

Infrastructural Access Challenges and Their Effects on Enrolment of Physically Challenged Learners Integrated Into Public Primary Schools In Uasin Gishu County, Kenya

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Abstract:- The Kenyan government has put in place deliberate awareness policies and strategies to integrate learners with special needs in regular learning settings. This is to open doors for All and hence enrolment rates. Despite this learners with physical impairment continue to face specific challenges that hinder their enrolment in one way or another. People with physical disabilities have poorer health outcomes, lower education achievements, less economic participation and higher rates of poverty than people without disabilities”(WHO, 2011).The objective of the study was to establish the infrastructural access challenges and their effects on enrolment of physically challenged learners integrated in public primary schools in Uasin Gishu County, Kenya. The study employed descriptive survey design in collecting data. Data was analyzed using descriptive statistics that involved frequency and percentages, with the help of computer Statistical Package for Social Science (SPSS). Documentary review was used to examine infrastructure situation in public primary schools Uasin-Gishu County. Major findings revealed that (75.8%) of learning institution had inadequate or total lack of infrastructure that directly support learners with physical impairments. Eighty five percent (85.3%) of infrastructure was accessible but with difficulty to learners with physical disabilities whereby (35.4) and (25.2) respectively were reported as being average and poor conditions. These findings have a great implication on enrolment rates of these learners. The study recommends that the Ministry of Education should enforce the relevant policies and impose stiff penalties for stakeholders who do not provide for accessibility leeway for all as they do constructions. Existing School infrastructural facilities should be re inspected and evaluated with the aim of promoting access for learners with physical challenges.

Key Terms: Access; Challenge; Enrolment; Physically; Challenged; Integrated.

I. BACKGROUND TO THE STUDY

Routine visits to most of our learning institutions reveal glaring facts about challenges that Learners with physical impairments have experienced in their quest for learning. Lots of disadvantages and less opportunity

to enjoy free mobility in school environments is in most cases quiet evident. According to the Education for all (EFA) Global Monitoring Report 2010, reaching the marginalized learners with disabilities remains one of the main problems leading to wide exclusion of the group from quality education.

Regardless of existing challenges, the disabled, particularly the physically disabled learners, have the right to enroll in primary, secondary and higher level education. Since the UN Universal Declaration on Human Rights was released in 1948, there have been legislations on providing education for all learners across various countries in the world, Kenya included.

In his research on inclusion of disabled learners in higher education, Chataika, (2010) states that:-

For the disabled... the issue of the infrastructure limits enrolment of these learners. Some qualified - very few qualified but like those people with physical disability look at the physical infrastructure and all along you say that they are not appropriate. So infrastructure development is also a limitation to accommodate some of these learners.

If this finding is happening in higher education institutions, then it is worse in lower institutions of learning. There are some clearly stated connections between the built environment and situation to the learning of individuals with physical disabilities. In our institutions these are reflected in facilities like the library, science laboratories and many classrooms that are only accessible through stairs (www.dailymail.co.uk/news/article-2366260 2014). To make matters worse, there no “lift” built in to assist people to move easily from one level of the building to another. Most learners with physical impairments who have soldiered on find themselves relying on inconsistent assistance from their classmates for them to access certain areas.



Figure 1: A Physically Disabled Person on a Wheelchair at the bottom of Stairs at the University of Utah, USA. Source: www.dailymail.co.uk/news/article-2366260



Figure 2: A Physically Disabled Student at St. John University of Tanzania, Dodoma, Tanzania, being assisted by his fellow graduates during graduation procession. http://www.sjut.ac.tz/sjut_fundraising.php

The above observations reflect some of the glaring difficulties encountered by disabled learners in institutions of learning as supported by Chataika (2010) study which points out that

