Teachers and learners' Attitudes towards the Teaching and Learning of Vocational Subjects: A Focus on Home Economics and Expressive Arts at ST Mzee School for the Deaf in Solwezi

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Abstract

The purpose of this study was to examine the attitudes of teachers and learners with hearing impairment in teaching and learning of home economics and expressive arts as vocational subjects of 2013 revised curriculum at ST Mzee (Pseudonym) Special School for learners with hearing impairment. A qualitative case study design was employed in this study. The school and participants were purposively selected since the aim of the study was to examine whether or not vocational subjects were positively or negatively perceived. Four teachers and eight learners with hearing impairment (Deaf) were involved in the study. Focus Group discussion method was used to collect data from learners and the teachers were interviewed. Data was analysed thematically by use of the research questions and emerging themes. The study established positive attitudes towards the teaching of vocational subjects by both teachers and learners. Learners tended to enjoy practical subjects more than theory oriented subjects and the theory component of the vocational subjects. However, learners reported that they did not have a wider choice of the vocational subjects to take because the school only offered two vocational subjects (Home economics and Expressive arts) and boys were compelled to take Expressive Arts while girls took Home economics. Teaching and learning was compounded with challenges of lack of materials for practicals as reported by both teachers and learners. Teachers further reported lack of adequate room for practical activities in expressive arts. Inadequate sign language vocabulary also hindered effective teaching of the theory component of the two practical subjects that were taught at the school. Institutions must strengthen the Continuous Professional Development (CPD) meetings to provide strategies for meeting the needs of learners with hearing impairments.

Key words: Expressive arts, Hearing Impairment, Home economics, Learners with Special Education Needs, Special, Vocational subjects.

1.0 BACKGROUND LITERATURE

In 2013, the Ministry of Education, Vocational training, Science and Early education rolled out a revised curriculum (Muzata, Mahlo & Mabunda, 2019). The old curriculum was overloaded with none practical skills, rather emphasized theory, hence the revision and subsequent roll out in 2014 (Ministry of General Education, Science, Vocational Training and Early Education, MESVTEE, 2013). The revised curriculum introduced a two tier pathway curriculum which included academic and vocational pathways. In the 70s through to the 90s, white colour jobs influenced most career choices, thus learners and students taking subjects that led them to being employed in the formal sector. However, available literature now shows more emerging positive attitudes towards vocational subjects than perhaps was before. Mubanga, Hock, Karim, Senteri, Mulenga, and Preckler, (2019), report positive attitudes by learners towards entrepreneurial subjects. To the learners entrepreneurial subjects empowered them with skills to start up their own businesses and become independent (Mubanga, et al 2019). Vocational education subjects constitute forms of knowledge, skills and values that every person should possess to help him or her deal with the physical world. The subjects also possess a potential relationship to the world of work. Hence, they help to prepare learners for post-school employment or vocational training. Alkan, Dogan, and Sezgin, (2001) define Vocational Education as that which provides knowledge, skills, and work habits in relation to a specific profession, and enhances various aspects of one's ability. Vocational Education and Training is education and training that is intended to equip learners with knowledge, skills and/or competences required for life and the job industry. Generally, vocational education normally refer to those aspects of the education process that involve, in addition to general education, the study of technologies and related sciences and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of the economic and social life, (Onazi in Adewale et al, 2017).

Learners with special educational needs equally deserve quality education which includes vocational education and training. The Salamanca Statement in UNESCO (1994) defines vocational preparation of students with special needs as one of the priority areas. It demands that schools should assist these learners to become economically active and provide them with the skills needed in everyday life. Vocational training provides students with skills responding to the demands of adult life, prepares for independent social functioning and makes them the contributing members of the communities. The provision of quality education and vocational training has not been a normal and equal trend in most countries worldwide. Learners with special educational needs have always received no or less type of education particularly vocational training.

