the views he/she shared. The phone call was used because at the time the researcher has done the transcription and students were on holiday.

3.9 Data Analysis

The data were analyzed qualitatively using narrative themes from the interview data recorded and transcribed. Transcripts of the interview data were given

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codes as Q1, Q2, Q3, Q4 Q5, Q6, Q7, Q8, and D1 for identification of responses from the individual. The code Q1 to Q8 were students with physical disabilities and D1 was the development officer. Fraenkel and Wallen (2009) stated that the first step in coding data to assign identification numbers to every group from whom data has been collected. According to Bogdan and Biklen (2007) coding allows for the categories and patterns emerging from data to be decided in advance, and facilitates the interpretation of smaller units since the analysis begins with the researcher reading all of the data to gain a sense of the whole. Verbatim expressions of the students were used in reporting the data where necessary.

3.10 Ethical Considerations

Ethics involve requirement on daily work, the protection of the dignity of the subject and the publication of the information (Fouka & Mantzorou, 2011). To ensure that participants‟ health, safety, respect, and fidelity are sustained, the researcher sought for verbal consent of participants. The students had the opportunity to voluntarily participate in the study. The researcher explained to participants that their names will not be needed in the course of data collection to ensure confidentiality. Before the researcher began the interview, he ensured that the purpose of the study was understood by the participants and also treated their rights with the utmost care. The researcher sought the permission of participants to use the tape recorder during the interview session in order to capture detailed data while concentrating on listening and stimulating participants. After transcription, some of the participant was called on the phone to make them aware of what they had said is exactly what had been transcribed. The participants were assured that they could have access to the findings of the study and that they could contact the researcher if they had problems regarding the study.

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3.11 Access and Ethical Considerations

Creswell (2012) contends that it is important to respect the site where research takes place. This respect according to Creswell is shown by gaining permission before entering the site. Informed consent was therefore obtained from the authorities of the University prior to the commencement of the study. This was facilitated by an introductory letter obtained from the Department of Special Education. A pre-visit was made to the university to book an appointment with the university authorities (the development officer). The appointments were made such that it was possible to meet all students that were involved in the study on an individual basis at a place agreed upon at a time. During the pre-visit, the researcher took the letter registry (Appendix A) detailing the purpose of the study. In addition to that letter, the researcher explained the aim, purpose, the use of the finding and the likely social consequences the study may have on their lives and the university. The researcher indicated why their site was chosen and detailed how much time would be at the site. The researcher met the potential participants in their locations and explained the rationale and the procedures of the study to them. They were duly informed that their participation was voluntary and was free to abstain or even withdraws from the study if they felt so. Their names were not mentioned during the interview to ensure the anonymity of the participants.

Ethics in research refer to the considerations taken to protect and respect the right and welfare of participants and other parties associated with the activity (Reynolds, 1982 cited in Awini 2010). The rights of respondents were treated with utmost care. The following consideration were made to promote and protect rights and interest of the participants at different stages of the study. As a procedure to gain access to the university, an introductory letter from the Department of Special

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Education, University of Education, Winneba, (Appendix A) was presented to the University Authorities (The development officer).

The researcher made the participants aware of their right to participate voluntarily or withdraw from the study at any stage if they deemed so. Anonymity and privacy of participants were guaranteed by asking them not to mention their names during the interview. To try to make participants informed before signing the letter of informed consent, the purpose of the study including how findings would be reported and used after the study were explained orally before every session. Participants was orally assured that there would be confidentiality in the handling of any data or information from them. The researcher reported exactly the finding without exaggerations. In the same respect, the database was created honestly by transcribing the interview recordings without any distortion that would yield „deceitful" findings (De Vos 2002). Pseudonyms wwas used to represent the students and the development officer name in the data analysis.

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CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION OF FINDINGS

4.0 Introduction

This chapter provides the analysis and discussion of the findings of the study. It has two main sections; the first section provides the analysis of data while the second section presents the discussion of the findings. The purpose of the study is to find out the experience of students with physical disabilities in accessing key facilities in the University of Education, Winneba. The study sought to answer the following research questions.

1. How students with physical disabilities access key facilities in the University of Education, Winneba?
2. What challenges do students with physical disabilities face in assessing the key facilities in the University of Education, Winneba?
3. What strategies do students with physical disabilities adapt to cope with challenges encountered in accessing the key facilities at the University of Education, Winneba?
4. What strategies should be put in place to enhance access to key facilities for students with physical disabilities at the University of Education, Winneba?

4.1 Background of Participants

This section presents details of the background of the students and the development officer who participated in the study. The table highlights the department and sex of the participant for the study.

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4.2 Background of Participants

The table below shows the department and sex of the participants.

Table 4.1: Background information of participants

Department	F	M	Total
Special Education	2	1	3
Early Childhood	1	1	2
Art Education	0	1	1
Political science	1	1	2
Development Officer	0	1	1
Total	**4**	**5**	**9**

Source: Field data, (2019)

In the study, Q1, Q2, Q3, Q4, Q5, Q6, Q7, and Q8 represent students with physical disabilities from various departments and D1 represents the development officer.

4.3 Analysis of Data

In this section, the data were analyzed to reflect the following themes: accessing key facilities by students with physical disabilities; challenges of students with physical disabilities are accessing key facilities; copping with the challenges; and strategies to enhance access to key facilities.

4.4 Students with Physical Disabilities in accessing key Facilities

The researcher interviewed eight students having different physical disabilities. During the interview, the students were asked to describe their experience on how accessible were the key physical facilities in UEW to them. By listening to the students with physical disabilities narrate their own experience on their access to key physical facilities. I gathered consistent elements that emerged.

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One of the issues that came up from the interview with the students with physical disabilities regarding accessibility to the library was the location of the facility. A students with physical disability made the following statement:

> *…… I only went there once when I was in level 100 for an orientation that is south library due to the location and the climbing of the staircase with my crutches. For the north campus library, I haven't been there before due to the location and moreover the lift that is supposed to help me access the place doesn't work all the time. It breaks down quickly and remains so for so many days and months unattended to* (Verbatim expression by student Q1).

