

**MIDLANDS STATE UNIVERSITY**



**FACULTY OF EDUCATION**

**DEPARTMENT OF APPLIED EDUCATION**

**IMPLEMENTATION OF TECHNICAL VOCATIONAL SUBJECT IN GUTU EAST  
SECONDARY SCHOOLS**

**BY**

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**(R126109X)**

**A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF APPLIED  
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## APPROVAL FORM

The undersigned certify that they have supervised/read and recommend for the acceptance, a research project entitled:**Implementation of Technical Vocational subject in Gutu East Secondary Schools**: This was submitted by **Mudzana Eneresin** partial fulfillment of the requirements for the Bachelor of Education Degree In Fashion and Textiles(Midlands State University).

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Date

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Signature of External Supervisor

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Date

## **DEDICATION**

To my late husband Maxwell my one and only child Charity, my unborn baby, my late father and mother who taught me to be pursue persistently in anything my heart desires.

## **ACKNOWLEDGEMENTS**

I wish to extend my sincere appreciation and gratitude to my supervisor Mrs B. Shoko for the guidance provided towards success of this project and above all her patience and tolerance throughout. Gratitude is also given to my sister Elizabeth for financial support and my friend Mavis for encouragement. I also thank the head of Zimbizi High School, Mr Matyokurebwa for encouraging me throughout the project.

## **ABSTRACT**

The study sought to analyze how Technical Vocational subjects are implemented in Gutu East Secondary Schools as well as ways of enhancing effective implementation of Technical Vocational subjects such that it produces employable and self-reliant school graduates. The study was motivated by the increasing numbers of school leavers who are unemployed and cannot sustain themselves through use of locally available resources. 20 secondary schools were identified in Gutu East and from which four schools were randomly sampled. Participants include four heads of schools that offer Technical Vocational subjects, 40 Technical Vocational school pupils and 12 Technical Vocational teachers. Pupils and schools were randomly sampled while heads and teachers were purposively sampled. A questionnaire was used to collect data from pupils. Structured interviews were used to collect data from school heads and Technical Vocational teachers. It was revealed through this study that there are a lot of constraints to effecting implementations of Technical Vocational subjects in Gutu East Secondary Schools. According to the findings these challenges include poor funding, shortage of human resources, material resources as well as negative attitudes of pupils. According to the findings, school leavers fail to get employment or to organize self-reliant projects due to poor skills acquired during years of schooling, negative attitudes towards manual labour, poor 'O' level results as well as lack of funding to start projects. It was concluded that implementation of Technical Vocational subjects in Secondary Schools is faced with a lot of challenges. It was therefore recommended that the government should invest heavily in capacity building of those implementing Technical Vocational subjects. Schools should form projects to generate funds to help sustain the Technical Vocational education. Exchange projects between industry and school through attachments should be offered by the Ministry Of Education as well as offering entrepreneurial skills to Technical Vocational students so that they are capable of managing self-help enterprises.

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# CHAPTER 1

## THE RESEARCH PROBLEM

### 1.0 Introduction

Technical vocational subjects have been made compulsory to all pupils in Zimbabwe Secondary Schools so that school graduates are self-reliant and employable (Mupinga, Burnett and Redman, 2006). This study focused on how Technical Vocational subjects are being implemented in Gutu East Secondary Schools. The chapter will highlight the background to the study, statement of the problem, research questions, and significance of the study, delimitations, and assumptions of the study as well as definition of key terms.

### 1.1 Background

On attaining independence in 1980, the Zimbabwean education system underwent several reforms to correct the past ills of discrimination against blacks (Zvobgo, 1999). The introduction of Technical Vocational education in schools come as a result of the unpopular F2 system of the colonial era (Peresu and Nhundu, 1999). The F2 system was phased out at independence because it was racially tailored and hence viewed as inferior. It was at this time that the new government embarked on reforms in the education sector. This led to the setting of the Nziramasanga Presidential Commission of Inquiry in Education and Training (Mupinga et al, 2006).