Teaching vocational subjects is aimed at equipping the students with lifelong skills that will prepare them in the employment sector when they leave school. These subjects help the students to acquire skills that will enable them find decent

work in either formal or informal employment sector as this is in conformity with the Sustainable Development Goal number 8 of the United Nations (2015). This goal seeks demand for employment and decent work for all as this is purported to boost economic productivity in every nation. Alkan et al (2001) postulates that, vocation education provides knowledge, skills, and work habits which is in relation to a specific profession and enhances various aspects of one's ability. The process of vocational education, which is carried out to prepare young people for life, should provide a relevant learning environment, improvement of required basic competences and skills as well as cultivate interest and desired behaviors among the learners.

Teachers and learners undergo various experiences in effective delivery and acquisition of knowledge and skills in the subject areas of vocation. The experiences are a combination of positive in nature which yield good performance and negative experiences which are associated with the inadequacies in academic performance. The inadequacies are attributed to the teachers' incompetence, inadequate teaching and learning materials and negative attitudes of the learners towards the vocational subjects (Alkan et al 2001).

Spark (1999) identified the inadequacies of teacher qualifications in vocational skills as well as lack of appropriate teaching materials which have largely contributed to lack of quality vocational skills training of students in various institutions offering skills training. Noncolela (1999) also added that students' attitude towards the vocational subjects is one other challenge faced by teachers towards equipping them with quality skilled education. Students may not realize the important of taking the vocational subjects if they do not see any relevancy and this result into reluctance.

To address the current state of inadequate survival skills imparted in the learners the government of Zambia, through the Ministry of General Education revised the curriculum which provides an emphasis on a two tier system of education; thus the Academic and Vocational Career Pathways. The emphasis on vocational career pathway includes the teaching of practical subjects which is aimed at equipping the learners with survival and lifelong skills to meet the society and individual demands (MESVTEE, 2013). The Government was compelled to formally establish technical education with an aim of providing comprehensive training programmes that will train the young school going youths meet the needs and requirements of industry for skilled manpower. Equipping learners with survival and lifelong skills is in line with achieving sustainable developmental goals vision 2030 especially goal number 4 which demands and promotes life skills among others for the young people, seen to be a contributor to national development, (United Nations, 2015). Since the Vocational Subjects will provide sufficient practical skills to prepare learners for subsequent training or entry into the world of work, the curriculum should provide learners with opportunities for hands-on practical experience which is the essence for all the Vocational Subjects, (MESVTEE, 2013). The

Vocational Subjects in the revised curriculum are Agricultural Science, Art and Design, Computer Studies, Design and Technology, Home Economics (which comprise Home Management, Needlework and Crafts, Health Education, Fashion and Fabrics and Food and Nutrition), Physical Education and Music Education. All schools offering secondary education are expected to implement the revised curriculum offering subjects from both academic and vocational career pathways. The choice of vocational career pathway subjects in a school depends on the availability of trained human resource in specific subject areas and teaching and learning materials at the institution.

This revised curriculum caters for both the non-disabled and the disabled students as there is no alternative curriculum for learners with special needs (MESVTEE, 2013). Teachers of vocational education teaching students with hearing disabilities toward career preparation face several challenges. The first challenge is for sure the students' own attitude.

In order to have competent teachers, that can impart academic knowledge and vocational skills, an emphasis has been made to ensure that all teachers attend institutional based Continuous Professional Development (CPD) in order to discuss professional matters that are aimed at improving teaching and learning in order to enhance quality (MESVTEE, 2013).

The learners' attitude towards the subject is the one important factor that would enhance active participation during course of learning. The learners with hearing impairments require adequate learning materials as well as sufficient time for practical work to enable them acquire the desired concepts and skills. The teachers are expected to enhance their expertise in the subject matter through professional development, provision of adequate teaching and learning materials as well as building positive attitude for themselves and their learners in the classroom environment. This study focused particularly on learners with hearing impairments at ST Mzee School for learners with Hearing Impairment.