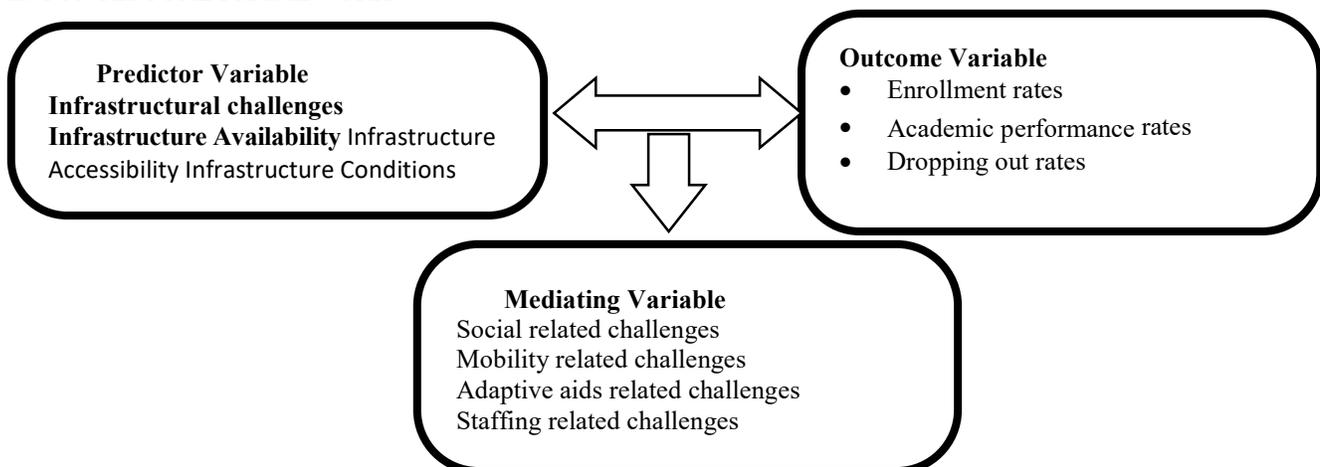
One of the big problems that we have here as learners is that we need to study but the library has no access to books ...because library has upstairs that we have to climb. These restrict people with disabilities to access some books. Some learners fail to attend lectures because lecture rooms are located upstairs and some disabled learners fail to climb so as to attend their lectures.

The population of people with special needs in Kenya is estimated at 10% of the total population; about 25% of these are learners of school going age. Enrolment in special education programmes is low given that population of a total population of 750000 learners with special needs who have reached school going age only an estimated 90,000 have been

assessed to establish the nature of their special needs; of this number, about 26,885 are enrolled in educational programs. This implies that over 20% (percent) of learners with special needs are at home .On average these learners go to school when they are 8 (eight) years and above. Consequently, they become adults before they complete their educational programs (Uwezo, 2010).

MOE (2014) noted that the main challenges in acquisition of basic education among the physical challenged and learners with special needs include lack of clear guidelines on the implementation of an inclusive education policy, lack of reliable data on learners with special needs, inadequate tools and skills in identification and assessment and curriculum not tailored to meet special needs. This means that special education has not been mainstreamed in all education sub-sectors and programs hence low enrolment rates. The situation is compounded by inappropriate infrastructure, inadequate facilities and lack of equipment which make it difficult to integrate special education in regular programmes (Gullford & Upton, G. 1982).

II. CONCEPTUAL FRAMEWORK



The study adopted a Conceptual Framework where the predicting variables comprise of infrastructural challenges, infrastructure availability, infrastructure accessibility and infrastructure conditions. Mediating variables are those characteristics, which emerge as a result of pressure from predicting variables that may condition a physically disabled student sooner or later in terms of enrolment to school; social related challenges, mobility related challenges, Adaptive aids related challenges and staffing related challenges.

Mediating variables may negatively influenced outcome variables, this in turn could lead to low enrollment, poor performance and the decision of a pupil to drop out of school. When school infrastructure and the school environment in general are not conducive they may cause poor attendance, absenteeism and even dropping out from school. School environment characterized by lack of supportive classrooms, hostels, laboratories, libraries, dining areas, sports and games grounds, and effective school management may develop hopelessness and disappointment among learners with physical disabilities. Poor academic performance among learners, which may be influenced by poor quality of education provided, may also cause poor acquisition of skills and knowledge and finally falling into situation of individual's dependence that is not only burdening family members and society in general but also the government at large.

The Concept of Physical Disability

The term physical disability is broad and covers a range of disabilities and health issues, including both congenital and acquired disabilities (Mifflin 2003). People with physical disabilities, also known as disabled people or physically disabled people, have a physical impairment which has a substantial 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 a severe physical disability would be unable to walk and dependent on a care for mobility.

Siebers (2008) argued that many causes and conditions can impair mobility and movement. The inability to use legs, arms, or the body trunk effectively because of paralysis, stiffness, pain, or other impairments is common. It may be the result of birth defects, disease, age, or accidents. These disabilities may change from day to day. They may also contribute to other disabilities such as impaired speech, memory loss, short stature, and hearing loss.

