

**INTERNATIONAL JOURNAL OF
INNOVATIVE RESEARCH AND KNOWLEDGE**

ISSN-2213-1356

www.ijirk.com

Enhancing Access: What Information Do Kenyan Public Universities Provide on Accommodations and Services for Students with Hearing Impairments?

Dr. Agnes Wanja Wanjau

Manager, Pinnacle Institute for Sign Language & Disability Access
NAIROBI, KENYA

Abstract

Students who have hearing impairments usually require accommodations in order to participate fully in university life. Although the Kenya Constitution (2010), the Persons with Disabilities Act (2003), and the Special Needs Education Policy (2009) mandate access to university activities, little is known about real access to these in Kenyan Public Universities. This paper presents results of a study that investigated access to university education with regard to the information Kenyan Public Universities provide on accommodations and services for students with hearing impairments. The researcher reviewed available accommodation policies in 2012. A systematic review of the policies and a survey with disability service providers, interviews with university administrators, a survey with the hearing impaired students, and one-on-one semi-structured interviews with the hearing impaired students were used to summarize accommodations and other support services available for delivery of course content, assessment, and university life. None of the three institutions provided information on accommodations online or otherwise. We discuss the results with respect to information that potential students may require to make informed choices with regard to university education.

Key Words: Access, Accommodations, Information, students with disabilities, Public Universities, Kenya

Introduction

Students with disabilities constitute a minority group within the student population of any institution of higher learning and little is known about provision of accommodations and other services for these students at higher education. This paper presents results of a study on the information that Kenyan Public Universities provide on accommodations and services for students with hearing impairments. Students with hearing impairments usually need accommodations and other support services at higher learning to enable them participate fully in academic activities including classroom instruction, course assessments and co-curricular activities on and off-campus. Accommodations are supports and services provided to help students with disabilities to access the general education curriculum and validly demonstrate learning. Although the Kenya Constitution, 2010 (Republic of Kenya, 2010)¹, the Persons with Disabilities Act (PDA) (Republic of Kenya, 2003)² and the Special Needs Education Policy (Ministry of Education, 2009)³ mandate access to campus activities, little was known about real access to these in Kenyan Public Universities. The level of availability of accommodations and other learning support services that cater for the needs of this category of learners may be a critical pointer of these learners' success once they are enrolled in higher learning and degree completion (Getzel, McManus, & Greene, 2004)⁴. Universities are expected to describe the procedures for requesting for accommodations and other support services in their policies formulated by the directorates of disability services or other relevant university office. Results of policy review, interviews with disability services coordinators/ directors, a review of responses on questionnaires for the disability services directors/coordinators, university administrators, responses on student questionnaires and semi-structured interviews with the hearing impaired students provided in this paper provide as a baseline to an in-depth enquiry of students' experiences requesting and using accommodations during their university education.

Literature Review

Enrolment of students with hearing impairments in Kenyan Public Universities

There is a lack of accurate data on the proportion of students with disabilities at Kenyan Public Universities. According to the Ministry of Higher Education, Science and Technology, "...at the tertiary level, the enrollment level for people with special needs is very low" (Republic of Kenya, Ministry of Higher Education, Science and Technology, 2012, p.11)⁵. This is particularly true with regard to enrolment of students with hearing impairments in Kenyan Public Universities. The woefully low enrolment is attributed to poor performance of the hearing impaired learners in Kenya Certificate of Secondary Education examination (KCSE) which acts as university entrance criteria. The poor performance is partly attributed to lack of learning supports and accommodations for this category of learners at all levels of basic education. As such, the transition rate has remained very poor over the decades. The low enrolment is also attributed to school drop out occasioned by lack of accommodations for students with disabilities in the higher learning institutions. Students with hearing impairments are the most affected by a lack of accommodations.