1.1 Statement of the problem

The Ministry of General Education recently revised the curriculum which now has two career pathways; the Academic and Vocational. The Vocational Career Pathway constitutes vocational subjects which among other focus areas are aimed at preparing learners for post-school employment or vocational training, (MESVTEE, 2013). Teaching and learning of vocational subjects involves sufficient and intensive practical skills training that enables the learners be fully apprenticed for future occupational life. Learners with special educational needs deserve similar but special attention to enable them acquire the necessary skills and knowledge which is obtained by other learners. The learners with special educational needs in particular the hearing impaired deserve quality education which is supported with adequate teaching skills and learning resources in a conducive learning environment. The MESVTEE (2013) states that "learning institutions should

ensure that learners with special educational needs are provided with appropriate resources for quality learning". However, the provision of vocational education in special schools has not been explored to establish its efficacy on learners with hearing impairment. More particularly, it is not clear what the attitudes are by learners with hearing impairment and their teachers towards vocational subjects such as expressive arts and home economics. This study was therefore conducted to establish the teachers and learners attitudes towards the implementation of expressive arts and home economics as vocational subjects to learners with hearing impairment at ST Mzee School for the Deaf in Solwezi district.

1.3. Research questions

The study was guided by the following research questions:

- (a) What is the attitude of school administration towards supporting home economics and expressive art subjects for learners with hearing impairment?
- (b) What do teachers say about the attitudes of learners with hearing impairments towards vocational subjects?
- (c) What are the attitudes of learners with hearing impairment towards learning vocational subjects?
- (d) What are the challenges of teaching vocational subjects to learners with hearing impairment?

1.4 Theoretical framework

This research was guided by the Student's Personal Professional concept or the Competence-Based Vocational Education which is based on the Constructivism Theory of Piaget.

Competence-Based Vocational Education (CBVE) is similar to performance-based teacher education which requires that knowledge, skills and attitudes to be taught in a vocational program are those required by workers to perform successfully in a job or occupation. This usually involves a series of learning experiences that include background information, practice and performance of the required skills in an actual or simulated work setting (Watson 1991)

Competence-Based Vocational Education is based on a constructivist learning paradigm of a Swiss Psychologist Jean Piaget where the development of students' personal profession knowledge is emphasized (Schaap, 2011).

Birenbaum (2003), Eraut (1994) and Onstenk (1997) in Schaap (2011) postulates that senior secondary vocational education needs to deliver reflective practitioners who possess an adequate knowledge base including relevant domain-specific and general knowledge, who are able to solve complex problems, and who have the ability to acquire and develop new knowledge during further professional career. It is expected that competence-based learning in senior secondary vocational education stimulates learning that prepares students sufficiently for working in

today's society. Research also has it that the students' and teachers' perceptions do influence the nature and quality of teaching-learning processes. The teachers' and students' perceptions are important because divergence and convergence between the perceptions have proven to be useful variables in investigating teaching-learning processes, (Fraser 1998, in Wesselink 2010). Linking this research with the proven theory, the findings will bring out the experiences encountered by both teachers and learners and thereby showing the perceptions as they strive to reach out to their aspirations. An important reason for the popularity of the concept of competence of the expectation held by stakeholders in the vocational education and training field that the gap between the labour market and education can be reduced through competence-bases education. The underlying idea is that vocational education should enable students acquire the competences needed in their future professional and in society as a whole, (Jenewein et al 2002) in (Biemans et al 2004).

3.0 METHODOLOGY

This study adopted a qualitative approach. A case study design was used to study teachers' and hearing impaired learners' attitudes towards teaching and learning vocational education subjects such as Home Economics and Expressive Arts at ST Mzee Special School in Solwezi. In-depth data was collected by means of interviews and focus group discussions. Qualitative data analysis was done through critical listening, comparing of responses and organizing similar responses in themes by way of interpreting the views, perceptions and attitudes that were collected from the respondents. The target sample was eight (8) Grade eleven (11) learners with hearing impairments and four (4) teachers teaching Home Economics and Expressive Arts vocational subjects offered at the special school. The learners were divided into two focus group discussion of 4 participants each. Both learners and teachers were purposively selected. According to Foley (2018) researchers use purposive sampling when they want to access a particular subset of people as all participants of a study are selected because they fit a particular profile. The kind of sampling provided for predetermined knowledge that at grade eleven, the learners should have had adequate experiences to share in learning the two vocational subjects. At ST Mzee Special School, there were only 8 learners with hearing impairment in grade 11 in the year of study. Muzata (2020) notes the complexities of sampling in special education research that numbers may be a limitation in collecting adequate information for a study in special education. However, as a case study, the sample was adequate enough to provide the needed data.