People with mobility and movement impairments may find it difficult to participate when facing social and physical situation. Quite often they are individuals of courage and independence who have a desire to contribute to the fullest level of their ability. Some are totally independent, while others may need part- or full-time assistance (Johnstone, 2001). Disabilities vary along several dimensions, including the degree and type of incapacitation (sensory, motor, or cognitive); the degree of visibility of the disability; whether

the course of the condition is constant, relapsing, or progressive; the prognosis or life expectancy of the person; the amount of pain or other symptoms experienced; and the amount of care or treatment required. Large percentages of persons with disabilities are still out of education. The rate of enrollment among persons with disabilities is very low. Common causes of non-enrollment among learners with disabilities are: lack of adaptive ability with the school environment, no or low scopes of personal assistance, absence of accessible transportation, inaccessible infrastructure and environment, absence of implication of policy, negative attitude of the family, teachers and community (Johnstone, 2001).

Putting this concept into practice means turning away from the traditional segregation of persons with disabilities. Many writers reviewed here stress the importance of changes in attitudes, behavior and socio-educational structures. Critical to the mainstreaming efforts is the necessity of change, not only on the part of the individual, but also in the social and cultural atmosphere that promotes helplessness on the part of people with disabilities. Those labeled "handicapped" are treated differently by our society which seemingly emphasizes on the disability of the individual instead of their ability, which works against the individual (Birch 1974).

In Kenya, the constitution supports inclusive education. The Persons with Disabilities Act, 2003 part 3 article 18 states that: "No person or learning institution shall deny admission to a person with a disability to any course of study by reason only of such disability, if the person has the ability to acquire substantial learning in that course; Learning institutions shall take into account the special needs of persons with disabilities with respect to the entry requirements, pass marks, curriculum, examinations, auxiliary services, use of school facilities, class schedules, physical education requirements and other similar considerations;

III. INFRASTRUCTURES AND LEARNERS WITH PHYSICAL DISABILITIES

Situation to education identified by learners with disabilities in 'Hidden Voices' (Kenny 2000), included inaccessible transport, buildings and facilities within the school. For example, inappropriate bench height and inaccessible laboratory equipment meant that learners with disabilities were unable to participate fully in science or other practical classes. Poor physical infrastructure is one of the major problems constraining the teaching of and learning for learners with disabilities. (Mifflin 2003). The study by McLean et al (2003) stated that whilst facilities and assistive devices play an important role in supporting learners with disabilities and have received much attention from higher educational institutions, limited attention has been paid to the extent to which teaching and learning processes marginalize or exclude learners/learners specifically with disabilities.

Karangwa (2008) has written about inclusive higher education in Rwanda. The author reports how a team in the Kigali Institute of Education reviewed application and selection criteria and advised the Ministry about adjustments and equipment needed to assist disabled learners. The Ministry, with the National Examination Council and the National Federation of the Disabled, provided a list of applicants with various disabilities who had qualified but could not get into university. There were over 250. Now three Rwandan public universities have opened their doors to male and female learners with visual and hearing impairments for the first time. Karangwa (2008:1) reports how:

The first few days in the university were shocking for the disabled learners, and their non-disabled peers. Everyone knew from the media that these learners would be enrolling. But sighted learners were still surprised to see blind learners on campus asking to share their notes, though many were eager to help.

This account indicates how, in the absence of institutional support, disabled learners were often dependent on their peers for basic services.

Nkinge (2009) and Motitswe (2014) attribute the declining rate of enrolment of learners with disabilities in regular schools to teachers' negative attitude towards inclusion. The belief was, and is that to receive equal access to public education; learners with disabilities must be educated in the same schools as learners without disabilities. Likewise, the rationale for inclusion is similar. For their education to be equal, learners with special needs need to be in the same classrooms as their typically developing peers. Kipkosgei, (2013) evaluated factors influencing enrolment of learners with disabilities in an inclusive education in primary schools in Nandi south district Kenya. The study found out that weather physical facilities are suitable for special learner; availability of special teachers; suitability of the curriculum and funding from government are needed. The study concludes that lack of adequate teaching and learning resources, lack of teacher preparedness and skewed curriculum has affected enrolment of learners. Muigai (2012), in her study done in Rachuonyo District, Nyanza Province, regarding challenges facing inclusion of learners with disabilities in regular primary schools, observes that discrimination and isolation impede education of learners with disabilities.