Legal Framework for Provision of Accommodations and Services for Students with Disabilities in Kenya

Kenya Constitution (2010), in its Bill of Rights, Chapter 4, Section 54 outlines the rights of persons with disabilities to equal access to education and supports that should be given to this category of citizens to enable them pursue education at all levels with least challenges. It affirms a number of entitlements for a person with any disability:

Section 54. "(1) A person with any disability is entitled— (a) to be treated with dignity and respect and to be addressed and referred to in a manner that is not demeaning; (b) to access educational institutions and facilities for persons with disabilities that are integrated into society to the extent compatible with the interests of the person; (c) to reasonable access to all places,

public transport and information; (d) to use Sign language, Braille or other appropriate means of communication; and (e) to access materials and devices to overcome constraints arising from the person's disability." (Republic of Kenya, 2010, p. 37)

The PDA, 2003, is a legal framework for access to services and inclusion. Section 18, article 1 outlaws discrimination in recruitment solely on the basis of disability. The law requires Universities to make necessary adjustments and modifications to address the learning needs of students with disabilities. The Special Needs Education Policy (2009) is intended to be a source of guidance for Ministry of Education personnel as well as other stakeholders in the provision of education to students with disabilities. It aims at guaranteeing full participation of learners with special needs on equal basis with their peers at all levels of education. This document covers various issues among them equal access to services³. The disability policy reaffirms the rights of persons with disabilities to "full participation and integration" (MOE, 2009, p. 18). One of the overarching objectives of the Special Needs Education sub-sector is to put in place measures that ensure all educational institutions are accessible for learners with special needs. The second objective is to enhance utilization of accessible facilities, services, and assistive devices and technology, equipment and instructional resources. The third is to enhance quality and appropriate education in all educational institutions. The fourth is to build capacity of Special Needs Education personnel, including heads of educational institutions and to provide services required by learners with special needs in these institutions.

Higher Education Accommodations

Access to the educational and extracurricular activities in a higher learning institution may have different meanings depending on the context and on the characteristics of the student. For example, Lancaster, Mellard, and Hoffman (2001)⁶ looked at the accommodations reported by students with disabilities in community and technical colleges in three states in the United States of America. In the study, 10% to 15% of the students who responded reported using extended time, a quiet testing location, or a note taker. Only a handful (less than 10% of all participants) used additional services such as counseling, registration assistance, a study skills course, or tutoring. The focus of accommodations across this diverse group of students appeared to be on testing and on recording lecture note information (by means of a note taker). Supplemental learning strategies, advocacy strategies, and counseling fell outside the realm of direct classroom participation, and thus seemed to be de-emphasized in accommodation decisions.

For students who are hearing impaired, the main emphasis is on communication and access to information. These issues apply both to the classroom instruction and to general university life. Students at institutions with a specific focus on deaf students, such as Gallaudet University, have direct communication access to classroom and co-curricular activities, which are made possible by the use of American Sign Language (ASL). For hearing persons living on campus, access might mean having phone, Internet, and cable in their hostel rooms. Similar levels of access for students who are hearing impaired may include a number of services and devices that can be used to make programs and services intelligible to persons who either use a visual communication mode (such as ASL) or cannot hear speech without amplification. Ranging from assistive technologies to access assistants, these accommodations typically are intended either to amplify sound or to provide the means for visual communication.

Statement of the Problem

Although the Kenya Constitution (2010), the Persons with Disabilities Act (2003), and the Special Needs Education Policy (2009) mandate access to university activities, little is known about real access to these in Kenyan Public Universities. This paper presents results of a study that investigated access to University Education with regard to the information Kenyan Public Universities provide on accommodations and services for students with hearing impairments.

Purpose of the Study

The purpose of this study was to find out the information on accommodations that Kenyan Public Universities provided to students with disabilities.

Objective of the Study

The objective of this study was to investigate the level of access students who are deaf or hard-of-hearing have regarding accommodations at Public Universities in Kenya. We focused on the availability of information about accommodations and services on institutions' publicity materials, policy documents and websites. The rationale behind this approach was that students who seek information about institutional disability resources are likely to use print media and online information as part of their search.

Research Question

The study aimed to answer the following research question: What accommodations information is available in print and digital formats for students who have hearing impairments in Kenyan Public Universities?

Research Methodology

Design of the study

An exploratory descriptive survey design was used. Questionnaires, interview schedules, focus group discussion guides, observation checklists and desk research were used as data collection instruments in the study.

