

# Accessibility of Technical And Vocational Training Among Disabled People: Survey Of TVET Institutions In North Rift Region, Kenya

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## ABSTRACT

People with disabilities face particular challenges in education and training. Most of them are deprived of access to basic literacy and numeracy skills. They also face barriers that affect access to Technical Vocational Education and Training (TVET) institutions some of them arising from the surrounding socio-economic environment and from mainstream TVET institutions. The main purpose of this paper was to assess barriers to accessibility of TVET institutions by disabled people in Kenya. The study was carried out in the North Rift Region of Kenya. The target population of the study consisted of the lectures and students with disabilities in 5 public TVET Institutions. Semi Structured Questionnaires were used as the main instruments for data collection. Data collected was analyzed using descriptive statistics and inferential statistics with the aid of SPSS IBM version 20. One of the most striking findings was that disabled students in TVET institutions are discriminated and isolated. Findings also indicated that the disabled students cannot access some of the school buildings; they are also barred from enrolling in TVET due to policies that provide cut off point marks or entry behavior to courses they desire to enroll in. It was also found that teachers had positive attitude toward the disabled students, contrary to the fact that students considered teachers to be unfriendly to them. Therefore, the paper recommended that skills training and instructional mechanisms must consider specific needs of youth with different types of disabilities before putting them together in regular class. Better coordination between the government and service providers could anticipate and mitigate this barrier. There is also the need for specialized training institutions to be upgraded and modernized, and mainstream training institutions be adjusted to include training of persons with disabilities.

**Keywords:** TVET, Disabled Students, Accessibility, Skills, PWD

## 1. Introduction

People with disabilities face particular challenges in education and training. Most of them are deprived of access to basic literacy and numeracy skills: according to UNESCO (2009), it is estimated that 98% of children with physical or mental impairments in developing countries do not attend school. Globally, disabled people are faced with discrimination and barriers to full participation in skills training and employment programmes (UNESCO, 2009). Disabled people are often debarred in work, because of ignorance and discrimination aspect of society reason being their inability to compete on the basis of relevant skills or qualifications. For people with disabilities training, which should encompass skill, knowledge and attitudes, is very often the key to success in finding a job. Professional training – under qualified instructors, and leading if possible to some form of recognized certification – is an essential passport to gaining employment (Dark and Light Blind Care, 2008). However, Lack of vocational training is the most frequently mentioned barriers experienced by handicapped persons when looking for a job. This is more often a barrier for women to finding employment than for men. This can mean that vocational training is nonexistent, that quality of the training is poor, or that disabled people are excluded from vocational training.

In support, according to ILO (2013), an important principle for the inclusion of disabled people in employment, is the promotion of vocational training. Vocational training is the preparation for jobs that call for extensive practical experience and training but have few requirements for theory, technical knowledge, or liberal arts education. Skills development is part of the vocational training. Like non-disabled people, people with disabilities need skills in order to engage in economic activities. But unlike non-disabled people they start with a number of shortcomings (Ibid, 2013). For example, families and communities perceive them as people who cannot compete in economic activities with non-disabled people. They often lack access to basic education making them unqualified to join skills training courses which result in lack of confidence, low expectations and low achievement. Skills training for people with disabilities involve building confidence and changing perceptions, both in the individual with a disability and in those around him or her. Learning a technical or professional skill such as carpentry, bicycle repairing, computing or veterinary work will demonstrate that indeed disabled people are as capable as non-disabled people of plying such trades (ILO, 2013).

Another ILO report (2010) avers that case studies have shown that possessing vocational skills significantly increases a disabled person's chance of earning fair income, whether it is in salary or self-employment in the formal or informal sector such as "jua Kali". The report also indicated that disabled people can acquire vocational skills through three avenues which include informal sector employment and, formal sector apprenticeships, and formal vocational training in TVET institutions. The difference between the three avenues is that employment and/or apprenticeships, formal sector apprenticeships do not require any basic educational qualifications but formal vocational training in TVET institutions requires the disabled to meet the entry qualifications of the respective courses to ensure access to TVET Institutions acting as a barrier for disabled to acquire vocation training from TVET institution (ILO, 2010)

According to Prasai (2010) vulnerabilities and barriers that affect access to TVET by Disabled Persons are both arising from within the disabled – the individual's disabilities, and arising from the surrounding socio-economic environment and from mainstream TVET institutions. The Kenyan government has been in forefront to ensure equity; programmes offered ought to be made attractive to the disabled, the poor and the marginalized (GoK, 2005)