Studies; Konza (2008), Mutisya (2004), Ndinda (2005) and Muigai (2012) present scanty information on challenges facing learners with physical disabilities in their schools context. Mutisya (2004) observes that learners with physical disabilities integrated into mainstream schools resist integration, drop out of school or regress in performance; however, she doesn't investigate the causes of this behavior.

IV. STATEMENT OF THE PROBLEM

A high percentage of Learners with physical impairments learn in inclusive settings with their counterparts in regular schools. This has not been the case in practice since enrolment remains low despite a large number of children being assessed and recommended to join inclusive settings. It has been established that a significant number of learners with physical challenges face problems in accessing quality education. With greater awareness and willingness by parents to take their children with special needs to school the dilemma as to why the enrolment is very low still lingers on. A recent resource distribution analysis undertaken by the Kenya Integrated Education Programme (KIEP, 2003) indicated a gross under supply of the requisite resources for the education of learners with special needs. These facilities if available, still don't adequately support learners with physical impairments hence get frustrated and drop out of school. Several scholars have ventured into special needs education but have not questioned why enrolment rates are low. Also despite policy requirements being in place as concerns standard of construction of facilities that supports learners with disability, stakeholders still do not put into considerations adherence to these standards. This study therefore seeks to explore the effect of infrastructural access of facilities on enrolment of learners with physical impairments.

V. OBJECTIVE OF THE STUDY

The specific objective of the study was to explore the infrastructural access challenges and their effects on enrolment of physically challenged learners integrated in public primary schools in Uasin Gishu County, Kenya.

VI. MATERIALS AND METHODS

Research Design

This study employed mixed methods research ie both qualitative and quantitative methods. Creswell and Clark, (2007) argue that mixed methods approach encourages the use of multiple worldviews by combining inductive and deductive thinking which helps to answer questions and provide more comprehensive evidence in numbers and words for studying research problems than either quantitative or qualitative. According to the duo, mixed paradigm research entails philosophical assumptions that guide the direction of the collection and analysis of data. Quantitative approach was used to examine infrastructural situations that learners with physical disabilities encounter in public primary schools such as staircases, toilets, desks and brails

Qualitative data sought to understand the experiences of LWPD in the mainstream schools from the headteachers, teachers and education officers' perspective and assessment of views on means there to solve problems that learners with physical disabilities encounter.

Target Population and Sample Size

The target population for this study consisted of 1002 respondents 880 teachers, 110 head teachers, 6 education officers and 12 physically challenged learners. Thus a total population of 1007 people, (N=1007) participated in the study. This population was particularly targeted because it provided key information on challenges facing LWPDP in integrated public primary schools. The target population for this study included public primary schools in the six Sub counties of Kesses, Moiben, Soy, Ainabkoi, Turbo and Kapseret, which have a population of 110 public primary schools.

The sample size comprised of 312 respondents, (n=312). This was arrived at as follows; 264 teachers (n=263), 36 headteachers (n=36), 5 education officers (n=5) and 12 physically handicapped learners (n=12). 5 education officers and 12 physically challenged learners in the selected schools were part of the sample. This sample was considered adequate for the study since according to Ogula (2005) for a large population a sample of 10% to 20% of the population is sufficient for reliable findings.

Probability sampling method was used to select teachers while non-probability was used for head teachers, learners and education officers. Cohen, et al (2007) argues that a probability sample is useful because the researcher is able to make generalizations since it seeks representativeness of the wider population.

Purposive sampling was used to sample the headteachers; these are the headteachers in selected schools. In probability sampling, simple random sampling was used to get respondents from the teachers in each of the selected schools. Teachers which was a homogeneous group was stratified into males and females strata to avoid the probability of having only one gender as participants. The teachers were useful in the sample because they're in contact with the learners more often than the rest of the teachers. Teacher counselors also provided crucial information about challenges affecting the integrated learners and how they help them to cope.

Purposive sampling which is one type of non-probability procedures helps the researcher to build a sample that is satisfactory to their specific needs (Best & Kahn, 2006). Purposive sampling was used to pick learners from the selected schools. All the LWPDP in these schools were part of the sample, the reason being they were key respondents to this study.