Another student said:

> *... I've never been to the library before because I see the staircase as a treat to my disability. Due to the location I don't go there especially the one at the south campus. The one at the north campus too due to the regular break-down of the lift I've never been there. I can't use my crutches to climb to the fifth floor to access the library. It will take me the whole day if I want to use the stair case* (Verbatim expression by student Q2).

A student on the other hand stated that:

> ..... *I develop fear anytime I want to go to the library. The location of the library is not favourable to me to use at all. I surfer a lot anytime I want to visit the library. When I manage to get there the seats and the location of some of the books on the shelves is also a headache and problem to me*. (Verbatim expression by student Q8)

Is clear from the statements of the students with physical disabilities that their inability to easily access the library facility is a result of the location of the facility.

Another issue that came up from the interview with the student with physical disability regarding accessing the library was the frequent break down of the lift to the facility. A student with physical disabilities made the following statement:

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> *…. I only access the library once. It wasn't for me because of my inability in climbing the staircase. The lift that you see there does not work all the time* (verbatim expression by student Q3)

> *…..For the south campus library, I've never been there before but with my visit to the ICT laboratory and the way I saw the entrance, to me it would be very difficult to access it. For the one at the faculty, I tried to access it once with the lift but it was rather unfortunate that by the time I was done with what I went to do, the lift went off. I nearly carried.* (Verbatim expression by student Q4*)*

From the statements of the students, they were afraid of the lift going off anytime they want to use the library. The intermittent breakdown of the lift prevent students with physical disabilities from accessing the library for their studies.

Another issue that emerged from the student with physical disability is their inability to use her artificial leg to climb the staircase that leads to the library. One (1) out of the eight (8) students made a statement like this:

> *…. I don't use the library as a result of my prosthetic leg and the use of the staircase to access the library. Anytime I try to use it I feel pain in my leg and it take me a long time to get to the library* (verbatim expression by student Q5).

The statements from the students indicate that they go through a lot of stress if they want to access the library.

It appeared from the interview with students with physical disabilities in accessing the library is the difficulty they go through anytime they want to go to the library.

One (1) student with physical disability made a statement that:

> *….. I hardly use the library for my studies because is not easy for me to access with my condition. When you go there the way the seat is you*

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> *can't have your comfort in staying in the library. I depend on friends and the internet to do my studies and assignment.* (Verbatim expression by student Q6).

The statements from the student indicate that the library is not accessible to them at all and for that matter, they hardly use the library; since the staircase is the only alternative means to access the library if the lift breaks down.

Another student stated that there were many libraries on campus so use the one that is easily accessible.

> *...we have a library at the south campus at the faculty block and one at the IDeL. I find it difficult to climb to those libraries. I sometime use the IDeL library which is just one story that I can manage. I don't go to the south campus library because of the nature and the design of the entrance full of staircase. The elevator at the north campus library does not work and climbing the stair with my crutches to the fifth floor is a very difficult task for me so I don't use that library at all. The furniture in the library too are not good for my use with the condition. The location of the books in the library too is a challenge for me to access*. (Verbatim expression by student Q7).

The statement of the student indicate that there are a number of libraries on campus but he could only access one with less difficulty. The rest of them were not easily accessible to him due to the location, couple with the frequent break down of the lift and the type of furniture that were in the library.

Access to the ICT laboratory

One of the issues that emerged from the interview with the students with physical disabilities regarding access to the ICT Lab was the location of the facility. The student with physical disability made the following statements:

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> ***….****I only went to the ICT lab to write exams once in the whole semester. It was difficult for me to climb the staircase to attend lectures in the ICT lab. The location was very difficult for me to use as a student with a physical disability using crutches. As for the one at the north campus I've never been there due to the location. It is not easy for me to access at all looking at my condition.* (Verbatim expression by student Q1)

A student remarked that:

> *…. I've not been to the ICT lab before due to the location and the use of the staircase. The place is not disability friendly at all to me who is physically challenged.* (Verbatim expression by student Q3)

Another student indicates that:

> *… I went to the I.C.T lab just once to write an examination. The first time I went there I couldn't climb and when my colleague complain to the lecturer, he came out to see me and said there is nothing he can do to help me access the place. I only collect notes from my colleagues and read and when it is time for a quiz I was given the assignment to do. On the day of the examination, I was carried by my colleagues to the lab to write the exam.* (Verbatim expression by student Q4)

A student also commented that:

> *…. I don't go to the ICT lab due to its location, it is not easy for me to access.* (Verbatim expression by student Q5)

This is the view expressed by another student:

> *…. I went there only twice. My first time was during orientation and the second was to write an end of semester examination. It is as the result of the location of the place and the difficulty I will go through to get there so I don't go for the ICT lecture.* (Verbatim expression by student Q6)

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A student on the other hand stated that:

> *.... Library: I face the same problem with the location so I don't patronzse the ICT lab.* (Verbatim expression by student Q7*)*

The statements from the students with physical disabilities indicate that the ITC Laboratory is not easily accessible to them due to its location and its disability unfriendliness. Accessing the facility was a problem for the students who used crutches, artificial legs, and wheelchairs because the facility is located on the second floor of a story building; thus, difficult to access.

One student said:

> *… I don't go to the ICT lab at all. I went there once and it was very difficult for me to get there during orientation and the last time I went there was during an end of semester examination and that one too it was my colleagues who helped me to the lab to write the exam and the same assistance was given to me when I finished the exams and was coming down.* (Verbatim expression by student Q8)

Is clear from the statements of the students that the ICT laboratory was not accessible to the student so the student should not use the place due to how they had to climb the staircase with difficulty and the stress they had to go through. Another issue that came out from the interview with one of the students with physical disabilities was that the student with physical disabilities did not have any difficulty in accessing the ICT laboratory facility due to its location. It appeared the student with physical disabilities did not have difficulty in accessing it.