Population of the Study

The population for this study included Public Universities, which were in the official list of the Commission for Higher Education and which have been accredited to undertake University education in Kenya. According to this list there were seven (7) of these institutions in Kenya (Commission on Higher Education, 1985).⁷

Methods

Sampling Techniques

Three Public Universities were selected to constitute the sample population. The researcher applied judgmental sampling technique which is a non-probability sampling technique where the researcher selects units to be sampled based on their knowledge and professional judgment (Black, 2010).⁸

University of Nairobi was chosen because it is the oldest University in Kenya; Kenyatta was chosen since it was the first University to launch a Bachelor's course in Special Education in Kenya and currently admits the largest number of students with disabilities; Jomo Kenyatta University of Agriculture and Technology was chosen since it was the first University for Agriculture and Technology to be established in Kenya.

In the three Kenyan Public Universities, whole population sampling was employed for students who participated in the study. Any student who appeared in the university records as having a hearing impairment was included. All those students identified themselves as having a hearing impairment though not in the University records were also included in the study. The faculty, staff and service providers who participated in this study were selected purposively. Since the number of students with disabilities at higher education is small, whole population sampling was employed hence all students with hearing impairments in the three institutions were involved in the study. The administrators, faculty and service providers were sampled purposefully. Only those faculty members who had taught students with disabilities for at least one semester were selected for the study.

Instruments for Data Collection

The researcher used questionnaires, interview schedules, focus group discussion guides, checklists and document analysis to collect data.

Methods of Data Collection

The procedures used in the current study to address the research question focused on (a) accessing university web-based information about accommodations and related auxiliary services for students with disabilities and, (b) obtaining accommodations documents from each of the studied Public University in Kenya. Each of the three Public Universities was requested for policy documents to review in print or any other formats, that is disability policies, strategic plans and any other relevant documents. Print media and websites are an important starting point for all students looking for information about institutions where they might want to apply or enroll. Audio and electronic materials are also as important for a student seeking information on university accommodations. Three Public Universities were selected for the study. They were chosen on the bases of age, the scope of programs offered, and their history of admitting students with disabilities. The initial web review was conducted during September and October 2012. Campus coordinators of disability services were also requested to fill a questionnaire on what accommodations were available for their students. We contacted three individuals one from each university. The coordinators were also interviewed to further verify the information obtained from the questionnaires. We received responses from each of the coordinators to our inquiries. Seven students with hearing impairments, five males and two females were chosen purposively to participate in the study. They were requested to fill a questionnaire on accommodations that they utilized and they were also interviewed on their experiences with accommodations provided. In this study, pseudonyms were used for the studied institutions and the participants to maintain confidentiality. The pseudonyms for the Universities are letters A, B and C in upper case. For the student respondents, codes have been used whereby the first letters denote the disability that the respondent has, that is d for deafness and the digit to denote the respondent number. Wherever any of the letters A, B or C appears in upper case before the student's code, it denotes the university where the student was enrolled during the data collection period.

Methods of Data Analysis

The researcher analyzed independently the quantitative data quantitatively using SPSS and the qualitative data qualitatively using the deductive approach. The qualitative data was used to help understand and clarify quantitative data.

Findings

We begin our presentation of the results of the policy review with a summary of accommodations and services for students with hearing impairments available on universities' websites and other formats. Of the three Public Universities reviewed, none had information about accommodations for students with disabilities on their websites. The three universities did not include any information with regards to the Persons with Disabilities Act, and the Kenyan Constitution 2010, the two key legislative bases for providing accommodations for students at institutions of higher learning. Neither did they provide any information on the Special Needs Education Policy Framework, the document that provides guidance for provision of accessible education for all citizens, including students with disabilities at all levels of education. Moreover, the Public Universities did not provide any policy or procedures on how to obtain accommodations. There was no mention, at all, of accommodations that might be specific to students who are deaf or hard-of-hearing, particularly in regards to the communication accommodations.

Regarding recruitment, none of the universities provided information on their websites nor did they send out materials to let students with disabilities know that the universities welcome all students, including those with disabilities. This was corroborated by the response of the seven hearing impaired students during one-on-one semi-structured interviews. These students reported that they did not see any information on the universities' websites nor did they find materials in other formats from any of the Public Universities providing information on what accommodations and services were available for students with disabilities.