Disability-suitable and market oriented technical and vocational training is very much successful package in the world which has really supported to enhance the economic life of PWDs' in many places. Providing vocational training to PWDs is a bit different and complicated than other people since their functional limitations and essential supports needed varies according to disability category and level of severity (Prasai, 2010). However, recently, people with disabilities were included to higher education. In many parts of the world, this is still the case and where institutions of higher education purport to provide equal access and reasonable accommodation, students with disabilities still face discriminatory policies and practices. In addition, too little is known about the state of international higher education for people with disabilities (Teachability, 2002).

In Kenya, most TVET institutions for people with disabilities provision is by civil society organizations, faith based organizations, such as the Salvation Army, NGOs and specialist intuitions including the Undugu Society of Kenya, which offers TVET and has programmes for deaf children; the International Youth Foundation Despite efforts of the government, religious bodies, NGO's and individuals, towards the education of PWD, there are problems such as unemployment and begging. Vocational and technical skills education and training have been used in special schools in Ghana and around the world and found to be an effective means of empowering individuals with disabilities in the areas of career training and employment opportunities.

## 2. Literature Review

Wagner et al (2003), in their study found that many students with disabilities also take vocational education courses with occupationally specific vocational education being taken much more often than prevocational courses. More than half of students with disabilities take occupationally specific vocational courses in a given semester.

A study conducted in Botswana by Dubois et al., 2010, indicated that most learners with disabilities are absorbed by non-governmental organizations (NGOs). A smaller number of learners with disabilities can also be found in brigades and company training centres. A baseline survey on vocational training conducted by BOTA (2006) indicated that at least 293 learners with disabilities constituted 1% of the total vocational training enrolment. Four out of the five institutions interviewed in this study indicated that they have special measures for learners with disabilities in terms of access to buildings, equipment and learning materials. Others actually have an enrolment quota. In order to realize sustainable development for all citizens, access creation and promotion is important. Interviewees are of the opinion that TVET reform is regarded as part of the poverty-reduction strategies of many countries and access is the major starting point. There is, for instance, little access for rural and female learners. In June 2009, the Leonard Cheshire Disability and Inclusive Development Centre, UCL, undertook a pilot survey in five urban areas in Sierra Leone (Kett, 2012) Those who had taken part in some form of vocational training had done so mainly through NGO initiatives, such as the YMCA, COOPI, and the School for the Blind, the Grafton Training Centre and Leonard Cheshire Disability (LCD). Some of these had been initiated after the war, while others were more recent initiatives, such as LCD in Kabala. Despite the array of training places, there is also a degree of mismatching between skills training and labor market needs: the most popular skills were tailoring and business, yet the main sources of employment are farming and trading.

According to Kett (2012) at first glance, China appears to have made significant improvements for youth with disabilities and expanding their opportunities for training and employment. However, it should be recognized that the compulsory education structure for children with disabilities, and the vocational training schemes available have not automatically translated into sustainable jobs. Moreover, there appears to be little formal support available for youth with disabilities once they enter the world of work – the incentives are geared to the

employer, not the employee. Nevertheless, there are some very positive examples of cooperation between service delivery organizations and the CDPF

The scale and scope of the different Vocational Training Centers' (VTC) courses ranged from three months to Three years. However, there seems to have been little attempt to link the courses offered to market requirements, little in the way of career guidance for 18-29 year olds, and low placement rates in real jobs (Mendis 2004). A survey undertaken by LCD (2009) in Sri Lanka indicated that PWD were unaware of any vocational training facilities and only 12% said they were able to access training. Many also claimed that the training facilities were not adapted to the needs of persons with disabilities.