> *.... I was fortunate to have my ICT lecture at the Ghartey block 'C' which was on the ground floor so I did not have any difficulty in accessing that ICT Lab*. (verbatim expression by student Q2)

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Access to lecture halls

One of the issues that came up from the interview with the students regarding accessibility to lecture halls was the location and the stress of climbing staircase in accessing the lecture halls.

One student said:

> *…. we are managing it as a student with physical disability. If even you are late and the lecture is upstairs, you have to use your crutches small, small, and climb to the top of the building where the lecture is and by the time you get there you are already tired. With the stress I go through on daily basis to access the lecture hall I feel pain in my arm and get tired at the end of the day and sleeping become a problem to me at night due to the pain. The location of the lecture halls especially the FES where the only means to access the lecture hall is through the use of the staircase.* (Verbatim expression by student Q1)

This is a statement that was made by another student with access to the lecture halls

> *…. The lecture hall is not accessible to me at all. The staircase is what put me off when I get to the FES. When the lecture is on the second or third floor of the FES I find it difficult to get to the room and at times I feel pain after using the facility.* (Verbatim expression by student Q2)

A student indicated that:

> *….all my lectures are upstairs at the faculty block room 304 and climbing from the ground floor to room 304 is not easy for me at all it is very stressful moving up and down every day*. (Verbatim expression by student Q3)

Another student said:

> *…. My brother, for the lecture hall, don't go there at all. If my lecture is at the top floor I have to at times crawl to climb the staircase whiles someone would be holding my crutches. At times colleagues come to*

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> *my aid to help me climb the stairs. I've never enjoyed the happiness of writing examinations with my colleagues. I always write my exams and quizzes in isolation due to the location of the rooms*. (Verbatim expression by student Q4)

A student on the hand stated that:

> *.... for the lecture halls is very serious. The location of the lecture something that worries me every day. I struggle with 'normal' students for space and furniture. Imagine my lecture is on the third floor of the faculty building and the last floor and the lift is not working? I pass through hell to get to my lecture hall. Even yesterday that I have my exam I had the exam on the third floor of the faculty building. You could imagine the stress that I went through. Taking the FES, for instance, the only way to access the top floor is by the use of the staircase and all my lectures are upstairs and I climb day in day out and when I come back home I become tired and learning becomes a problem for me and adversely affecting my performance.* (Verbatim expression by student Q7).

A student remarked that:

> **….** *I go through hell every day in accessing my lecture halls. All the rooms allocated to me are all on the story-building and accessing it on daily basis poses a big challenge to me. If I manage to get to the lecture hall, the seat are not too good for me to use and at time I have to struggle with able body students for space and seat. Moreover the seat are not disability friendly to me. I get tired on daily basis after lectures and feel pain in my arm after using the clutches and my artificial leg in climbing and descending* (verbatim expression by student Q8).

Is clear from the statements from students indicated that the facility which was the lecture halls was not easily accessible to them. The location and the use of the

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staircase as the only means to access their lecture halls was not the best and they go through a lot of difficulties on daily basis to access the facility.

Another student during the interview made a statement that:

> *....I struggle to access the lecture halls especially when the lecture is upstairs. At times when you don't have a room, and you have to move round to get a room I become traumatized and cry within myself. You were a witness to one such situations and you saw how I was suffering. The furniture in the lecture halls too is not comfortable for me when I use them.* (Verbatim expression by student Q5)

The issue that emerged from the statement of the student is the trauma they had to go through on daily basis in using the facility. She felt like crying when accessing the facility. They made a reference to a situation that the researcher witnessed when they wanted to access the lecture hall.

> *….I can't tell you that my lectures are accessible to me. I find it very difficult to get to my lecture hall especially when the lecture hall location demands climbing to the top floor. For my department, I don't have much problem because the tallest building is only one floor so I manage to climb to attend lectures.* (Verbatim expression by student Q6)

The concern that emerged from the statement of student stipulate that the lecture halls as one of the facilities were not easily accessible to the students as a result of the use of the staircase with crutches and an artificial legs.

Residential facilities

One of the issues that came up from the interview with the students regarding accessibility to residential facilities was the location and the smoothness of the tiles used on the facility did not support their crutches.

One student stated:

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> *.... am only limited to the ground floor of the hostel. The building is a story-building and the only means I can access other floors is through the use of the staircase which I find very difficult to use my crutches to climb to the top. As for the residential washrooms, I find it very difficult to use them because the tiles used on the floor are very smooth and do not have a good grip with my crutches and at times I do slip and fall sometimes to jumping over the short wall before using the facility is very difficult.* (Verbatim expression by student Q1)

Another student said:

> *....Am only able to access just my room which is on the ground floor of the building. I am not able to access other floors due to the use of the staircase which I find very difficult to use with the crutches. The washrooms in the hall to are not good for my use. There are no rails for me to hold the toilet. In the bathroom too because of my crutches and the smoothness of the floor I do fall and at times crossing a short wall before entering the cubicle is a problem. I must say the facilities at the hall of residence were not easily accessible to me as someone who is physically challenged. There was a day I felt down and hurt myself in the bathroom because my crutch slip on the smooth tiles*. (Verbatim expression by student Q2).

The issue that emerged from the interview with the student indicate that, they were limited as a result of the use of the staircase and they could not use crutches as such, their only access was the ground floor of the building. The end rooms of the hostel facility were not disability friendly, the floor was too smooth and made it difficult to use.

There were also obstacles in the room which posed a problem to them. The concern that emerged from the statement of the student specified that the facility was not easily accessible to the student.

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A student noted:

> *.... I am not on campus. I stay in our own house where am comfortable with the accessibility of the facilities. For my residence I don't have any problem with the facilities.* (Verbatim expression by student Q3).