The offices mandated to provide information on accommodations in the Public Universities did not have any information, neither was the staff in these offices aware of what accommodations students with hearing impairments might require. This is because the personnel in these offices were not trained on disability. They therefore lacked relevant knowledge and skills in this area.

Table 1: Accommodations Available at Kenyan Public Universities' Policy Documents and on Websites

Accommodation or service	Number (%) N=3	Example
Extended time	0 (0%)	N/A
Alternative exam formats	0 (0%)	N/A
Assistive listening devices	0 (0%)	N/A
Note takers/Scribe	0 (0%)	N/A
Sign language interpreters	0 (0%)	N/A
Course substitution	0 (0%)	N/A
Other	0 (0%)	N/A

Table 1 indicates that none (0%) of the three studied Public Universities had information on accommodations available for students with disabilities either in their policy documents or websites.

Table 2: Frequency (%) Accommodations Utilized by Students in Kenyan Public Universities

Accommodation	Frequency (%)
Brail machine	2 (4.8)
Braille materials	18 (43.9)
Eye glasses	1(33.3)
Reading lens	1(33.3)
Lecture notes	5 (20.8)
Lecture notes through email	1(4.1)
Enough space for wheelchair	6(37.5)
Unit waiver	4 (5.9)
Unit substitution	3 (4.47)

The accommodations that students with disabilities reported utilizing in the universities are shown in Table 2 above. Clearly, these are of a very narrow range considering the array of accommodations available for students with disabilities. These responses are consistent with those from the disability services officers, which also indicate a narrow range of accommodations that they provided to students with disabilities. Although there was a wide range of accommodations listed in the questionnaire from which the administrators of disability support services were asked to indicate the accommodations and related services that they provide for students with disabilities, the number they indicated is very small. This means the universities are providing a very limited number and range of accommodations to this category of learners.

University A indicated that it provided Braille services and readers for students who are blind, while University B cited that it provides alternative exam formats and sign language interpreters. University C cited providing only Braille services.

As indicated in Table. 2 students cited utilizing other accommodations and services such as Braille machines, lecture notes in form of hard copies or email, enough space for wheelchairs, unit waiver and unit substitutions. It appears the offices of disability services or the other offices responsible for disability accommodation are not aware of all the services that the students utilize in these universities. This could be an indication of lack of coordination in the provision of support services and accommodations to students with disabilities in Kenyan Public Universities.

Although the students in University A appreciated that they received brailled materials, they pointed out that these were received only during examinations, as examination question papers and answer sheets. They were also concerned that the materials were often delivered behind schedule during examinations and they had to wait while non-disabled counterparts progressed with the examination. This caused them a lot of anxiety and they believe it impacts negatively on their performance in the examination. Students at University B cited that no reading materials were available in Braille that university, neither were Braille machines available for them.

University B indicated that it provided sign language interpreters for deaf students, however, one of the students who were interviewed (Bd1) cited that he did not get any interpretation services from the university; hence he was unable to follow lectures that are basically delivered orally. An excerpt from an interview with Bd1, who is deaf, confirms this:

I am not provided with an interpreter for communication skills and chemistry. The university should provide an interpreter for me in these units because I find them more challenging. The teachers stand in front and talk and talk but I cannot take any notes because I cannot hear what they are saying (Bd1).

I asked this student (Bd1) to tell me his experiences with lectures in the other units and he said:

I read books but I have difficulty understanding the content without someone to explain the concepts. For example, in mathematics you need to know how this is done; why this? and how this? and without explanation you can't follow anything. I therefore need an interpreter in all units to enable me follow lectures (Bd1).

The student went further to explain that even the learning materials that the university provides are too complex for him to understand. He said thus:

Even the textbooks that are you find in the university library have been written in very complicated language. I hardly understand their contents. These books are very different from the ones I read in the high school which had an easy to understand English. The ones in the university library are obtained from United Kingdom and are written very difficult English.