### 3. Methodology

The study adopted a survey research technique. Yin (1984) argues in favor of the use of surveys in educational fact-finding because they provide a great deal of accurate information. The intention of survey research is to Revitalizing a Technical Training Institute in Kenya, gather data at a particular point in time and to use it to describe existing conditions. The descriptive nature of research was used in order to gain information on how the institution has become attractive. The study was carried out in the North Rift Region of Kenya. This is where five institutions targeted for the study namely; the Kaiboi Technical Training Institute, Rift Valley Technical training Institute, Ol'lessos Technical Training Institute, Kitale Technical Training Institute and Eldoret National polytechnic are situated. These institutions reports directly to the Ministry of Higher Education, Science and Technology. They offer training by following the statutory obligations. The researcher sought permission from the relevant authorities to carry out a study in the institutions. A reconnaissance trip was made to the institution to familiarize the researcher with its operation. The target population of the study consisted of the lectures and students with disabilities. In collecting data, questionnaires were used which were based on a five-point Likert scale. The statements were formulated in a positive form. The statements required the subjects to select any one of the options: strongly agree (SA), which was awarded five points; agree (A), four points; undecided (UD), three points; disagree (DA), two points; and strongly disagree (SDA), one point. The research instruments were validated beforehand by the Technology Education experts at Moi University. Data were analyzed in terms of both descriptive (mean, standard deviations, frequency and percentage) and inferential statistics (t test).

### 4. Results

In this section data collected was analyzed and presented, followed by result discussion in relation to the research hypothesis stated with the aim of achieving the study objectives. Research findings revealed that 73.3% of the male lecturers and 26.7% of the female responded to the questionnaire. Results showed that 66.7% of the lectures were aged between 30-40 years whereas 33.3 % ( 20) were aged between 41-50 years. Most of the lecturers had been teaching PWD between 1-5 years (86.7%). Unexpectedly, most of the lectures in TVET had diploma as their highest level of educations (45 %), while 41.7% of them had bachelor's degree and only 13.3% had a master's degree. Thus, it would be true that TVET institutions in Kenya have not fully met the requirement for qualified lectures which is below the recommended qualification level that lectures should have at least bachelors' degree (Gok, 2011).

**Table 1. Lecturer Demographic Characteristics**

		Frequency	Percent
Gender	Male	44	73.3
	Female	16	26.7
	Total	60	100
Age	30-40yrs	40	66.7
	41-50yrs	20	33.3
	Total	60	100
Highest level of education	Diploma	27	45
	bachelor's degree	25	41.7
	Master's Degree	8	13.3
	Total	60	100
working experience with PWD	1-5yrs	52	86.7
	10-15yrs	8	13.3
	Total	60	100

#### 4.1 Demographic Information of students

Findings from the field survey revealed that 61.7% were male whereas 38.3% were female. Based on the fact that students were randomly picked, the study can therefore reveal that there was gender bias either because female students were not enrolling in TVET institutions because programmes offered were perceived to be “male subjects”. This is echoed by a recent study conducted by Murgor (2013) in Kenya indicated that female students were acquiring less vocational and technical skills than male counterparts. Further, the findings revealed that 11.7% of the respondents were aged below 25 years, 38.3% between the age bracket of 26-30 years and 50% of the respondents were above 31 years. This imply that disabled students were enrolling in TVET at older age which might be related to the fact that prospective trainees in TVET institutions are required to have obtained specific aggregate and subject grades in secondary school examinations to join craft or diploma courses ( Hooker, 2011). Older age might again act as barrier to disabled students to associate with younger generation resulting to isolations and discrimination in TVET institutions. More results showed that 63.3% of the disabled students were undertaking certificate programme whereas 23.3% were pursuing diploma and 13.3% had reached high school level of education. Low number of disabled students in TVET pursuing diploma is as a result of traditional provisions of vocations training which is based on certain stereotypes (European Union, 2006). Traditionally PWD in developing countries were regarded as unproductive.

**Table 2 Student demographic information**

		Frequency	Percent
Gender	Male	37	61.7
	Female	23	38.3
	Total	60	100
age bracket	Below 25yrs	7	11.7
	between 26-30yrs	23	38.3
	above 31yrs	30	50
	Total	60	100
Indicate the programme your are undertaking	Diploma	14	23.3
	Certificate	38	63.3
	High Diploma	8	13.3
	Total	60	100

#### 4.2.1 Courses Undertaken Disabled Students

The study was also interested in establishing various course undertaken by disabled students in TVET where 23.3% were undertaking engineering, 16.7% information studies, 11.7% accounts, 8.3% (5) banking and a similar number laboratory technology 10% were doing fabrication while 5% catering. This suggest that there is improvement in number of disabled students pursuing engineering courses when considering people with disabilities are faced with challenges while pursuing engineering programmes (Burgstahler, 2013)