At independence the current secondary education was academically satisfactory but failed to cater for the majority of students, neither did it prepare them for the necessary skills needed in the world of employment ( Nherera, 1999). Having established the above facts the commission of inquiry made several recommendations to redress the shortcomings of the education system of

the time. This led to the commission recommending the vocationalisation of the secondary school curricular such that it will cater for various talents and interests of the Zimbabwean children, hence make it relevant to the needs of the children and the nation's developmental needs (Raftopoulos, 2003)

The focus on Technical Vocational education was mainly aimed at reducing shortages of skilled workers and was viewed as a possible solution to the increasing youth unemployment crisis in the country, (Nherera, 1999). The Zimbabwe Education Act (1991) makes a vow to drift from quantitative expansion in education to quality and relevance in education through the vocationalisation of the school curricular, (Raftopoulos, 2003). This resulted in the introduction of practical subjects such as Metalwork, Woodwork, Fashion And Fabrics, Foods and Nutrition, Technical graphics and Building Studies and these subjects were meant to equip the learner with skills and knowledge to plan and use the available resources, hence mitigate poverty and finally raise one's standards of living. The Zimbabwe School Examination Council Syllabus for 'O' level (2009-2012 p5) Fashion and Fabrics (6051), Food and Nutrition (6064) and Home management (6078) states the objectives of Fashion and fabrics to include "develop skills for self-reliance and consumer competence." Thus the major focus of Technical Vocational education in schools is to do away with high unemployment rates in the country.

Currently in Zimbabwe, Technical and Vocational education offered in some schools is designed by the Higher Education Examination Council (HEXCO). HEXCO curricular are designed in close consultation with industry and commerce (Zendera, 2013). Thus such type of education is well designed in preparation for one's work life after leaving secondary school. According to Policy Curricular number 77 of 2006 all secondary schools in Zimbabwe are obligated to teach Technical and Vocational subjects to all pupils. This aims at empowering the youth with

appropriate knowledge and skills so that they own means of production and can run sustainable projects after leaving schools (Mupinga et al, 2006). Thus this type of education as explained by the commission of inquiry is an integrated course that marries theory to practice and produce self-reliant citizens who are also employable, hence the products of this education system acquire the necessary culture needed for the labour market.

It is against this background that this study seeks to analyze how Technical Vocational subjects are implemented in secondary schools particularly those in Gutu East District. The study is motivated by the rate of unemployed school graduates who are failing to sustain themselves yet they have passed through Technical Vocational education in secondary school years.

### **1.2 Statement of the problem**

The country is experiencing high numbers of unemployed youth or school leavers. The mismatch between the Technical Vocational education's objectives and the situation of school leavers who cannot sustain themselves prompted the researcher to investigate the implementation of Technical Vocational subjects in Gutu East Secondary Schools.

### **1.3 Research questions**

1. How is Technical Vocational education being implemented in Gutu East secondary Schools?
2. What challenges do Secondary Schools in Gutu East face in trying to implement Technical Vocational subjects?
3. What mitigation strategies can be put in place to enhance the implementations of Technical Vocational subjects in Gutu East Secondary Schools?

## **1.4 Significance of the study**

### **To the researcher**

The researcher will benefit from the study as it will contribute to her professional and intellectual growth. Thus the researcher will have in depth knowledge on how research is conducted in various areas.

### **To schools**

Schools where the research was conducted will benefit from the findings as the study will highlight challenges faced in the implementation of Technical Vocational subjects and mitigation strategies recommended

### **To Midlands State University**

The findings of the study will supplement the existing literature in the field of Technical Vocational education and hence be used as literature source by other researcher who might embark on similar study.

## **1.5 Delimitations of the study**

The research was delimited to four secondary schools in Gutu East District. These schools offer Technical Vocational Subjects up to 'O' level. The research focused on the implementation of Technical Vocational Subjects in Gutu East Secondary Schools because it has been noted that the district has vast numbers of school leavers who are unemployed and not able to sustain themselves yet they have passed through a vocationalised secondary school curricular

## 1.6 Limitations

- Financial constraints have posed a challenge to the researcher, however relatives and friends offered support in financial form.
- Permission to collect data was another limitation that the researcher faced. The permanent secretary was not available to give permission in time, however the Provincial Education Director made recommendations that facilitate quick provision of the permission.

## 1.7 Definition of terms

**Vocational** – a calling or a dedication to do something (Oxford Dictionary, 2015)

**Technical Vocationally Education** – the type of education that marries theory and practice for the purpose of producing self-reliant and employable graduates (Raymond 2007, Zvobgo 1990, UNESCO 2008, Nziramasanga, 1999).

**Implementation** –Gatawa (1999) propounded that implementation denotes the carrying out or putting a plan or design into action.