What Bd1 is saying above is that he does not receive interpretation services from the university and therefore finds it difficult to follow lectures because they are basically delivered orally. Though the mathematics concepts may be clearly explained by the lecturers, only his hearing counterparts benefit from the explanations since the instructions are basically delivered orally. He therefore misses out on very critical components of classroom instruction, that is, the content. He therefore hopes that the university would provide interpreters, as this would enable him benefit fully from the lectures. He further points out another important issue, the appropriateness of the language level used in the instructional materials. Generally, deaf students have challenges understanding English, since for most of them it is a second language, their first language being Sign language. Consequently, for them to comprehend any materials in English, the language ought to be simplified to their level of proficiency.

When the researcher asked another deaf participants to give his experiences with recruitment to the Public Universities during the focus groups, he cited that he did not see any materials from any of the Public Universities providing information on what accommodations and services were available for students with disabilities; nor was there disability depiction on the university application materials provided by the Joint Admissions Board, which was responsible for admission of students to Public Universities (Ad3). Most of the students at University A cited availability of facilities for students with disabilities as an important factor to consider in choosing to attend the university, yet University A did not provide any information on what accommodations were available for them. When the researcher asked a deaf participant enrolled in university A the question: “What interested you in attending this university?” His reply was that he had received personal recommendations from former students of the university (Ad4). Another deaf student said the following about the way he got to know about University A where he was enrolled at the time of data collection: “I got to know about it when I was about nine years old through an uncle who attended the university” (Ad3). The above accounts clearly indicate a lack of information on accommodations for students with disabilities in Kenyan Public Universities. Consequently students have to rely on secondary unreliable sources of information in considering the universities to attend. Notably also, all the three University websites did not have disability statements indicating that they welcome students with disabilities.

Table 3: Referrals and Other Services Available For students with Hearing Impairments at Kenyan Public Universities

Services	Number (%) N=3	Examples
Counseling	0 (%)	N/A
Tutoring	0 (%)	N/A
Registration Assistance	0 (%)	N/A
Accessible Transportation	0 (0%)	N/A
Campus orientation	0 (0%)	N/A
Extra-curricular campus activities	0 (0%)	N/A
Peer support/counseling	0 (0%)	N/A
Referral to local and national disability agencies	0 (0%)	N/A)
Tuition waive	0 (0%)	N/A)
Transition services	0 (0%)	N/A

Table 3 above shows that the Kenyan Public Universities did not provide any referral services for students with hearing impairments.

Summary of Findings

Students with hearing impairments lack comprehensive information on accommodations available in Kenyan Public Universities at the time of choosing what institution to join. As such they chose to join a university from a point of ignorance. This means they would later discover that the university did not provide the much needed supports and services for successful learning at these institutions. This led to frustrations due to inability to follow the curriculum in general university classrooms and environment. Thus the few students who join the universities drop out or are discontinued due to inability to meet the academic standards. The universities' websites also do not depict disability nor provide vital information on higher education to prospective students with disabilities. As such, these students are not able to make informed choices when it comes to selection of institutions where they would wish to pursue their studies after graduating from high school. All the hearing impaired students who participated in this study indicated that they relied on the information from friends or relatives in choosing universities where they would pursue their degrees. This source of information may not be reliable especially when one is making such important decisions. The information that students with disabilities had obtained during their visits to the higher learning institutions or interaction with institutional representatives had a direct influence on their selection of the type of postsecondary institution to attend (Miller, Rzonca, & Snider, 1991).⁹ These findings call for closer collaboration between high schools and universities (Fairweather & Shaver, 1990).¹⁰

Discussions

The findings of the present study have implications for a number of interest groups. First and foremost, these findings should be helpful to students who have hearing impairments who may choose to pursue university education. Second, administrators at Public Universities may also find the results of this study helpful when they develop and review accommodations policies and practices at their own institutions. Finally, Special Education teachers at the secondary school level may find this information helpful when preparing students to transit from high school to university.

Researchers such as Lancaster, Mellard, and Hoffman (2001) have indicated that in the United states of America students with disabilities cited a wide range of accommodations provided by the universities that they attend in order to make higher education accessible to them. The accommodations ensure that these students have equal opportunity in pursuit of higher education. Most of the universities provide information on their website regarding the accommodations that are available for students with disabilities and the procedure for requesting for these accommodations and other support services. However, as the results of this study indicate, Kenyan Public Universities do not provide the information that students with disabilities require on accommodations and other support services. The results have therefore the following implications to various stakeholders.