Another student added:

> *... I've not used the university residential facility for the four years that I stayed in the university. The facility is not accessible to me.* (Verbatim expression by student Q7)

One student said:

> **....** *I am not residing on campus. I am in a private hostel. For this place it is private and it is somehow manageable compared to the university residential facility which is not easily accessible to me.* (Verbatim expression by student Q8)

The issue that emerged from the statements of the students with physical disabilities indicate that they did not use the university residential facilities with the reason that the facility was not disability friendly as a result of the use of staircase which was not easily accessible to them and they preferred to use a private facility which was more accessible and disability friendly to them.

There were many issues that came up from the interview regarding access to residential facilities and washrooms.

A student stated:

> *.... The location of the room is not a problem because it is on the ground floor but what makes it difficult for me to access is the staircase. I find it very difficult when I'm coming in to use the staircase with my clutches. Also the walkway way that leads to the washroom are also a problem to me. I have to descend before I use the wash room*

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*and using the clutches to descend is a problem. (*Verbatim expression by student Q4).

Another one said:

.... I was accommodated on the ground floor of my hostel. The situation was somehow better. My only bitter experience is the staircase in front of the building that I have to climb on daily basis before entering my room (Aggery Hall) (verbatim expression by student Q5)

One student said:

.... Am fortunate to be given down the floor but the room is not easily accessible to me because before I enter the room, I have to use a staircase at the entrance which is a challenge to me. One thing too is that the floor at the halls of residence is too smooth for the crutches I use. All the time I have to be very careful when moving around because I can slip and fall. The walkway from my room to the washroom is not safe for use I find it very difficult to use the washroom. There is a staircase to descend to the washroom. It has no rail and I can easily fall if not careful. (Verbatim expression by student Q7)

The issues that emerged from the statements made by the student indicate that the rooms in their hostels were in a way accessible to them but the washrooms were the issues of concern. Their crutches could not stand firm on the floor of the tile and other things like the staircase and short walls made the place difficult for them to use.

Access to washrooms

There were many issues that came up from the interview with the student regarding accessibility to the washroom‟s facility.

A student said:

.... the floors are too smooth for us to use. It is not useful to us at all. I easily slip and fall due to the smooth surface of the floor. The end

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*rooms also don't have handrails that will support you when you want fall. Is very challenging using the washroom on campus. (*Verbatim expression by student Q1).

Another student added:

....The room was not built to accommodate me as someone who is physically challenged. There are no rails for you to hold, or which can support you. The floor is too smooth which does not support our clutches. The level of the port is too low or too high for my use. (Verbatim expression by student Q2).

One student said

....The washroom on campus is not neat and not easily accessible at all. There is no rail metal to hold. The tiles on the floor are very smooth which makes us fall easily. (Verbatim expression by student Q3).

.... They are somehow okay, but the floor is what poses a challenge to me. The non-availability of metal rails to support us I must say is not a hundred percent disability-friendly. (Verbatim expression by student Q4).

A student remarked:

*.... the washrooms are okay but we need rails or metal bars and the type of tiles that are used on the floor was too smooth which does not support my clutches. (*Verbatim expression by student Q5).

Another student noted:

....the washrooms attached to the lecture halls are somehow accessible in terms of moving in. The major problem I have in using it is the floor which is too smooth for my crutches. Moreover, there are no bars for you for support. (Verbatim expression of student Q6).

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Another student stated:

> *....the washroom attached to the lecture hall become accessible but very difficult and dangerous for me to use because if I make a mistake of not holding my crutches well I am likely to fall because of the floor and moreover too there are no support metals bars for me to use so I always depend on my clutches.* (Verbatim expression by student Q7).

A student said:

> ***….****the washroom on campus, fortunately, is attached to the lecture halls are somehow easily accessible to me because it attached to the lecture hall and very easy for me to access but there is no support system in the washroom like bars and handrails for us to hold.* (Verbatim expression by studentQ8*).*

The issues that emerged from the statements of the students indicate that the washrooms were easy for them to walk in but were not friendly for them to use. The floor was too smooth to grip their crutches and it made the washrooms difficult to use. There were no support devices for them to use in the washroom.

4.5 Challenges students with Physical Disabilities face in Accessing Key Facilities.

The issues that came up from the interview with the student regarding challenges they face in accessing facilities included: the use of staircase to access the facilities, difficulty using crutches to walk a long distance, open gutters, absence of handrail or bar to hold, and most at times transportation.

For example, one student said:

> *....walking from my hostel to the lecture hall is a big challenge to me. There is a problem with transportation too. The cars that we pick on campus on daily basis are not disability friendly at all. We spend a lot*

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on transportation due to my inability to walk a long distance. My challenge is also about accessing the lecture halls the location makes it very difficult for me to access. At times when we are finding it difficult to climb, it is our colleagues who help us to get to the lecture hall. The Faculty of Educational Studies has no lift so always you have to struggle with the staircase which is a challenge to me. I also face the challenges of crossing over open gutters on campus. (Verbatim expression by student Q1*)*

Another student said:

....the challenges I face on campus is the use of a staircase to access almost all facilities on campus and also crossing gutters and at times climbing small, small steps before accessing the facilities.(verbatim expression by student Q2)

A student said:

....The challenges I face is how to access the lecture halls on campus and how to access the key facilities. I use two crutches so I find it difficult to cross gutters and staircase on campus. It is very difficult for me to move around on campus in general. (Verbatim expression by student Q4)

Another student stated:

....my biggest challenge on campus is the use of the staircase to access the key facilities on campus and their location of the facilities. (Verbatim expression by student Q5)

A student said:

....my major challenge as a student with a physical disability is some of the open gutters that we have on campus and the use of the small, small staircase that I have to climb to access most the facilities on campus. (Verbatim expression by student Q6)

Another student noted:

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> *...the challenges I faced in accessing the facility is the use of the staircase that makes my movement in accessing the facility very difficult. The location of the facility also poses a very big challenge to me*. (Verbatim expression by student Q8).