## 1.8 Assumptions of the study

**The study assumed that:**

- Secondary schools offer Technical Vocational subjects
- School heads, teachers and pupil are literate, so will be able to respond to a questionnaire
- Schools are facing challenges in implementing Technical Vocational subjects

## **1.9 Summary**

The number of school leavers who are failing to sustain themselves through use of locally available resources is increasing in Gutu. The mismatch between Technical Vocational education's objectives and the situation of unemployed school leavers who cannot sustain themselves encourages the researcher to investigate how Technical Vocational subjects are being implemented. The study is of importance to the researcher's intellectual growth, to schools where the study was carried out and to Midlands State University. This study was delimited to Gutu East district where the problem has been identified. Limitation of the study, the assumptions of the study and definition of terms were also presented. The next chapter will review related literature.



## CHAPTER 2

### REVIEW OF RELATED LITERATURE

#### 2.0 Introduction

This chapter is meant to give an insight to what other authorities have written about the implementation of Technical Vocational subjects in schools. There will be a thorough review of the literature to help accomplish the objectives of this study, aspects such as Technical education in Zimbabwe secondary schools curriculum, the review of selection criterion used to channel students into Technical Vocational subjects, review of assessment and evaluation, review of challenges faced by schools in implementation of Technical Vocational subjects as well as the review of mitigation strategies needed to enhance implementation of Technical Vocational subjects will be looked into.

#### 2.1 Channeling of pupils into Technical Vocational subject areas

A diversified curriculum should have selection options for Technical Vocational subjects (Muvandi and Kurebwa, 2014). Thus, secondary schools in Zimbabwe uses various selection methods to channel students into different practical subject areas, hence students can pursue practical subjects of their own choice in order to earn a living after graduating from school. This can be helpful to mitigate the problem of unemployment (Ghosh, 2014). The point of this curriculum and freedom of choice in Technical Vocational subjects is that after graduating from secondary school, learners should have grasped the relevant knowledge and skills in the Technical Vocational arena, hence become employable and self-reliant.

Although secondary school curriculum has been vocationalised, many secondary school leavers are without relevant knowledge and skills matching the employment sector (Nherera 1999,

Muvandi and Kurebwa, 2014). Thus more emphasis is put on diversification of the secondary school education curriculum transformation leaving out an important implementation aspect which is the selection of pupils into Technical Vocational subjects (Ghosh, 2014). Since the country needs a workforce with a variety of technical skills, selection becomes very important. The kind of selection adopted by any school should not discriminate pupils on basis of sex, religion, gender or national origin.

### **2.1.1 Design and selection agents used in schools**

The grade 7 examinations results are used by some schools to determine entry into secondary schools. Hence these grade 7 results are used as selection tools of Technical Vocational subjects allocation (Muvandi and Kurebwa, 2014). For other schools selection is sometimes done through use of form 1 entrance test as supported by Husen and Postlethwaite (1995) that schools use different procedures for allocating pupils Technical Vocational subjects and these can be examination or no-examination procedures.

### **2.1.2 Other procedures used to select pupils**

Muvandi and Kurebwa (2014) posits that these procedures do not test or use examinations to allocate pupils into Technical Vocational subjects. Thus, in some schools form 1 pupils are assembled and exposed to career guidance before choosing a practical subject, hence prepare them to select their desired Technical Vocational channels.

In some other schools teachers assigned to recruit form ones rank students based on the entrance test. This kind of selection is combined with the teacher's comments on ability of students (Muvandi and Kurebwa, 2014).

Technical Vocational subjects should not be viewed as a program for the intellectual weak students (Zendera, 2013). Through use of free selection pupils can select practical subjects that

suit their personality and ability. Haralambos and Holborn (1995) propounded that pupils are able to classify occupations as masculine and feminine through primary and secondary socialization. Therefore when given a chance for free choice of Technical Vocational subjects girls tend to take subjects perceived as feminine and boys choose traditionally masculine subjects. This is as a result of gender stereotype internalized during primary socialization process through parents and peers (Gati, 2009). While free choice is recommended practical subjects choice should be guided but not imposed on student.

If well scrutinized subject choices reflect parental choices and similarities among friends (Gati, 2009). This shows that sometimes pupils are forced to take parental choices, whether they like it or not. In such cases students may not commit themselves to the subject (Muvandi and Kurebwa 2014). Such students even if they acquire the relevant skills for the Technical subjects, will not use the skills in life after school hence increase the number of school leavers who cannot sustain themselves through use of locally available resources.