Data were collected using the unstructured method of data collection from the two groups of respondents these were teachers and learners. An interview guide was used to collect data from the teachers. Having realized the advantages of interview, as according to Kombo and Tromp (2009), the researchers used this

instrument because of the advantages that unstructured interviews are flexible allowing participants to freely express themselves and provide the needed depth of information required for the study.

The researchers also found it ideal to collect the views and perceptions towards learning of vocational subjects by engaging the learners through focus group discussion. The method aims at obtaining data from a purposely selected group of individuals. This form of data collection allows free discussion of participants and interaction among the group members.

Data gathered from interviews and focus group discussions were analyzed using the thematic analysis method. The method is used in qualitative research whose purpose is to identify patterns of meaning across a dataset that provide answers to the research question being addressed. The patterns were identified through a rigorous process of data familiarisation and all participants were given codes within the same school which included the teachers. The codes given were such as HET1 or HET2 represents teacher from Home Economics department, EAT1 or EAT2 represents teacher from Expressive Arts department and G11AP1 or G11AP2 represents a pupil from Grade 11 A or B class, this was a class for the hearing impaired learners. G11BP1 or G11BP2 represents pupil from Grade 11 B class, a class for learners with non-hearing impairments. Collected data from the hearing-impaired learners was transcribed from sign language to spoken by an interpreter who happened to be one of the teachers at the school and then the researcher transcribed it to print. For ethical reasons, a pseudonym (ST Mzee Special School for learners with hearing impairment) has been used to represent the name of the school where the study was conducted.

4.0 FINDINGS OF THE STUDY

The findings have been presented according to the major and subthemes that emerged. The major themes were the attitudes by school administration towards supporting home economic and expressive arts; teachers and learners' attitudes towards teaching and learning of vocational subjects respectively and the challenges encountered when teaching and learning vocational subjects.

4.1. Attitude by school administration towards supporting Home Economics and Expressive Art subjects

In this theme, support from administration towards the teaching of Home Economics and Expressive Arts has been presented. Classroom space, teaching and learning materials and challenges related to the teaching and learning of the vocational subjects under study have been presented.

4.1.1. Support related to professional development of teachers.

The study established that school administration was supportive of vocational subjects for learners with hearing impairment although they faced challenges with teaching materials. One of the participants said:

the department of Home Economics has been receiving text books for teachers and pupils for all grades and sometime back the school received some money which was used to buy a fridge and kitchen utensils. Other donations were stoves, sewing machines and a fridge. The school administration sometimes gives us money for practical lessons especially at the end of each term for practical assessments." (HET1, Female, 29/05/2019)

The sentiments from participant HET1 stated that the department received some equipment from the ministry headquarters, and donations from independent donors as well as financial assistance from the school administration.

Teachers of expressive arts and home economics reported that they received professional development support in terms of trainings to update their skills in teaching the subjects, the following excepts demonstrate positive attitudes towards supporting vocational subjects:

We have professional meetings in our subject. Professional meetings are well time tabled and these are considered as Continuous Professional Development (CPD) meetings and we hold these meetings together with other teachers from other departments because we are few in the departments. (EAT1, Male, 29/05/2019).

According to participant EAT1 professional meetings were planned for and held but were compelled to meet together other teachers from other departments because the numbers in each department were few. The other participant added on that,

The professional meetings are timetabled but the timetable is not strictly followed sometimes because of some activities which are not planned for disturb the meetings. Sometimes when we want to hold our meetings the head teacher or the deputy tells us to go and supervise the pupils because the school is receiving visitors or we take them for sports or other unplanned activities (EAT2 Male 29/05/2019).