Sample frame of respondents

No.	Sample category	Population	Sample	Sample size in %
1	Teachers	880	264	30%
2	Head teachers	110	36	32.7%
3	Education officers	6	5	83.3
4	Physical challenged learners	12	12	100%
	Total	1008	312	30.9%

Data Collection Instruments

This study, involved the use of documentary reviews, questionnaire and interview.

This technique was used to trace the infrastructural situation in the selected public primary schools that support learners with physical disabilities. In this study a list of all types of infrastructure needed to support learners with physical disability in the integrated public primary schools was prepared for the purpose of analyzing their conditions and accessibility to physically disabled learners.

The study used a questionnaire to find out academic problems that physically disabled learners encounter in public primary schools as well as gathering information from stakeholders which are education officers, head teachers, teachers and learners on their views concerning the means to solve problems that are facing learners with physical disabilities in accessing integrated public primary school. This technique was used to collect concise data from physically disabled learners admitted and registered in integrated public primary schools

Validity and Reliability

The validity of the questionnaires was ascertained by subjecting them to the scrutiny and judgment of peers and the experts. Their criticism and suggestions was adhered to in the final draft of the research instruments. As regards reliability, this study used split half method in the questionnaires for teachers and learners, analyzed if the test items are consistent among themselves and with the test as a whole. Split half measures how consistently the instrument measures the construct of interest and it assumes that if all items are drawn from the same domain, then the two halves should correlate highly with each other. This involved splitting the items in the questionnaires into two halves (odd and even numbers). The odd numbers, set A, were administered separately and scored accordingly and the even numbers, set B, was done the same. The scores of the two tests were then computed by Pearson's Product moment coefficient and found to be 0.6. This was to determine an estimate of reliability coefficient of the whole questionnaire. Spearman Brown prophecy formula recommends that a reliability coefficient of 0.6 and above is a good measure of reliability (Kothari, 2004, Ogula, 2005 & Gay et al, 2009). Source triangulation was used to validate the instruments by making teachers and learners to respond to some similar questions as well as method triangulation. It entails use of questionnaires, interview guides and observation schedules to collect similar information. The rationale behind using method triangulation was to ensure validity of the data. The questionnaires for the teachers, head teachers, education officers and the interview schedule to the learners facilitated for respondent triangulation for data validation.

Coded data was analyzed with the help of an appropriate computer programme (Statistical Package for Social Sciences SPSS). Data analyzed involved both descriptive and

inferential statistics. This is because the research instruments yielded both quantitative and qualitative data. The descriptive statistical techniques include the frequencies, percentages and means. This forms the basis of interpretation, discussion, conclusion and recommendation of the research. According to Kombo & Tromp (2006), data analysis refers to examine what had been collected in a survey or experiment and making deduction or inference after data collection, all completed questionnaire is thoroughly coded and appropriately organized for analysis. The descriptive analysis enables the researcher to go beyond the data gathered from a small number of subsets (respondents) and arrive at tentative conclusions about the larger group (population) from which the smaller group is derived (Mutai, 2003)

VII. FINDINGS AND DISCUSSIONS

The study revealed that out of all infrastructural areas at sampled public primary schools visited, including classrooms, dormitories, libraries, dining halls, administrative offices, wash rooms and play grounds, about the average of 40 percent was available but highly inadequate. The researcher also found that an average of 35 percent of all infrastructures was available but inadequate while only 15 percent of all infrastructures were available and adequate. 10 percent of infrastructural areas at sampled public primary schools were totally not available.

Alarming, the study found that the school structures are not disabled friendly. School facilities; classrooms, verandahs, bathrooms, were not accessible to learners with wheel chairs, crutches and prosthesis. Physically impaired students find it difficult to move freely within the school compound. Worse still is lack of adapted game to accommodate learners with physical disabilities. Findings revealed that, 75 percent of infrastructure was not available for disable learners. Eight five percent (85%) of the infrastructure was accessible with difficult for the learners with physical disabilities whereby 60% of all infrastructure conditions were relating as ranging between average and poor.