**Table 3 Courses Undertaken Disabled Students**

	Frequency	Percent
Fabrication	6	10
Lab Tec	5	8.3
Librarian	2	3.3
Engineering	14	23.3
Social Work	6	10
Information Studies	10	16.7
Accounts	7	11.7
Catering	3	5
Banking	5	8.3
Secretariat	2	3.3
Total	60	100

#### 4.2.2 Teachers' attitude toward disabled in TVET

The findings indicated that teachers' were compassionate towards the disabled students attitude (mean = 4.73) and have amicable relationship with them (mean = 3.92). Lecturers also had sense of personal responsibility in disabled students and their behavior (mean = 4.32). To address disabled learners need as they occurs lecturers were flexible (mean = 4.4). Research findings also revealed that teachers are able to motivate a disabled learner thus encouraging him/her to be an active learner in class (mean = 4.55) and able to create humor in a class of disabled students thus, resulting in less anxiety for students and a more positive attitude toward disability. From the study, it was also established that teachers are determined in supporting disabled students in their learning process (mean = 4.45).

More findings strongly argued that teachers are able to establish a trusting relationship with the disabled students by providing nurturance and consistency in them, interactions and routines as (mean = 4.2). they are also patient when working with the disabled students (mean = 4.18) and empathic with disabled students (mean = 3.92). From the above findings it would be true to conclude that the respondents' attitude toward disability is positive and this can have long lasting effects and can help students with disabilities to succeed.

**Table 4 Teachers' attitude toward disabled in TVET**

		SA	SD	Mean	Std. Deviation
I have compassionate towards disabled students	Frequency	16	44	4.73	0.446
	Percent	26.7	73.3		
I have amicable relationship with disabled students	Frequency	39	8	3.92	0.591
	Percent	65	13.3		
I have sense of personal responsibility in disabled students and their behavior	Frequency	41	19	4.32	0.469
	Percent	68.3	31.7		
Am flexible in order to address Learners needs as they occur	Frequency	36	24	4.4	0.494
	Percent	60	40		
Am able to motivate a learner thus encouraging him/her to be an active learner in class	Frequency	27	33	4.55	0.502
	Percent	45	55		
Am able to create humor in a class of disabled students	Frequency	34	14	4	0.759
	Percent	56.7	23.3		
Am determined in supporting disabled students in their learning process	Frequency	33	27	4.45	0.502
	Percent	55	45		
Am able to establish a trusting relationship with the learner who is disabled students by providing nurturance and consistency in them, interactions and routines	Frequency	48	12	4.2	0.403
	Percent	80	20		
Am patient when working with a disabled student	Frequency	49	11	4.18	0.39
	Percent	81.7	18.3		
I am empathic with disabled students	Frequency	41	11	3.92	0.85
	Percent	68.3	18.3		

*SD = strongly disagree, SA = strongly agree*

#### 4.3 Environment related factors

Despite teachers indicating a positive attitude towards disabled students, male students were not sure about it, while female students indicated that TVET lecturers were not friendly to them. Other students are unfriendly to disabled students. The findings revealed that both male and female disabled students agree that they do not receive counseling and guidance service from the institution. Disabled students were uncertain on their safety within the institution. In addition, disabled students were not treated equally with other students. For instance, they cannot vie for any student leader post since they are not voted in. The study results also reveals that disabled learners in TVET are not provided with enough time in order to finish their assignment, practical test among other exams. They were also not provided with monetary support in order to attend school trips if needed. However, disabled students are allowed to choose a course of their own interest. Nevertheless, they are not sure if they will get a job after completion of their course.

**Table 5 Environment related factors**

	Mean		Std. Error Difference	T	P
	Male	Female			
School teachers are friendly to me	2.59	2.17	0.179	2.356	0.022
Other students are friendly to me	2.84	2.74	0.23	0.429	0.669
I have received counseling and guidance service from the institution	1.92	2.48	0.243	-2.304	0.025
I feel safe when am in the institution	2.35	2.13	0.249	0.887	0.379
Am treated equally with other students. For example I can vie for any student leader post	2.54	2.57	0.317	-0.078	0.938
I am provided with enough time in order to finish my assignment, practical test, exam among others	2.16	2.17	0.198	-0.059	0.953
I am provided with monetary support in order to attend school trips if needed	3.35	2.87	0.318	1.516	0.135
Am allowed to choose a course of my on interest	2.46	2	0.249	1.842	0.071
Am sure i will get a job after completion of my course	2.03	2.13	0.176	-0.586	0.56