When asked about subject association meetings and conferences for the Home Economics department, this is what the respondents had to say; participant HET1 said:

I have been attending most of the subject association meetings organized at the district and also attended the conference for Home Economics in the province. I learnt a lot about my subject at the conference. (HET1, Female 29/05/2019

According to participant HET1, she has been attending most of the meeting organized at district as well as provincial levels where she had learnt a lot regarding issues pertaining to the subject. The EAT2 participant had this to say;

I have attended many meetings organized within the district where we discuss a lot of issues about Expressive Arts and I have been attending the JETS conferences because I am a member of the executive for ETAZ in the district. I have been taking pupils for exhibitions at the JETS conferences when I was at my previous school. (EAT2 Male, 29/05/2019).

Participant EAT2 acknowledged attending the subject association meetings at both district and provincial levels as well as taking the learners for exhibitions at the conferences. Participant HET2 had this to say;

There are many meetings for Home Economics organized at the province especially during the first and second term and I have been attending most of them because we are asked to attend as teachers of Home Economics but at provincial and national level I haven't been going because the school has little money to sponsor all of us in the department at the same time. (HET2, Female, 30/05/2019).

Participant EAT1 had the following explanation concerning attending subject associations meetings,

I have been attending the subject association meetings organized at the district level where we discuss a lot about Expressive Arts but I have not attended any at the provincial level. Those who attend at the provincial level when they come back they are given chance to explain to us during the district meetings. (EAT1, Male, 29/05/2019)

According to the responses regarding the question whether teachers attend subject association meetings and subject conferences from the four participants, HET1 and EAT2 reported that they were privileged to attended subject association meetings organized at the district and the provincial levels where issues pertaining to their respective subjects are discussed. At provincial levels the participants also were privileged to take learners for exhibitions in their subject areas which provided experience to the teachers. Participant HET2 and EAT1 have also been attending subject association meetings organized at the district however they haven't

attended any of such meetings and conferences at provincial and national levels for the reason of financial constraints as reported by HET1.

4.1.2. Lack of classroom space

In an interview with another participant from the same department (EAT2), he explained the challenge faced in the department that:

The challenge we experience is inadequate special room for Expressive Art activities. We teach the subject in a regular classroom and for this reason we fail to display the pupils' finished items because the moment you leave them in class they are always tampered with or picked by other learners who use the same room. (EAT2 Male, 29/05/2019).

Inadequate classroom space particularly specialized rooms for the practical subjects was a challenge. The use of regular classroom did not provide much security for the materials of the department because other learners used the same rooms that, in most cases, were fond of tampering with the displayed items.

4.1.3. Teaching and learning material

Inadequate teaching and learning materials were the main challenge that hindered selection of other vocational subjects in the schools. As a result, learners were restricted to only taking home economics and expressive arts as vocational subjects. Below is what one of the teacher said:

Inadequate teaching and learning equipment has been a challenge and this hindered the school to offer the proposed subjects in the Vocational career path way (EAT1 Male 29/05/2019).

Another reported that:

The school had decided to pick on the two subjects because the teachers available for vocational career pathway are only for Home Economics and Expressive Arts and there are no other special rooms apart from one class for Home Economics only which is also used as a classroom for other lessons. (HET1 Female 29/05/2019).

Thus, from findings, learners with hearing impairment have an opportunity to learn other subjects such as computer studies, Business studies, Industrial Arts, Agriculture science among others but the school's capacity to offer these subjects was restrictive.

Effective teaching of home economics is being restricted by lack of teaching equipment. Participant EAT1 had this to say:

The department has very few items for teaching the subject especially for practical lessons such as for pottery and sculpture which require special equipment. The department has not received enough money to buy such items but only sometimes some money to buy things like paint, beads and paper for drawing and painting lessons" (AET1, Male, 29, 05, 2019).