The construction of school buildings did not take account and consideration of the needs of learners with physical disabilities and other disabilities. As result, many learners with disabilities, especially those with visual and physical disabilities, struggle in their movements from one point to another within school premises. Some learners with vision loss reported difficulties in finding their way round the school because of a lack of handrails on stairs and corridors. Therefore the problem of inaccessible school buildings is a real concern for many learners with disabilities. Learners with disabilities will have certain unique requirements that impact on how they use school facilities, (Kenny et. al., 2000). For example, Learners with mobility disabilities may have particular difficulties with steps, or heavy doors. They may need additional desk space if they use a wheelchair, or additional storage space for a walking frame or crutches, learners with visual difficulties will benefit from improved lighting and clear visual contrasts on doorframes and support columns, some learners with emotional, psychological or mental health difficulties will benefit from a calming environment created by appropriate use of light and colored schemes.

Inclusive education remains to be a mirage as most regular schools are physically inaccessible. Most of the regular schools sampled lacked ramps, doors were narrow and stair cases existed in key offices therefore limiting access by persons with physical disabilities. Following interviews with teachers from various schools, it was reported that when learners with disabilities sought admission in regular schools, most of them were referred to special schools since facilities could not allow them to comfortably study in regular schools. Further, not all could manage to get admission in public special schools since the capacity was limited and the option would be private schools which are very expensive and unaffordable. Despite all these challenges, some recognizable efforts were identified in a few schools which had gone beyond the government facilitation to ensure an inclusive environment.

Infrastructure availability in public primary schools

Infrastructure	Availability							
	Available and adequate		Available but inadequate		Available but highly inadequate		Not available	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Classrooms	1	20%	3	60%	1	20%	0	0%
Dormitories	1	20%	1	20%	2	40%	1	20%
Dining halls	0	0%	1	20%	3	60%	1	20%
Administrative Offices	3	60%	1	20%	1	20%	0	0%
Wash rooms	0	0%	2	40%	3	60%	0	0%
Play grounds	0	0%	1	20%	3	60%	1	20%
Total	6	15%	14	35%	16	40%	4	10%

According to these results from the study, necessary infrastructural areas largely seemed to be available but highly inadequate while very few public primary schools had available and adequate infrastructural systems necessary for physically disabled learners. Areas which were highly associated with academic issues and knowledge acquisition seemed to be very inadequate comparing to number of enrolled learners. This made the sense that physically disabled learners needed to share learning resources according Chataika (2010) leads to their poor competences and performances of those subjects.

This situation hinders the enrolment academic development of physically disabled learners in the sense that it make them to depend on their fellow learners hence leads them to learn more theoretically rather than practically due to their condition. The situation could be avoidable through ensuring that all necessary learning facilities are adequate and inclusive. Therefore, it is advisable that something must be done in order to make sure that at least all necessary teaching and learning materials are available so as all learners, both able and disabled learn more practically.



Disabled learners at school with their assistance devices

Infrastructure accessibility in integrated public primary schools in Uasin Gishu County which was a very sensitive area that touches the lives of the physically disabled learners directly was also examined. From the selected public primary schools involved in the study, about an average of 85

percent of their infrastructure were accessible with difficulty to learners with physical disabilities. It was only 7.5 percent of infrastructure that were easily accessible and 7.5 percent of all infrastructures from public primary schools were not accessible at all for learners with physical disabilities.

Infrastructure Accessibility in public primary schools Uasin Gishu County

Infrastructure	Accessibility					
	Easily accessible		Accessible with difficulty		Not accessible	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Classrooms	1	20%	4	80%	0	0%
Dormitories	0	0%	5	100%	0	0%
Dining halls	0	0%	4	80%	1	20%
Administrative Offices	1	20%	4	80%	0	0%
Wash rooms	0	0%	5	100%	0	0%
Play grounds	0	0%	4	80%	1	20%
Total	3	7.5%	34	85%	3	7.5%

Physically disabled learners in integrated public primary schools were facing very big problems on their infrastructural accessibility at most public primary schools visited. Many areas around schools such as classrooms, dormitories, dining halls, administrative offices, wash rooms as well as playgrounds were accessible with difficulties for the physically disabled learners.

Regardless of their right to quality education the same as normal learners, the physically disabled learners have not been

considered by the ministry of education whereby many infrastructural systems have got situation such as stairs, narrow paths, and classrooms, unsupportive toilets and bathrooms that are not friendly for them as shown in figure 6 and 8. Physically disabled learners who were using wheel chairs and crutches encountered difficult to reach some places due to the nature of infrastructure which are unfriendly to them. Filmer (2005) argued that, those physically disabled learners who do start school, in those

environments are at increased risk of dropping out.