### **2.1.3 Ability tests and Examination as allocation procedures**

Muvandi and Kurebwa (2014) propounded that some schools may use test related to Technical Vocational subjects in allocating students practical subjects to do. Thus these test results will provide information for quick and accurate identification of Technical Vocational subjects in which students can perform well (Husen and Postelthwaite, 2005). Murphy and Davidshofer (1991) support that schools match students' talents, skills and capacity for the job they are best at through testing and evaluating students.

In Zimbabwe before independence, Technical Vocational subject allocation was a racial thing. The skin colour was the variable for selection into industrial training (Zvobgo, 1990). This was abolished on attaining independence. Walford (1984) purports that when students make their

own choice learning is enhanced. However, in Zimbabwe gender is still a criteria used to allocate subjects such as Fashion and Fabrics and Food and Nutrition to girls while subjects like Building, Woodwork, Metal work and Technical graphics are allocated to boys only. Muvandi and Kurebwa (2014) support that very few schools use tests for allocating form one students into Technical Vocational subjects, but is mostly done by Technical Vocational teachers, school heads and deputy heads basing on gender of the students. In such cases selection may go against interest, aptitudes and ability of students hence pupils are forced to study practical subjects opposed to their interest thereby place no values in the subjects.

## **2.2 Technical education in the secondary school curriculum**

In line with the Nziramasanga commission of inquiry the Zimbabwean Government adopted a two pathway system. According to Senator David Coltart (2012) at junior secondary level, the curriculum is broad based and there is no specialization and students are expected to study at least 2 Technical Vocational subjects, one business or commercial subject and at least 5 compulsory academic subjects. At middle secondary which is form 3 and 4 (O' level) students are expected to be offered Technical Vocational subjects as well as business or commercial subjects in addition to the academic subjects.

Although the Nziramasanga commission recommends the three pathway system the government adopted the 2 pathway system (Zimbabwean Government, 2006). The two pathway system offers a skills path in Technical Vocational subjects and business or commercial subjects to cater for the interest, aptitude and demand of the student's world of work. The policy circular requires that all Zimbabwean secondary schools adopt the 2 pathway education system.

According to Munikwa (2011) most schools are in favour of a mixed curriculum which offers both academic and vocational subjects to develop students into participative individuals. Thus

the policy left the initiative to individual school heads to choose what to offer depending on available facilities and staff available at the school.

Secondary education in Zimbabwe is divided into 3 phases which are ZJC, O' level and A' level. At form 3 students are selected into classes with stipulated practical subjects (Pedzisai et al 2014). However, there is no clear design system used to channel students into these classes (Mahere, 2006). Thus each school construct its own design. This implies that in practical subject allocation at secondary school, some pupils end up being forced to study a practical subject they do not like, hence deny the student the chance for one's vocational arena (Chiedza et al 2003).

According to David Coltart (2012) a wide range of Technical Vocational subjects are offered and these includes Agriculture, Fashion and Fabrics, Food and Nutrition, Woodwork, Building Studies, Technical Graphics, Metal Work and Art. These subjects are offered and examined at O' level. However, some schools with the capacity are offering National foundation certificate (NFC) and these are single subject course examined by the Higher Education Examination Council, HEXCO (Mahere 2006). At A' level Technical studies offered include Agriculture, Food Science, Clothing and textiles and Drama.

### **2.3 Teacher quality and quantity**

The role of the teacher in curriculum implementation is a paramount one (Zvobgo, 1990). Zvobgo (1999) purports that the teacher is the one who select and decide what to teach from the syllabus. Thus, implementation takes place when the learner interact with planned learning opportunities, hence the role and influence of the teacher in implementation process is indisputable. Therefore the success of Technical Vocational curriculum implementation relies on teachers, these teachers transfer Technical Vocational curriculum into action. Peresu and Nhundu (1990) support that teachers are the main agents of curriculum implementation because they are

the ones who determine how students should be prepared and exposed to relevant skills and knowledge. Therefore teacher's professional qualification should be adequate to enable effective implementation of Technical Vocational education with the right specialization and professional skills (Peresu and Nhundu, 1999).