The interview with student indicates that they faced the challenge of using the stair case which the common means in accessing the key facilities. They had the challenge of using their crutches and artificial legs to climb the staircase. There were issues of crossing open gutters which also posed a challenge to them whenever they wanted to negotiate such places with the use of crutches and artificial legs.

A student said:

> *....my challenge is using the faculty block to access my lecture halls without the lift. Learning material should be made available to us so that we don't struggle in chasing and running after them*. (Verbatim expression by student Q3)

Another student added:

> *....for the challenges I have is the infrastructure, social and emotional.* (Verbatim expression by student Q7)

Different issues came out of the students. What came out from the statement indicate that the lift could not work all the time. The lift could go off at any time unannounced and fixing the lift could take a long time to repair. Infrastructure in general also pose a challenge to some of the student with a physical disability.

To add, it also appeared that the student with physical disability had a challenge with social and emotional disturbances on campus.

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4.6 Coping with Challenges Encountered in Accessing the Key Facilities.

The issues that came up from the interview with students with physical disabilities of the University of Education, Winneba, regarding coping with the challenges in accessing key facilities to students with physical disabilities according to the students include:

> *…. I can't use my crutches to climb to the fifth floor to access the library so I depend heavily on my colleagues to get notes to read. That is how I cope with the challenge of not being able to access the library.* (Verbatim expression by students Q1)

Another student said:

> *....It was a colleague who helped in carrying me to the ground floor. Since then, I've never been there before because I have the fear that if I go and the lift goes off how do I come down? That is how I was able to cope with the situation on that day* (Verbatim expression by student Q4)

A student remarked that:

> *....To cope with my challenges I don't bother myself going to use those facilities if it is not all that necessary and the need be I call on friends and colleagues to help to do whatever I want to do.* (Verbatim expression by student Q5)

A student on the other hand said:

> *...the stress I will go through to get there is not easy so I don't go for the ICT lecture. I take notes from my colleagues and read and also depend on the books that I have. That is how I cope with my situation is going to the ICT lab for lectures.* (Verbatim expression by student Q6)

Another student stated that:

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> *…. we are managing it as a student with a physical disability. If even you are late and the lecture is upstairs, you have to use your crutches small, small, and climb to the top of the building where the lecture is.* (Verbatim expression by student Q7)

A student made this statement:

> *…looking at our condition in general as students with physical disabilities, we struggle to cope with accessing the facilities so at times we use time management to cope with the situation. If you have a lecture on the last floor of the faculty block you have to set off early so that you can take your time and walk slowly to the lecture hall.* (Verbatim expression by student Q8)

The matters that arose from the interview with the students with physical disabilities indicates that the students depended on their colleagues students, used individual strategies which were self-developed strategies and time management as a means to cope with the challenges they encountered in accessing key facilities.

4.7 Strategies to be adopted to Enhance access to Facilities for Students with Physical Disabilities at University of Education, Winneba.

It came up from the interview with the development officer regarding the strategies to be adopted to making the facilities accessible to students.

The development officer made this statements:

> *….The University can make key facilities accessible to the students who are physically challenged by the following means: by installing lifts in the various facilities to aid vertical circulation (for multi-story structures*). (Verbatim expression by development officer D1)

The verbatim response from the development officer during the interview indicates that the university was aware of things that should be done to make the

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facility accessible to students but it looked like the law that would force them to do it is dormant. Some of the buildings that were put up after the passage of the disability law into act were still not easily accessible based on the report from the students.

The issues that came up from the interview with students regarding the strategies to be adopted making the facilities accessible to students with physical disabilities.

A students made these statements:

> *....if management can work on the lift at the faculty block to be working. The FES (Faculty of Educational Studies) block which is my department if they can install a lift or provide some ramps that can make it easy for us to access the place. Open gutters should be closed and rails and ramps should be provided at the entrance of some of the rooms on the ground floor. Management should talk to taxi drivers to respect us who are physically challenged. Management should consider our condition and allocate our lecture hall on the ground floor*. (Verbatim expression by student Q1)

A student also noted:

> *....management should provide lift, rails and ramps at the places or the facilities that the physically challenged patronised. They should cover all gutters on campus. Not quite long a visually impaired student fell in a gutter moving towards the main gate. Now I can see that, that part of the gutter has been covered. We also need disability fun to access.* (Verbatim expression by student Q2)

Another student noted:

> *....Management should make sure that the lift is always working for the use of students who are physically challenged. New buildings that would be put up in the university should be designed to make it accessible to students who were physically challenged and disabled in*

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> *general. Management should also consider providing ramps and rails where necessary.* (Verbatim expression by student Q3)

One student said:

> *....The lift at the faculty block should be given much attention for it to be working all the time, with that we can access the library. Ramps should be constructed alongside the staircase to aid my movement. Open drains, I mean all should be covered. The FES block should be re-looked at if the authorities can provide a lift there at all. Hostels facilities should be made available to all students with disabilities.* (Verbatim expression by student Q4)

> *....ramps should be constructed alongside the staircase. The university authorities should install a lift in all the story buildings on campus. I will also suggest management should consider covering all gutters on campus. Department of Special Education should be consulted in addition to students with physical disabilities when facilities are being put up.* (Verbatim expression by student Q5)

A student indicates:

> *....we need ramps alongside the staircase and where the staircase is, there should be some rails or bars at the side to save as a support for our use. I will also plead with management to close or cover all gutters and provide a lift at the story buildings.* (Verbatim expression by student Q6)

The issue that emerged from the interview with students indicates that some of the students were of the view which suggest that in order to make the facilities accessible to them, management should adopt a culture of regular maintenance of the lift at the faculty block.

Also, the staircase should not be the only option in accessing the FES block (Faculty of Educational Studies) and other story-buildings on campus be equip with

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lifts. Further, the suggestions by some of the students with physical disabilities was also that, management should cover all open gutters on campus and provide ramps alongside the staircase and handrails.