As witnessed by a researcher, in most institutions the situation is not convincing at all, as many infrastructures are not accessible easily to learners with physical disabilities. For

example, one of the physically disabled male pupil in one of the institution exposed his experience to the researcher on how he suffered to access to washroom which was not designed to suit his condition

Unsupportive Infrastructures for Physically Disabled Leaners at Sampled public primary school



The study also found long distances from one place to another within schools is a very big barrier to learners with physical disabilities. Many physically disabled learners got trouble in moving from point to point due to long distances between one building and another or between one office and another in one building. For example, long distance from classrooms to dormitories and dining halls. Such long distances hinder physically disabled learners to reach and get different services in time. Due to the nature of their disabilities physically disabled learners spend much time walking comparing to “normal” learners when seeking different services at the institutions such as class rooms. No extra time or remedial classes were provided in case the physically disabled learners reached to classes late or when

they miss class sessions.

The results of the study for infrastructural conditions as sampled at integrated public primary schools in Uasin Gishu County in areas of classrooms, dormitories, dining halls, administrative offices, wash rooms and play grounds showed that, 35 percent of total average infrastructures had good condition. The same 35 percent of total average of all infrastructures had average condition while 25 percent had very poor infrastructure condition. It was only 5 percent of all infrastructures at all public primary schools that had very good conditions suitable for the physically disabled learners. Table 7 shows detailed infrastructures condition at sampled higher learning institutions.

Infrastructure Conditions in public primary schools Uasin Gishu County

Infrastructure	Condition							
	Very good		Good		Average		Poor	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Classrooms	1	20%	1	20%	2	20%	1	20%
Dormitories	0	0%	2	40%	2	20%	1	20%
Dining halls	0	0%	0	0%	4	80%	1	20%
Administrative offices	1	20%	4	80%	0	0%	0	0%
Wash rooms	0	0%	1	20%	1	20%	3	60%
Play grounds	0	0%	1	20%	1	20%	3	60%
Total	2	5%	14	35%	14	35%	10	25%

The study showed that infrastructure condition was good in administrative offices, but when it comes to other areas such as washroom, the infrastructure conditions were much worse

especially to learners with physical disabilities to the extent that their healthy was in danger. Some physically disabled learners argued that they were living in a very hard time in

using toilets which were unsupportive, dirty and publicly shared as revealed in figure 8. According to Croft (2010), the physically disabled learners in school environments are less favored by the infrastructure and schooling environment in general. As reported above that the condition is not convincing, therefore something must be done by head of institutions to consider physically disabled learners by looking at their special needs and attend to them.

The situation is compounded by inappropriate infrastructure, inadequate facilities and lack of equipment which make it difficult to integrate special education in regular programmes (Gullford & Upton, G. 1982). Resources encourage learners to participate in the learning process. (ROK,2003) stated

that all school should be spaciouly well lit and well ventilated aiming at ensuring SNE learners are put in a conducive learning environment free from difficulties and complexities.

Despite this limitation, it is still clear from the study that, in the view of the respondents, who overwhelmingly identified limited educational facilities, poor infrastructure and insufficient learning materials as significant situation to building an inclusive educations system. They mentioned specifically the physical inaccessibility of educational facilities, such as classrooms, for many physically challenged learners and the limited provision of accessible learning materials such as textbooks.

Good and Supportive Infrastructures in Administrative Blocks sampled in public primary schools



Field Data situation of physical facilities/infrastructure that are supportive to disabled learners at sampled in public primary schools

Poor and unsupportive infrastructure in leaners' washroom areas used by physically disabled leaners at sampled in public primary schools



This study sough to find out the influence of environmental situation of physically challenged leaners and establish how learners are affected by the school environmental situation

which include negative attitude from teachers and other leaners, stigma and disrespect both from teachers and leaners. Results are shown in the table below.

The study intended to examine if leaners with physical disabilities in integrated public primary schools that were participating in sports and games. Out of 12 respondents interviewed by the researcher, seven (7) respondents (58.3%) were involved in sports and games. Five (5) respondents

(41.7%) did not participate in sports and games due to various reasons including lack of tools and playgrounds special for physically disabled leaners. Table 21 presents frequency and percentage of involvement in sports and games.