Akinsola (2009) asserts that availability of qualified teachers determine the performance of students in schools, hence to excel in a subject area and to get skills for self-reliance after leaving secondary school students need qualified teachers. Darling (1998) defines qualified teachers as one who is fully certified and has the equivalent of a major or minor in a field being taught, hence a teaching qualification enriches the teacher with more detailed knowledge of the course taken during training.

Zimbabwe like most states uses certification to distinguish qualified teachers and non-qualified teachers. Goldhaber (2002) purports that certification is used across all states to ensure that teachers have at least a minimum level of teaching or content based standards to be a teacher. Most countries requires that teachers are graduates of schools of teacher education (Zvobgo, 199). In Zimbabwe a certificate in education, a diploma in education and a Bachelor of education degree are among the recognized certificates for one to be regarded as a qualified teachers.

However, Zimbabwe is experiencing shortages of Technical Vocational teachers as supported by David Coltart (2012)'s speech that the country is experiencing challenges in Technical Vocational implementation resources both human and material. The state has resorted to recruit non-teaching staff who have majored in the subject matter but without knowledge of teaching methods.

These includes graduates from Polytechnic colleges and Universities around the country. These teachers are placed to teach though they do not meet the definition of qualified teachers. Berry (2004) propounded that although the use of non-teaching certificates have diversified the teaching force and helped to fill in teaching post in most secondary schools, they are not the best.

Wilson et al (2001) suggest that fully prepared and qualified teachers are more successful with students than those without this preparation. Thus teacher's pedagogical knowledge has positive impact on student's performance in and out of the school.

#### **2.4 Assessment and evaluation of Technical Vocational subjects**

All offered Technical Vocational subjects are examined at O' level where written examinations carryout much weight. The ZIMSEC syllabus (2009-2012) for Fashion and Fabrics, Food and Nutrition and Home management stipulates that examination, theory carry 40% of the total weight, examination practical work 40% of the total weight and 20% will come from the coursework item made by pupils during senior secondary school. Thus the feature of examination tend to reduce what should be learning of practical skills to memorization of facts because the pedagogy in Technical Vocational subjects as reinforced by the methods of assessments used fails to develop problem solving skills. It places excessive emphasis on memorization. This is supported by Kapungu (2007) that the Zimbabwean curriculum is too exam oriented hence produce individuals who cannot deal with harsh challenges of the work environment.

#### **2.5 Challenges faced by schools in implementing Technical Vocational subjects**

Despite efforts being made to promote Technical Vocational subjects implementation in Zimbabwe secondary schools, the system is faced with a number of challenges and these includes, lack of adequate resources, lack of up to date equipment, teacher quality, high staff

turnover and pupils attitudes (Munikwa, 2011). Thus the quality of Technical education in schools depends very much on availability of resources. Therefore, training of appropriate high quality skills requires appropriate training equipment and tools as well as adequate supply of material and human resources (Coltart, 2012).

### **2.5.1 Quality and quantity of teachers for Technical Vocational subjects**

Nyagura and Reece (1990) observed that most Technical Vocational teachers are poorly trained academically and professionally. This implies that effective and efficient implementation of Technical Vocational curriculum is in the hands of implementers who lack necessary skills to organize and manage secondary school classes and as a result school graduates are found with little or no skills for employment and self-reliance.

Most rural secondary schools lack adequate professionals (Coltart, 2012). These schools are staffed with untrained teachers who lack background in the foundations of education (Nyagura and Reece, 1990). These rural schools are shunned by the experienced and professional teachers due to lack of infrastructure that includes roads and electricity.

In a speech made by David Coltart (2012) the country is experiencing a challenge in the production of teachers who can teach Technical Vocational education, this is as a result of our previously academically oriented curriculum, hence very limited number of teachers have necessary skills to teach Technical Vocational subjects. The shortage of Technical Vocational teachers has been increased by high staff turnover due to the fact that Zimbabwean teachers are marketable both within and outside the country (Coltart 2012). This implies that a few teachers who were skilled in the field of Technical Vocational subjects have left the country to seek for greener pastures due to economic hardships in the country.



To mitigate the problem of Technical Vocational teachers' shortage, the country has resolved to recruit non-teaching staff that have majored in Technical Vocational subject matter but without knowledge of teaching skills (Zvobgo, 1999 and Berry 2004). Thus the country has employed graduates from polytechnic colleges and universities and even from vocational training centers around the country as Technical Vocational School teachers. These teachers are placed to teach though they do not meet the definition of qualified teacher, but they are teachers with alternative certificates (Berry, 2004).