A student noted:

> *....when structures are to be put up there should be a broader consultation with lecturers in the Special Education Department. Student with physical disabilities should also be consulted when structures are being planned to be built. Small, small gutters on campus should be covered to enable us to have smooth and obstacle-free on campus. I will appreciate it if the authorities can also install some warning signs on campus where there seem to be a danger.* (Verbatim expression by student Q7)

The strategies that appeared during the interview with the students indicate that there was no collaboration between lecturers and contractors when management wanted to put up a new structure. That was why most of the new facilities are not easily accessible. Collaboration should be part of the strategies to be adopted.

A student stated:

> *....most of the rooms I use or we use which are at the top floor of the story building should be located on the ground floor for we student with physical disabilities. The floor tiles in our washrooms should be taken a look at. The smooth tiles on the floor are not helping us. We need ramps alongside the staircase. The lift at the faculty block should be maintained well to be working all the time since that is the only means I can use to access the library with comfort. Some of the open gutters on campus should be covered. The new buildings that is being put up should be disability-friendly. I also want the government to enforce the law on a public building which is in the disability Act*. (Verbatim expression by student 8Q).

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The issues that emerged from the interview suggest that where their lecture halls were, If possible the halls that they use should be relocated at the ground floor for them to have easy access. Ramps should be constructed alongside the staircase and open gutters should be closed. It also emerged from the suggestion that the floor tiles in washrooms should be tiled with rough surface tiles which would be friendly to the clutches used by the students.

The law on the public buildings in the disability Act, Act 2006(Act 175) is not enforced because some of the facilities that were put up after the passage of the Act, were still not disability friendly and not easily accessible to students with physical disabilities.

4.8 Discussion of Findings.

This section provides a discussion of the findings of the study. In addition the research questions that were raised to guide the study have been addressed.

The following research questions were raised to guide the study:

1. **How students with physical disabilities access key facilities of the University Education, Winneba?**

The transcription from the students with physical disabilities on their experience on access to key facilities indicate that almost all the students with physical disabilities interviewed were very emphatic that the key facilities were not easily accessible to them. For instance, a transcription from a student‟s interview on access revealed that students with physical disabilities were not able to access the facilities due to its location. The student agreed in the interview that: *the location of the library is not favorable to me at all. I surfer a lot anytime I want to visit the library.*

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Transcription from another student with physical disabilities with reference to access to key facilities disclosed that the environment posed a burier to them. Due to that they are not able to access the key facilities namely, the library, ICT lab, lecture halls, residential facilities and washrooms owing to the numerous staircase that they had to use as the only means to use the facilities. These revelations were consistent in the statement made by all the students with physical disabilities.

For instance a student in the interview revealed that:

> *I don't use the library as a result of my prosthetic leg and the use of the staircase the access the library. Anytime I try to use it I feel pain in my legs and moreover it takes me a long time to get to the library.*

The findings revealed that students with physical disabilities are not able to access the key facilities because the facilities are not easily accessible to them. This manifestation of inaccessibility of facilities to students with physical disabilities has been reported in a study conducted by Sawyer and Bright (2007) which indicates that the built environment does present barriers for the accessibility of the building infrastructure especially for physically disabled persons or for People with mobility restrictions. They further contend that characteristics of the built setting such as vastness and room for approach and use, acceptance of oversight, equitable use and flexibility of use have a significant affiliation with the accessibility or inaccessibility of the building and infrastructure by persons with physical disabilities.

Additionally, the analysis revealed that some of the students with physical disabilities were not comfortable in using the lecture halls. It was evident in the interview that some of the students with physical disability found it very difficult in using the lecture halls.

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For instance interview with students with physical disabilities revealed that:

> *The lecture halls is not accessible to me at all. The staircase is what put me off when I get to the FES. When the lecture is at the second or third floor of the FES I find it difficult to get to the room and at times I feel pains after using the facility*.

Another student with physical disabilities revealed in the transcription interview that:

> *The lectures, is very serious. The location of the lecture is something that worries me every day. I struggle with normal students for space and furniture. Imagine my lecture is on the third floor of the faculty building and the last floor and the lift is not working? I pass through hell to get to my lecture hall.*

It is perceived from the transcription of the interview with the students with physical disabilities that there is no easy access to facilities. The findings were consistent with Kerbles-Kefo (2009) which state that there was an increase in the accessibility of buildings in Slovenia by persons with physical disabilities. They also distinguished that the renovation of old buildings to install ramps, grab rails in the toilet, automatic main entrance door and the creation of access ways did not make the buildings more accessible to persons with physical disabilities.

To support the findings, Soyingbe, Ogundairo and Adenuga (*n.d*) indicate that major facilities required by persons with physical disabilities are lacking in many public buildings. Some of the facilities recognized in a few public buildings are in a poor state of operation. However, the absence of these key facilities restricted the activities of people with physical disabilities. Hence, they could not work and become productive as tax-paying members of the nation. Due to shortfall or perhaps total neglect in provision of these facilities, their movement, competence and talents were being restricted.

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4.9 What Challenges do Students with Physical Disabilities Face in Accessing Key Facilities in the University Education, Winneba?

Transcription from the students with physical disabilities it became ostensible that students with physical disabilities faced the challenge of using the staircase which was the common means in accessing the key facilities. They also had the challenge of using their crutches and artificial legs in climbing the staircase. For instance, a student with physical disabilities in an interview on the challenges revealed that: *'my biggest challenge on campus is the use of the stair case to access the key facilities.'* Another student with physical disabilities in the interview on the challenge also indicated that apart from the staircase, it was also evidence that the frequent use of their crutches also posed a big challenge. These answers were very consistent in the interview transcription with students with physical disabilities. These could also be linked to a study by UNESCO (2009) cited in Hayford and Oduro (2013) reiterates that the first thing that meets people in most public buildings is stairs which must be climbed before an individual can enter the building which posed a challenge to people with physical disabilities. Stairs are often the first barrier or challenge for many children and adults to access school or other public buildings and enjoy the services these facilities offer.