Participation in Sports and Games to Leaners with Physical Disabilities

Do you participate in sports and games?	Frequency	Percent	Valid Percent	Cumulative Percent
No	5	41.7	41.7	41.7
Yes	7	58.3	58.3	58.3
Total	12	100.0	100.0	100.0

Like other social activities, involvement in sports and games is associated with ones’ interests, however, in primary schools, it may also be involved with how schools are sensitive and invested in sports and games to ensure leaners needs and interests in sports and games are satisfied. This includes having accessible playgrounds, enough sports and games tools, not only for normal leaners, but also to leaners with physical disabilities who have also interests and talents in games like other normal leaners.

Many leaners with physical disabilities who declared to involve themselves in sports and games observed their fellow “normal” leaners at playgrounds playing but they do not directly participate. As argued by McLean *et al* (2003), it was

quite possible that their passive involvement in sports and games have been caused by lack of playgrounds, and tools that are specifically suit their physical disability conditions, such as special wheel chairs.

In order to raise interest in sports and games for leaners with physical disabilities as one of important right to them, it is necessary for learning institutions to design playgrounds that suit conditions for leaners with physical disabilities but also purchasing sport tools to enable leaners with physical disabilities to participate. It is also important for learning institutions to employ special staff for training and coaching leaners both able and disabled in various sports and games to raise their talents and hobbies.

Observation Checklist Table

	Facility	Availability	Adequate
1	Teaching and learning resources	3	Not adequate
2	Textbooks	3	Adequate
3	Hearing aids	×	Not available
4	Visual aids	×	Not available
5	Ramps leveled doorsteps	×	Not available
6	Adapted desks/furniture	×	Not available
7	Adapted toilets and latrines	×	Not available
8	Well-structured play ground	×	Not available
9	Wheel chairs	3	Not adequate
10	Walking sticks	3	Not adequate

From the observation teaching and learning resources were inadequate. Most of the facilities available, did not take account and consideration of the needs of leaners with physical disabilities and other disabilities. As result, many leaners with disabilities, especially those with visual and physical disabilities, struggle in their movements from one point to another within school premises.

Indeed, it was observed that textbooks, hearing aids and visual aids for many schools targeted schools in Uasin Gishu County was wanting with none of the schools having any of these facilities unfriendly and generally unsupportive for the needs of leaners with physical disabilities. Ramps and leveled door steps and entrance to most buildings, for example, had

long staircases that cannot be accessed by physically challenged learners using wheel chairs

It was also observed that schools in Uasin Gishu County that were targeted by this study did not have any of these facilities: visual aids adapted desks/furniture, adapted toilets and latrines, well-structured playground, wheel chairs and walking sticks.

It was observed that the type of education received by learners with disabilities is of very poor quality, noting that they did not consider themselves as receiving any education! This may be due to the fact that, there are very few education centers which provide training for teachers in special education, so the available teachers are not knowledgeable on teaching learners with physical disabilities.

VIII. CONCLUSIONS AND RECOMMENDATIONS

Parents and siblings of physically challenged children have a leading role in molding of self-concept of learners with physical impairment. The way these children are brought up in the family dictates a lot on how they will view their disabilities, hence be integrated into the society. It is apparent that many parents of children living with disabilities find it hard to nurse the stigma of disability. From the findings it is clear that there is great need to sensitize the parents the understanding of children with disability from the onset, for the child to grow in an environment where he/she feels accepted, loved and have free mobility not confinement.

In Kenya, the Disability Standards of Education (2005) support the enrolment and full participation of students with disabilities in mainstream schools. All in all, if this is to come to full implementation, there is urgent call for County Government through the Districts Education Office to create a barrier-free environment for learners with physical impairment in all mainstream schools. From the study it clearly stands out that mobility is one of the major challenges which physically challenged learners encounter. Therefore, pavements, classrooms, washrooms, dormitories and other structural environment should be made accessible.

The area around the school and within the school compound should be free from architectural barriers which can cause mobility on emotional disturbances. Physically impaired learners should be able to move freely with their wheelchairs, crutches and prostheses.

Physically challenged children are capable of doing well in schools, hence there is need to be assisted to fit well in any educational program in order to unleash their potentials. Those with mild disability should be integrated in public primary schools. Those with very severe disabilities need to be given priority in special schools. The Government should provide adequate special trained teachers to mainstream schools. Remedial classes should be given especially when they miss school due some medical issues. These learners may not move at the same rate with their classmates and so they

greatly need some emotional support and understanding from the teachers and the peers.

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