A home economics teacher reiterated the challenge of teaching material. She said:

Some practical tasks in the syllabus require expensive materials to make so it is difficult to teach them because the school has no enough money to buy the required materials. (HET2, Female, 29/05/2019.

4.1.3. Challenges related to the syllabus

Other challenges related to the syllabus for the vocational subjects that were being taught at the school. Some teachers reported that even though the subjects were practical, there was too much theoretical content in them, which made teaching learners with hearing impairment difficult. Participant EAT1 said:

The theory part is challenging and spend a lot of time than practical lessons... the syllabus has disadvantages it is too theoretical and this affects performance for the learners with hearing impairments... the practical lessons will help them be self-reliant than theories... they have no much time to read too many notes... the content is boring for the hearing impaired learners."(EAT1, Male, 29/05/2019)

The participant EAT2 from the same department had this to say:

The syllabus has theory and practical areas but the theory part is difficult to explain because of some words are not easy to explain in sign language... the hearing impaired pupils are slow and they take too long to grasp the concepts especially the theory work. (EAT2, Male, 29/05/2019)

The other participant from the same department had a different view:

"The syllabus is too bulky especially for the Home Management... too many notes for every lesson... less practical activities ... requires a lot of finances to buy materials for practical tasks." (HET1, Female, 30/05/2019).

4.2. Teachers' attitudes towards vocational subjects for learners with hearing impairment

The teachers were asked about the general perception towards teaching of vocational subjects to learners with hearing impairments. The teachers were generally positive about the teaching of vocational subjects to learners with hearing impairment. They said the subjects were more helpful to learners in a job scarcity environment because they would acquire skills for self-sustenance. The following observations were made by teachers:

The Home Economics teachers (HET1) had this to say,

Home Economics is a good subject especially for the learners with hearing impairments because the skills they learn can be very helpful for them in their future life. It is not easy for these learners to get employment because some jobs are not fit for them because they cannot hear so the skills they learn for Home Economics can make them start their own businesses such as opening up places where food is sold or selling different things from sewing and weaving. The only problem I find with these learners is that they are too slow and they forget easily. (HET1, Female, 29/05/2019).

Participant HET2 had similar view about the advantage of the subject but raised concerns regarding the syllabus and this is what she said:

the syllabus for Home Management at senior level is too bulky with a lot of notes and has few practical lessons...the department is not very equipped so sometimes the learners bring some things from their homes... we also carry things from our homes...it is a challenge for the school to find money to be buying things for practical lessons. (HET2, Female, 30/05/2019).

4.3. Attitudes of learners with hearing impairments towards vocational subjects - Teachers' voices

4.3.1. Pupils' Interest in vocational subjects

It was learnt from participants that vocational subjects were more liked by learners with hearing impairment than academic subjects. The subjects were said to be interesting and engaging to learners with hearing impairments.

The hearing impaired pupils are very interested in practical work in Home Economics and they do not miss the lessons. When they are given work to do for practical activities they do not want to stop to go for the other subjects when the period for Home Economics finishes and the performance in this practical subject is very good compared with what they get in other subjects like social studies or science. (HET1, Female, 29/05/2019).

Participant HET2 affirmed what HET1 stated and added on as follows:

The hearing impaired pupils are very much interested in this subject and they do well including the boys. The boys sometimes do very well than the girls in Home Economics. (HET2, Female, 30/05/2019)

The participant from the Expressive Arts Department had this to say about the attitude of learners towards vocational education subjects; EAT1 said:

It is a favorite subject for the hearing impaired because it is handson and they enjoy the practical part, they even do better than other learners (EAT1, Male 29/05/2019).

A teacher said:

The pupils have been producing a lot of art works which were displayed during JETS and have always been winning because of their fine works. Some of these projects are kept in the store room and some were carried by pupils (HET2, Female, 29/05/2019.