#### 4.4 Physical related factors

Study findings in table 6 reveals that male students have a challenge accessing learning and teaching facilities in the school library whereas their female counterparts were not sure. Again male students revealed that classroom were not ideal for them, contrary to female students indicating that there were not sure about, from this the study can deduce that disabled female students are not aware on what they are supposed to have or access in institutions, adding more support on the pervious findings that disabled female students are marginalized or isolated in TVET institutions. The findings are consistent with Murgor (2013) that male students were acquiring more skills than female students. Further findings showed that the institutions have special playing equipment for their kind. Moreover, lecturers in TVET do not provide adequate special attention. Table 6 also showed that disabled students cannot access school buildings easily especially when attending classes even after having special policies of disabled people.

**Table 6 Physical related factors**

	Mean		Std. Error Difference	T	Sig. (2- tailed)
	Male	Female			
i can easily access learning and teaching facilities in the school library	2.38	2.7	-0.317	-1.243	0.219
physical arrangement in the classroom is ideal for me	2.3	3.26	-0.964	-3.826	0
the school has special play equipment for my kind	4.05	3.91	0.141	0.626	0.534
i am given special attention by the lecturers	3.38	3.3	0.074	0.271	0.788
i can easily access school buildings especially when attending classes	3.32	3.13	0.194	0.781	0.438
The school has special policies of disabled people	4.22	3.57	0.651	2.497	0.015

#### 4.5 Lecturer Related Factors

In table 4 above teachers indicated a positive attitude toward disabled students which is contrary to what disabled students feel. Results in table 7 reveals that disabled students were not satisfied with their lecture. Notwithstanding, their lecturers seem to be well prepared when teaching them and handles them in a professional manner. Finally, according to disabled lecturer seems to be highly trained on handling the disabled learners.

**Table 7 Lecturer Related Factors**

	Mean		Std. Difference	Error t	Sig. (2-tailed)
	male	female			
Am satisfied with the lecture	2.41	2	0.239	1.698	0.095
All my lectures seem to be well prepared when teaching our kind	3.08	3.35	0.256	-1.041	0.302
My lecturer handles me in a professional manner	3.16	2.83	0.237	1.416	0.162
All lecturer seems to be highly trained on handling disabled learners	3.43	3.26	0.225	0.764	0.448

### 5. Conclusion and Recommendation

One of the most striking points is that disabled students in TVET institutions are discriminated and isolated. Second, disabled students cannot access some of the school buildings since they were built without considering disabled students needs. Third, policies that provide cut point marks for students willing to joining TVET have highly restricted disabled students to enroll for vocational and technical skills in TVET. Teachers had positive attitude toward the disabled students, contrary to the fact that students found teaches to be unfriendly to them. Such information would at least provide a baseline from which to understand, improve and evaluate the progress towards providing vocations skills to disabled students in TVET institutions among youth with disabilities.

There are several key pre-conditions that may be required in order to improve the current accessibility and conditions of vocational and technical training in TVET institutions. The first is attitudinal ranging from government officials, parents and youth with disabilities themselves which can be done through positive role models. Another point is that skills training and instructional mechanisms must consider specific needs of youth with different types of disabilities before putting them together in regular. The issue of gender also needs further examination. Youth vocational training is often characterized as ‘male’ (especially issues around the mathematical and scientific subjects); however, the differences between accessibility of vocational and technical training for disabled men and women are rarely mentioned, let alone addressed, in TVET programmes.

TVET buildings which do not suit disabled learners need is another factor, however better coordination between the government and service providers could anticipate and mitigate this barrier. Programmes set up for adults may need to be more flexible when providing services to youth with disabilities. More innovative approaches are needed to ensure children and youth with disabilities enroll in and are retained in both formal and informal education and also relaxing enrolment criteria increasing the number of short-term courses, as well as offering specifically targeting programmes to disabled. There is the need for specialized training institutions to be upgraded and modernized, and mainstream training institutions be adjusted to include training of persons with disabilities. In support Kett (2012) recommended that TVET should ensure that tertiary education institutions attach the same importance to the professional future of students with disabilities as they do for other students and make greater efforts to translate the growing presence of students with disabilities in tertiary education into successful entry into the labor market and ensure that admissions and support services for students with disabilities give greater attention to access to employment in their strategies.

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