Students Who Have Hearing Impairments

The transition from high school to university presents enormous challenges, especially for students who have disabilities (Durlak, Rose, & Bur-suck, 1994).¹¹ As outlined by the Persons with Disabilities Act, the Kenyan Constitution, 2010, and the Special Needs Education Policy Framework, reasonable accommodations should be available to any individual who has a hearing impairment and requires them. Clear articulation of the available accommodations can help Public Universities meet the legal requirements of these laws and/or policy. However, students may not be aware about the accommodations that are available to them in these institutions, or whether

they can access accommodations like those they had utilized in secondary school. For example, students may find that they require additional services for instance, computer assisted real-time captioning or scribes when in a large undergraduate lecture hall than when they were in a secondary school classroom.

The results of the present study illustrate the information available on the accommodations available for students with hearing impairments in Kenyan Public Universities. Students looking at these institutions can expect to find minimal accommodations offered in the Public Universities. If students are looking for accommodations in higher learning institutions, the Universities only stated that they provided Braille machines, with only one university stating that it provided extended time on examinations and no other accommodations for instruction and assessment, nor counseling, tutoring, and other assistance specifically for students with disabilities. Students may need to be more proactive in obtaining assistance with classroom instruction and for activities that are not directly related to course instruction. They may also need to contact students who are hearing impaired who are currently on campus to learn how accommodations or services relevant to communication needs are met at that university. This information can be used as a starting point for students making the transition out of high school and into a Public University.

Public Universities

The present study highlights important issues for offices of disability services in Public Universities in Kenya. The first issue is the availability of information to interested or incoming students. Students with disabilities who are looking at university education may seek information about accommodations as part of their school selection process. Our results indicate that Public Universities in Kenya hardly make information available to students about the range of accommodations they can use in the classroom. Students who have hearing impairments may be more in need of supports such as, assistive listening devices, and sign language interpreters. Nevertheless they may lack information on other possible accommodations such as note taking, and live text-captioning technologies (e.g., C-Print or CART) since these are not often made available in secondary school settings (Cawthon, 2006)¹². If a university provides these accommodations but fails to make a list of them on directorate of disability services documents, students are likely to underestimate the supports that the university provides.

The second issue raised in the present study is where incoming students with hearing impairment can go to for support throughout the application, registration, and enrollment processes. Accommodations information was not found anywhere in the Public Universities or in any of the Universities' documents. Universities did not have functional offices of disability services. The few personnel employed to handle issues related to disability were not trained on disability hence they lacked competence in handling important disability related issues such as student accommodations. When looking for additional information, we found that it was often challenging to identify who acted as a resource for students with disabilities in the university. It is quite difficult to figure out where the best starting point may be for students with disabilities. Prospective students in particular may face similar challenges because of the variations in administrative structures from one university to the other. Where possible, office of disability services coordinators or student services coordinators could serve as points of entry for coordinating access to a university's various resource programs and services. "Point persons" from these offices would be available to answer questions from prospective students visiting the university; direct them to assistance in registering for courses, obtain accommodations for instruction and assessment, and help to facilitate increased access to campus life activities. Deliberate and advanced planning would be required to implement this or similar recommendations to collaborate across departments in providing support services for students entering university education (Eiland, 2006)¹³. Public universities should therefore establish functional offices of disability services as recommended in the model below for provision of accommodations and learning supports for students

with disabilities in Kenyan public universities developed in this study. The central anchor of this model is the “Accessibility Division” which provides a number of supportive services, systematized in a three-layer structure based on their closeness to the learner: accessibility services with a direct focus on the student, accessibility services dedicated to the student’s environment, and accessibility boosting services. Part of the accessibility services with direct focus on the student should be provision of information on accommodations available for students with disabilities in the universities and the procedure for requesting for the needed accommodations and support services.