The study further discovered that learners with hearing impairment did not like the theory component of the same vocational subjects that were provided. The following excerpts explain participants' views on this emerging theme:

The view for EAT2 was as follows:

The pupils who are hearing impaired need to be encouraged in theory part of the subject, it's like they do not have much time to read and study the notes. (EAT2, Male. 29/05/2019).

From the verbatim excerpts, it is clear that learners with hearing impairment prefer vocational subjects to theory-based subjects. The activities in home economics and expressive arts raised interest in doing tasks given and improved attendance to school. From the findings, there appears to be an assumption that learners with hearing impairment perform better in the vocational related subjects than the theory-based subjects.

4.4. Attitudes of learners with hearing impairment towards learning vocational subjects

4.4.1. Lack of choice of vocational subjects

The participants in a focus group discussions reported that they had no choice of what vocational subjects they would take. The following were the responses:

The head teacher asked us to choose Home Economics or Expressive Arts and I chose Home Economics because I like the subject. (G11AP1, Female, 31/05/2019).

Another participant said:

We were asked to choose between home economics and expressive arts and I chose expressive arts because it's what I like, I started art in Grade 8 and I want to continue (G11AP2, Male, 31/05/2019)

The findings revealed that all the four boys chose Expressive Arts class while the 4 girls were all taking the Home Economics subject.

4.4.2. Lack of Teaching and Learning materials

Like what their teachers reported, learners also reported lack of teaching and learning materials in both Home Economics and Expressive Arts. Participant G11AP3 said:

There are no many things to use when we learn art for the school. The teacher says we cannot make some things because there are no machines but we do paintings and making things using beads. (G11AP3, Male, 31/05/2019)

Participant G11AP4 said:

The teacher has not given us the syllabus for Art subject so we do not know what will come during the examination. G11AP4, Male, 31/05/2019

Another participant said:

We are not given a lot of practical work to do like making things using clay and making things using wood... the teachers says the school has no much money to buy things to use. G11AP5, Male, 31/05/2019

The focus group discussion revealed that there were few teaching and learning materials for both subjects. The text books were very few and most often the teachers always wrote the notes on the chalk board for the learners to copy. Regarding other learning resources the group reported that in most cases the learners were asked to provide their own materials from their homes to enable them have practical lessons. The inadequate learning resources resulted into having less practical lessons especially in Home economics subject.

5.0 DISCUSSION OF FINDINGS

This study explored the attitudes of teaching and learning selected vocational subjects at ST Mzee Special School for learners with hearing impairment in Solwezi District of North Western Province. The discussion focuses on the emerging issues from the findings which included the limited choice of vocational subjects, the lack of teaching and learning materials, limited space for practical and limited sign language skills for teaching vocational subject theory component.

First, it must be noted that teachers and learners attitudes towards a subject is influenced by many factors. For learners, it is important that their career pathway is laid straight way from primary school. The Zambia curriculum framework 2013 clearly states that the curriculum is a two tier pathway career meaning learners can choose the vocational or the academic pathway (MESVTEE 2013). Clearly, the subjects indicated in the curriculum framework should be available in schools in order for learners to make wise decisions about their future career. Restricting learners to a choice of only two vocational subjects creates a nondemocratic educational environment. For learners with hearing impairment, whose performance in the academic pathway has raised a lot of debate, the maximization of the vocational pathway would provide learners with well laid career pathway to pursue right from primary through secondary to tertiary levels of education. This study established that learners with hearing impairment were more interested in the vocational subjects and did not like the theory part of the subject. This attitude is compounded by the lack of skills in sign language by teachers when it came to teaching the theory part of the subjects. The lack of sign language skills among teachers in Zambia has been a source of worry in the teaching of learners with hearing impairment (Muzata and Mahlo, 2019; Muzata, 2017; Mulonda, 2013). This concern needs to be addressed in order to provide quality education to learners with hearing impairment in schools.