Additionally, from the transcription, the students with physical disabilities show that, aside from the challenges of the use of the staircase and crutches, they also have the challenge of not having access to the lift at the faculty block. It was revealed in the interview with the students with physical disabilities that the lift at the faculty block went off anytime and no attention is paid to its regular maintenance. For instance, a student with physical disabilities in an interview on the challenges revealed that: *'my challenge is using the faculty block in accessing my lecture hall*

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when the lift is off". The functional state of the lift was very worrying to all students with physical disabilities. Evidence from the interview with students with physical disabilities established that there was another obstacle that posed a challenge to students with physical disabilities. The indication is that the students with physical disabilities had the challenge of crossing open gutters and also jumping over short walls to the washrooms. Some of the findings were evident in a study by Pierce (1998) which sort to state that one of the commonest protests of students who were physically challenged was the in-access of the environment caused by architectural barriers. A lack of access to services within universities prevents functional independence and full social integration for physically challenge students (McClain, Cram, Wood & Taylor, 1998).

Losinsky, Levi, saffey and Jelsma. (2003) found that difficulty in accessing educational institutions in exact, difficulties individuals with physical disabilities as it limits their chances of developing their latent. Shevlin, Kenny and McNeela (2004) indicated that students encountered access difficulties at every level of university life. A regular survey of disabled and non-disabled students conducted by Madriaga, Hanson, Kay, Newitt and Waker (2010) establishes that more students with disabilities identified greater difficulties in gaining physical access into university buildings in the UK. Tinklin and Hall (1999), Borland and James (1999) & Holloway (2001) reported that difficult physical access constituted a major obstacle to participation at university for students with physical disabilities despite the notion that difficulties faced by students with physical and sensory impairments are the most compliant.

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4.10 What Strategies do Students with Physical Disabilities Adapt to Cope with Challenges Encountered in Accessing the Key Facilities in the University of Education, Winneba?

Transcription from the students with physical disabilities it became ostensible that all the students with physical disabilities adopted similar strategies to cope with the challenges they encountered. Some of the coping strategies they adopt to be able to cope on campus were dependent on their colleagues, roommates, classmates, family members and time management on campus.

For instance a student in the interview stated that:

> *…. I can't use my crutches to climb to the fifth to access the library so I depend heavily on my colleagues to get notes from them to read. That is how I cope with the challenge of not been able to access the library.*

This finding was in line with Uzoma (2010) which stated that to cope with challenges of going to lectures, fetching water, washing clothes and going to the market, the coping strategies being considered here were by way of who assists them with these activities. These strategies include; use of friends/roommates, the use of relations and relying on oneself to cope with activities of daily living. Students were of the view that they depend on the relations, friends, course-mates and roommates.

To collaborate the findings, Nageswara (2015) affirmed that respondents underlined the importance of support received from family members, friends, and the ones whom they were close to, which could be seen as instrumental in helping the individual to deal with the issues including both personal and education matters. Dhemba (2015) also buttressed the finding by indicating that minimizing social barrier by providing non-disabled individuals with practical personal experiences with those learners with physical disabilities can help them cope in their environment. This

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is where the non-disabled learners are given an opportunity to simulate a particular physical disability, not in a derogatory way, though. Simulating a disability makes the non-disabled peers directly experience what it is like to be disabled, thereby developing a better understanding of handicapping conditions and feelings one has. Children simulate wheelchair or crutch users, where they can take some time, practically using a wheelchair or crutches, as they move from one point to the other. It is hoped that such an activity makes those with no disabilities become empathic, and not sympathetic to those persons with physical disabilities.

4.11 What strategies should be put in place to enhance access to Key Facilities for Students with Physical Disabilities in the University of Education, Winneba?

The strategies the university should adopt in enhancing access to facilities for students with physical disabilities were revealed by the Development Officer. He was of the view that the university was aware of how to make the facilities accessible to students with physical disabilities but it appeared the law that was there had not been enforced which made the university authorities relax in applying the law.

For instance interview with the Development Officer shows that:

> *'The university can make key facilities accessible to the students who have physical disabilities by the following means: by installing lifts in the various facilities to aid vertical circulation (for multi-story structures)'*

To buttress the finding by the Development Officer, most of the student with physical disabilities were of the view that in order to make the faculty block accessible, the university should adopt a culture of regular maintenance to keep the

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lift working all the time. It was also revealed in the previous section by students with physical disabilities that, to make the FES block accessible, lift should be install. For instance, an interview with a student with physical disabilities revealed that:

> *Management can work on the lift at the faculty block to be working all the time and also a lift should be installed at the FES block.*

Furthermore, the interview data transcription from the students with physical disabilities exhumed that making the key facilities accessible, most of the students were consistent with the view that ramps should be provided alongside the staircase. In addition it was clear that the student wanted the relocation of their lecture halls to the ground floor. They also wanted the floor in their washrooms tiled with rough surface tile to the extent that the student‟s crutches would have a firm hold of the floor. For instance an interview with a student with physical disabilities revealed that: *„most of the rooms we use which are at the top floor of the story building should be relocated to the ground floor'* These findings were consistent with a study by Handicap International (2008) which reported that public places should be made accessible for persons with all kind of disabilities through installation the of features such as ramps, accessory rails in the bathrooms. The study suggested that modification should be made to the following stairs, building entrance, handrails, to make them accessible to persons with physical disabilities.

Ong‟eta (2013) also reports that there is the need for a more barrier-free and disability-friendly environment to enable students with physical disabilities to have access to buildings, academic information, materials, assistive devices and other equipment to promote their mobility as this will increase their participation in learning activities. This could be achieved by universities administration by removing all physical barriers within institutions‟ physical environment through the construction of

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ramps that are according to international standards. Hayford and Oduro (2013) in a study to buttress the findings indicate that all public facilities should have alternative ways to enter. Ramps are in most cases easy and alternatively inexpensive to build for at least in one-story building and benefit many. This study in a way contradicts some of the findings of the study which sort to suggest that ramp construction is more expensive.