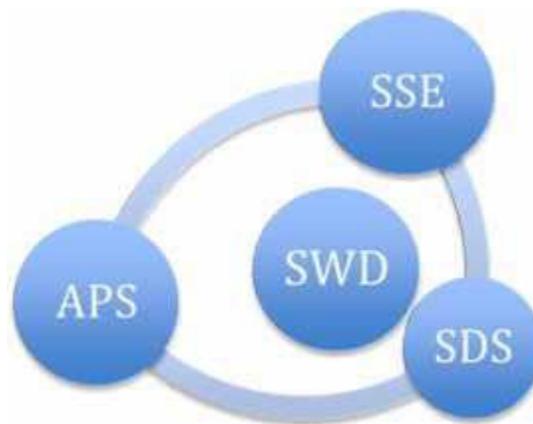


Figure 4.14: Accessibility division provision model

(Generated by Agnes Wanja Wanjau. 2016.)

Key:

SWD Student with disability

SDS Services addressed direct to students^[SEP]

SSE Services targeted to student’s environment

APS Accessibility promoting services

Secondary Schools

The results of the present study should also be helpful to secondary school Special Education teachers helping to prepare students for the transition from secondary school to university settings. The role of the Special Education teachers is not only to prepare students academically, but also to provide them strategies for self-advocacy. Self-advocacy strategies have been shown to be effective ways to be proactive in higher learning classroom settings (Durlak et al., 1994). Knowing which accommodations tend to be available, and which are not, is one way that Special Education teachers can help students identify areas where they will need to be more proactive in obtaining assistance. Special Education teachers can help students identify accommodations they have received at secondary school but that they may not have legal rights to under the Kenya Constitution, 2010, the Persons with Disabilities Act, and the Special Needs Education Policy Framework.

Perhaps even more important are the hidden challenges of living and working on campus as a student who has hearing impairment. Campus life accommodations such as videophones, interpreters for campus events, and captioning for media displays were, on the whole, not addressed by policies from campus offices of disability

services in the present study. Incoming students who use these communication devices or rely on interpreters or captioning may need to address these areas directly with office of disability services staff.

Another way to help strengthen the link between secondary schools and universities is for Special Education teachers to be familiar with the office of disability services personnel at universities frequently chosen by students in their schools. Special Education teachers can help students identify whom to communicate with and what questions to ask when evaluating the support available at universities that have drawn their interest. This bridge between support personnel can help facilitate a smooth transition for students from secondary school to university. Self-advocacy and communication strategies will be increasingly important as more students enter mainstreamed higher learning settings.

Conclusion

The findings of our investigation described in the present article indicate that information about accommodations and services is lacking in Public Universities in Kenya. All the three studied Public Universities have no information available online, in print or other alternative formats. Because the level of access students have to accommodations may be important to an enrollment decision, as well as a predictor of degree completion, Public Universities could benefit by being proactive rather than reactive in their practices regarding information about disability services. By failing to be proactive, a university may give potential students the impression that their needs may not be met, or will only be addressed after they enroll. This may be enough reason for prospective students either to choose a different university or to delay entrance into higher learning.

The office responsible for enhancing access to accommodations was quite different from university to university. In order for universities to be proactive regarding students with disabilities, it will be useful to provide information on accommodations on their websites and to have a clear link to the accommodations page from the main website for the university. Alternatively, prominent links to the disabilities page from key resources for students, such as enrollment, registration, and student services, would allow students to have efficient access to multiple points that required accommodations or assistance. Additionally, the universities should provide information on accommodations in print and other accessible formats. On a broader level, it may be helpful for Public Universities to adopt the Models of Provision of Learning Supports and Accommodations for Students with Disabilities in Public Universities developed in this study. The purpose of these recommendations is to provide structure in provision of learning supports and accommodations. Within this model, there will be a transparent access point for students, particularly those just making the transition from high school. For students with disabilities, this may be the first time they have to advocate for themselves. Providing clear and meaningful access points to university resources can play an important role in ensuring that they receive the accommodations necessary for success in higher education.

Recommendations

The first recommendation is that each Kenyan Public University should establish a functional Office of Disability Services with one of its key mandates being provision of information on accommodations available to students with hearing impairments. This information should be availed to the students in various accessible formats.