A study by Alkans, Dogan, and Sezgin, (2001) also attributes teachers' incompetence, inadequate teaching and learning materials and negative attitudes of the learners towards the vocational subjects, (Alkan et al 2001). Although Spark (1999) identified inadequacies of teacher qualifications in vocational skills, this study established that the teachers were qualified and underwent adequate professional development capacity building. However, the limitation in sign language needs to be specifically addressed. The findings of this study resonate with Yukani (2013) study on factors affecting teaching of vocational skills in selected schools in Solwezi district. Although Yukani's study did not focus on learners with hearing impairment, the challenges affecting the teaching of vocational skills appear to be the same. According to Yukani (2013), while teachers at primary school level were eager to teach vocational skills, a finding that was similar to this study, primary schools had no tools, equipment, essential materials and specialised rooms for vocational skills education. Just as Yukani (2013) recommended, teachers need the support in terms of the areas of deficiencies such as infrastructure, provision of tools, equipment and materials to all primary schools. Further, for practical based subjects and specifically vocational based subjects for learners with hearing impairment who depend on sign language, a practice based preparation of teachers in skills specifically meant to teach these learners is needed. Muzata & Ndonyo (2019) emphasise the need for practice based orientation and preparation of special education teachers to be able to deliver skills competently.

Since there is appreciation for vocational subjects by both teachers and learners in schools and the reality facing unemployment globally today, support for vocational subjects, which Mubanga, Hock, Karim, Senteri, Mulenga, and Preckler, (2019) refer to as entrepreneurial education meant to broaden employment opportunities especially self-employment should be supported. Vocational subjects impart skills in learners. Impartation of skills gives long life skills workable in the absence of formal employment. In any case, such skills mean broadening the learners' capacities to be employers themselves in future. For learners with disabilities, support for them in terms of vocational teaching and learning would enhance their capabilities and overturn the negative perceptions towards them that they are incapable of being productive members of the society. The school system can change such long term negative attitudes towards persons with disabilities by empowering them with skills in what they can do best. This study established that learners with hearing impairment like and perform better in vocational subjects such as expressive arts and home economics.

On the challenge of sign language, there is need to utilise several options to ensure effective use of the theory part of the vocational subjects to learners with hearing impairment. The use of competent sign language interpreters is one option besides training teachers themselves. Current technologies also suggest that education for learners who are deaf should be made easier by use of computer software used to generate signing avatars necessary for interpreting technical concepts that pose particular hurdles for sign-language interpreters especially in technical subjects like science and math (Ndonyo, Matafwali & Chakulimba, 2017). Ndonyo *et al* (2017) emphasises:

The use of teaching and learning resources can-not be over emphasised when teaching the hearing-impaired pupils. The hearing-impaired learners find it very difficult to learn in abstract. They learn better when they are involved in touching and manipulating teaching and learning resources they can see (P: 15561).

Schools should ensure that they are well equipped with necessary tools to teach vocational subjects. It was encouraging to note from this study that there were adequate professional development meetings that upscale the teaching skills for teachers in vocational subjects addressing a concern that Ndonyo et al (2017) raised that effective teaching for learners with hearing impairment was not taking place because specialist teachers were not using effective methods of teaching the hearing-impaired pupils. Thus, from this study, no challenge from learners was reported relating to methodologies and understanding of content based on teaching methods.

From the study findings, there is hope that learners with hearing impairment can achieve through the provision of quality vocational education. There is need to support the initiative to realise the goals of the 2013 curriculum framework.

Students should further be encouraged to hold in positive regard the advantages that accrue with vocational subjects in order to address issues of unemployment in the nation

6.0. RECOMMENDATIONS

Based on the findings of this study, the following recommendations could help address the gaps observed through this study.

- (a) The Ministry of General education should support the teaching of vocational subjects for learners with hearing impairment by providing adequate practical rooms and specialised equipment.
- (b) The school should broaden the choice of vocational subjects so that learners with hearing impairment can have a free choice within their capabilities and interest to study subjects they want.
- (c) The Ministry of General Education should provide alternatives for effective sign language communication during lesson delivery by teachers. The use sign language interpreters and software would help effective delivery of content to learners with hearing impairment.

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