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CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

The purpose of the study was to describe the experience of students with physical disabilities in accessing key facilities in the University of Education, Winneba. Of interest was how easily accessible are the following facilities to the students with physical disabilities, library, ICT lab, lecture halls, residential facilities, and washrooms. The study used an interview guide to gather data.

5.1 Summary of Major Findings

The major findings are summarized here as follows:

In terms of experience on accessible facilities to the students with physical disabilities, the study revealed that all the facilities identified were not easily accessible to the students with physical disabilities. Also, apart from the lecture hall and the residential facilities which they struggled to use on a daily basis they did not use the rest of the facilities.

With respect to challenges faced by students with physical disabilities in accessing facilities, the study revealed that the students with physical disabilities major challenge they faced was the use of the staircase and crutches to access almost all the facilities. In addition, students with physical disabilities faced the challenge of crossing gutters and the inability of their crutches to have a firm grip on the smooth tiles.

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In coping with the challenges to access facilities, students with physical disabilities adopted their own way and methods to cope with the challenges. The study revealed that the University did not have any lay down coping strategies for the students to access key facilities. The students with physical disabilities depended heavily on their classmates, roommates, and colleagues, friends in some cases family members and time management to cope with the challenges.

In terms of the strategies to be adopted to enhance the access to facilities to students with physical disabilities, the study revealed that the lift at the faculty block should be maintained to work regularly. In addition, the FES block should be fitted with a lift, ramps should be constructed alongside the staircase. Furthermore, open gutters should be covered and the by-laws regarding building regulations should be enforced, collaboration should exist between the Development Office and the Special Education Department.

5.2 Conclusions

First, it emerged from the study that the students with physical disabilities did not have easy access to key facilities in the university. The researcher was able to conclude that: infrastructure at the University such as lecture hall, libraries, ICT lab, washroom and residential facilities were available but highly inaccessible to suit the needs of students with physical disabilities almost all of the facilities were accessible with difficulties.

Secondly, it was established that challenges such as the staircase, the use of crutches and smooth floor tiles posed problem to the students in the university. Modern architectural design should also show that physical accessibility features would be incorporated in design when a conscious effort is made in that direction

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Thirdly, the study shows that students with physical disabilities depended heavily on their classmates, roommates, and colleagues, friends in some cases family members and time management to cope with the challenges. From the findings of the study, it can be concluded that students with physical disabilities did not have easy access to the key facilities in the University of Education, Winneba. This can be done by retrofitting the existing buildings with lifts or elevators and ramps to make the facilities easily accessible to students with physical disabilities.

5.3 Recommendations

Based on the findings, the researcher made the following recommendations:

1. Greater attention should be paid by the University to the maintenance of the lift at the faculty block in order to reduce the challenges in using the staircase.
2. Management should pay attention to the little things they can do a lot to help the students with physical disabilities function well.
3. Newly constructed buildings in the University should follow the building regulations by-laws in designing new structures to meet the needs of students with physical disabilities
4. Students without physical disabilities should be counsel to use the lift with caution to prolong its life span.
5. Students without disabilities should have the compassion to help students with physical disabilities if they need help in accessing the facilities.
6. There should be a collaboration among the Department of Special Education, the University Development Office and the building contractors.
7. It is recommended that existing buildings be evaluated in terms of their capability to provide physical accessibility for students with physical

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disabilities and appropriate remedies put in place. Architects, educationists as well as other stakeholders can assist in this regard.

8. The lecture halls for the students with physical disabilities should be located on the ground floor for easy access.

5.5 Suggestions for Further Studies

Further research should be conducted to examine and compare the views of students with physical disabilities on accessing key facilities to that of their non-disabled colleagues in the University of Education, Winneba.

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APPENDICES

APPENDIX A

Letter of Introduction

UNIVERSITY OF EDUCATION, WINNEBA
FACULTY OF EDUCATIONAL STUDIES
DEPARTMENT OF SPECIAL EDUCATION
P. O. Box 25, Winneba, Ghana
+233 (020) 2041069
sped@uew.edu.gh

16th May 2019

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

LETTER OF INTRODUCTION: MR. ERIC WORLANYO ADOR

I write to introduce to you, **Mr. Eric Worlanyo Ador** an M.Phil student of the Department of Special Education with registration number 8170150006.

He is currently working on his thesis title: **"Access to Key Facilities for Students with Physical Disabilities in the University of Education, Winneba. Ghana"** which he needs to interview and administer his questionnaire to some of the students in your school.

I should be grateful if you could give him the needed assistance to enable him carry out his interview and administer the questionnaire.

Thank you for the consideration and assistance.

Yours faithfully,

DR. DANIEL S. Q. DOGBE
Ag. Head of Department

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APPENDIX B

Interview Guide

UNIVERSITY OF EDUCATION, WINNEBA

DEPARTMENT OF SPECIAL EDUCATION

TOPIC: EXPERIENCES OF STUDENTS WITH PHYSICAL DISABILITIES IN ACCESSING KEY FACILITIES IN THE UNIVERSITY OF EDUCATION, WINNEBA GHANA

SECTION A

BIO-DATA

1. Age: .....

2. Sex: a. Male [ ] b. Female [ ]

3. Level.

4. Department …….

SECTION B

1. What is your experience in accessing the following key facilities in the university

(i) Library facilities

(ii) I C T Laboratory

(iii)Lecture halls

(iv)Residential facilities.

(v) Wash rooms

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2. What challenges do you face as a students with physical disabilities?

3. How do you cope with the challenges you encounter in accessing the key facilities on campus?

(i) Library

(ii) I C T Laboratory

(iii) Lecture Hall

(iv) Residential Facilities

(v) Wash rooms

4. How will the University make the facilities accessible to students with physical disabilities? (**Development Officer**)

5. What suggestions will you give to management that will help students with physical disabilities function well in the university?