Although the use of non-teaching degrees and diplomas have diversified the teaching arena and has helped fill teaching posits in most rural secondary schools shun by the experienced and qualified personnel these teacher recruits are not the best (Berry, 2004).

Of all the fourteen teacher's colleges in Zimbabwe, 11 primary teachers training and three secondary teacher's training only two of them Mutare teachers and Belvedere Technical Teachers college offer teacher's training in practical subjects with only Belvedere exposing its student teachers to an industrial attachment. This raises questions on what exactly is taught in Technical Vocational educational schools programmes (Embassy of Zimbabwe, 2007). This has seen the ministry engaging unqualified teachers as supported by the Newsday 2013 that Zimbabwe has 135 000 teachers and 9 000 are unqualified and should go back to school for training as argued by Minister of Education, Mr Lazarus Dokora on the Newsday 24 February 2015 so that learners would be taught by the people who have the skills of imparting knowledge.

Mumbengegwi (2001) propounded that insufficient quantity of Technical Vocational teachers in Zimbabwe has influenced teaching negatively. Thus for effective implementation to take place teacher pupil ratio should be proper to teachers such that teachers are not overloaded with pupils.

The right teacher pupil ratio helps the teacher to attend to different kinds of learners in a limited amount of time.

With specific reference to Technical Vocational education more specialized teachers are needed (Hollinshed, 1990). This is because a Technical Vocational Teacher is a link between industry, society and education system. Thus in the absence of textbooks and even when textbooks are available Technical Vocational teachers play a vital role in promoting learning, hence shortage of these teachers in Zimbabwe hinders the effective implementation of the kind of education that aims at mitigating poverty through offering skills necessary for the world of work and for self-reliance. Cailldos (1988) believes that in most developing countries where textbooks and teaching aids are in short supply the teacher remains the sole agent of knowledge transmission.

### **2.5.2 Shortage of material resources in secondary school**

Material resources are also paramount for the successful implementation of Technical Vocational education. These are relevant for imparting practical skills relevant to the world of work (Mandebvu 1991, Mavhunga, 2002). These material resources include textbooks, infrastructure, equipment and consumables.

#### **Textbook shortages**

Beside the fact that textbooks are still a basic source of information in Technical Vocational subjects, their availability is still scarce in most Zimbabwe rural secondary schools (Coltart 2012). The availability of textbooks contributes substantially to the teaching and learning situation. Nyagura and Reece (1990) postulate that student textbooks are the predominant instructional resources in secondary schools classrooms and their shortages is greatly affecting implementation of the curriculum. This implies that Technical Vocational subjects in rural

secondary schools have poor textbook ratio, hence it is difficult for students to acquire skills and knowledge for employment and self-reliance in the chosen field.

When UNICEF made a great contribution to schools in terms of availability of resources such as textbooks, Technical Vocational subjects did not benefit from the program. This means that the excluded practical subjects are still suffering from the 2008 situation where the whole school used to depend on one teacher's tattered and torn textbook.

Chakambat et al (2013) propounded that textbooks forms the basic material for both teacher and pupil. Thus even though we are now in an ever-growing world of technology textbooks cannot be avoided since very few rural schools have access to internet, hence the textbook remains a vital aid for students. Therefore, non-availability of resources such as textbooks is hindering Technical Vocational subjects' implementation in schools.

### **Shortage of Technical Vocational equipment in schools**

The use of material resources such as cutting machines for metal work and sewing machines for Fashion and Fabrics empowers pupils and put them in control of learning. Peresu and Nhundu (1999) argues that material resources such as machines determines how curriculum is being implemented at an institution. Thus relevant and adequate machinery is required for the schools to produce skilled manpower as advocated by the Nziramasanga commission of inquiry (1999).

The specialized equipment is paramount in promoting effective transformation of practical skills (Nyagura and Reece 1990, Hollinshead, 1990). Such practical skills are important in preparation of learners for the world of work and self-reliance. This is because Technical Vocational subjects require special equipment and infrastructure so that pupils are sufficiently trained. Mandevu

(1999) supports that availability of technical equipment enabling teachers to use hands on approaches which will foster graduates to lead productive life after schooling.