Second, Public Universities should hire qualified personnel with disability knowledge and skills to handle issues regarding disability accommodations.

Third, to address issues related to recruitment and admissions, information about available services for students with hearing impairment should be made widely available to potential applicants and persons in contact with such applicants for example, high school career counselors. The Universities should create materials and/or advertisements detailing the types and range of services available and procedures for accessing the available services. These resources ought to be disseminated to secondary schools, technical institutes, teacher training colleges and various disabled people's organizations. Similar information ought to be conspicuous in the universities' calendars and in any other publicity materials advertising the universities and the programs that they offer as well as in universities' websites. Staff from the universities ought to be among the team that visits high schools to seek applications from the Kenya Certificate of Secondary Education (KCSE) candidates for instance, during career awareness days. On the first meeting, the staff could explore with students with hearing impairments and any teacher in the schools who is knowledgeable in Special Education the types of accommodations that might be needed, for example, sign language interpreters services and notetakers and captioning as well as the procedures for obtaining them, that is, the person to be contacted. A frank discussion during this initial meeting will be crucial regarding what types of supports and accommodations will be provided or will not be provided at the particular university the student may be interested to join.

Fourth, Universities should provide procedures that will assist students to know what services are available in the institution. To this end, the following suggestions are made:

The Students ought to be urged to disclose their disability before reporting to the university. They may provide this information as they apply for admission or once they have been accepted. Disability disclosure will facilitate provision of appropriate accommodations and other auxiliary services to these students. For "non-identified" students with disabilities on campus, deliberate effort ought to be put towards ensuring that individuals who interact with these students know where to refer them for help. Information regarding the services offered by the Disability Services Officers ought to be provided in university publicity materials in accessible formats, for example, university newsletters, and websites.

Future Research

Future research will fill an important gap in the field by providing results on the role of the Ministry of Education in provision of learning supports for students with disabilities at higher education. Second, a national survey on students with disabilities enrolled in postsecondary institutions in Kenya should be conducted as such information would be useful in formulating policy on disability and planning for provision of learning supports and accommodations at higher learning.

References

1. Republic of Kenya. (2010). Constitution of Kenya. Nairobi: Government Printer.
2. Republic of Kenya (2003). Persons with disabilities act. Nairobi: Government Printer.
3. Ministry of Education. (2009). The national special needs education policy framework. Nairobi: Government Printer.
4. Getzel, E, McManus, S. & Briel, L, (2004): An effective model for college students with learning disabilities and attention deficit hyperactivity disorders, *Research to Practice*, 3(1), pp 1-8.
5. Republic of Kenya, Ministry of Education, Science and Technology. Policy framework for University Education. Nairobi: Government Printers.
6. Lancaster S., Mellard D., & Hoffman L., Current status on accommodating students with disabilities in selected community and technical colleges, University of Kansas, Center for Research on Learning (2001).
7. Commission on higher education. Status of universities. (1985). List of public Universities. <http://www.cue.or.ke/services/accreditation/status-of-universities>
8. Black K., *Business Statistics: Contemporary Decision Making*, 6th Ed. John Wiley & Sons, (2010).
9. Miller R., Rzonca, J. C., & Snider B, (1991): Variables related to the type of postsecondary education experience chosen by young adults with learning disabilities, *Journal of learning disabilities*, 24 (3), pp188-91.
10. Fairweather J. S, & Shaver D. M., (2016). A Troubled future?, *The Journal of Higher Education*, 61(3), pp 332-348.
11. Durlak D., Rose E., & Bursuck W, (1994): Preparing high school students with learning disabilities for the transition to postsecondary education. Teaching the skills of self-determination, *Journal of Learning Disabilities*, 27(1), pp 51-59.
12. Cawthon S. W., (2006): Findings from the National Survey of Accommodations and Alternate Assessments for Students Who Are Deaf or Hard of Hearing in the United States, *Journal of Deaf Studies and Deaf Education*, 11(3), pp 337-359.
13. Eiland S. E., Positive connections: Working together to prepare well in advance. Paper presented at Roots and Wings, a conference of the Postsecondary Education Programs Network, Louisville. (2010). <http://sunsite.utk.edu/cod/pec/products.html>