However, the situation in the country as observed by the Nziramasanga commission of inquiring is that practical subjects are being handled like academic subjects due to lack of necessary equipment to use during practical lessons. The few remaining equipment is pathetic and outdated, taking for example, most rural secondary schools are still using the outdated hands sewing machines which are no longer found in the industry while some other schools with capacity have adopted to use the same machinery as found in the world of work hence matching skills acquisition with the demands of the labour market.

UNESCO (1990) observed that equipping Technical subject is rather very difficult. Thus Technical Vocational curriculum implementation is bound to be comprised and produce poorly trained school leavers. Munikwa and Chinamasa (2010) support that it is considerably very cost to fund technical programs as compared to general subjects, hence it is not surprising to note that most school administrators prefer academic subjects, this as a result hinders effective implementation of Technical Vocational subjects in secondary schools.

### **Poor funding**

Funding of the education system in Zimbabwe is and will remain a challenge for a long time (Kanyongo, 2005). This is why Kohoe(2007) laments that what used to be once thriving Woodwork and Metalwork departments in various schools have deteriorated due to poor and inadequate funding. This as a result affect Technical Vocational curriculum implementation hence products of such a curriculum will attain little or no skills necessary for employment and self-sustaining programmes.

Mupinga et al (2000) propounded that Technical Vocational curriculum policy did not bring with it financial support, for example, the (2006) budget to sustain Technical Vocational program had Harare Province with a total of seventy (70) government secondary schools allocated a mere Z\$3 000 million which was an equivalent of US\$300. This shows that funding of Technical Vocational subjects is still far less than anticipated.

In most schools parents have to incur extra costs apart from the school fees to buy the consumable for practical subjects used for practice before a child can face the examination, (Kanyongocited in Chikamba 2013). When such is the case the quality of consumables usually did not meet the required specification, for a particular item to be made by the child due to the fact that parents look for cheaper items or they fail to understand the material specifications. Not all parents are able to meet the extra costs for practical subjects hence pupils miss out on day to day proper practice. This is supported by Bvekerwa et al (2011) that without these consumable students will fail to do the practice required by the syllabus hence ending up comprising the quality of skills acquisition.

Failure to fund the practical subjects also increases parents and student's negative attitudes towards practical subjects. In most cases when parents are asked to meet the extra expenses such subjects are dropped. Therefore if more and more schools record dropouts in practical subjects it becomes difficult for school leavers to be self-reliant. Making parents and communities responsible for equipment and consumables create an uneven implementation and widespread under provision of basic teaching materials (Chakamba et al (2013).

## **2.6 Stakeholder's attitudes as a challenge to implementation of Technical Vocational subjects in secondary schools**

### **Pupils' attitudes**

Students are not aware of the importance of Technical Vocational education because this kind of education is seen as suggested by Emmaculate (2006) as a career path for the less academically privileged. This has been supported by low academic entry requirements for admission into these practical classes. Thus pupils are streamed making those with low pass marks at grade 7 or form 2 to take practical subjects such as Fashion and Fabrics. It is in this view that students develop negative attitudes towards Technical Vocational education, hence make the implementation process very difficult. Zendera (2013) argues that the government creates an impression that the primary subjective of Technical Vocational education is to keep dropouts thereby making students feel that the kind of education is for those who cannot move up with the ladder, instead of projecting it as an effective strategy to train skilled workers to sustain livelihoods.

To make matters worse Technical Vocational education faces stiff competition with academic subjects. Parents and guardians encourages their children to take seriously subjects that will give them higher chances of prospering in life or those that take the route to better jobs and incomes such as law and medicine (Munikwa 2011). With all these in mind students develop negative attitudes towards practical subjects hence places no value in them.

### **Comments used on practical subjects**

Language used about practical subjects carries negative elements or connotations (Chakamba et al, 2014). A lot of undermining is noted in the language used when talking about practical subjects. Take for example, when parents visit schools on consultation days, parents will rather first consult teachers of academic subjects such as Mathematics, English and Science before

considering consulting the practical department. Evidence of passing a practical subject is regarded as waste of time on useless subjects instead of putting effort on academic subjects which are considered more important. On contrary if pupils fail a practical subject parents question why one fails just to cook and sew (Chakamba et al, 2014). This shows that Home Economics subjects are assumed by parents as only cooking and sewing with no scientific theoretical aspects, this further increase student's negative attitudes of the subjects hence makes implementation process very difficult (Kohoe, 2007).

Most parents find it very difficult to perceive practical subjects as a route to success. Authorities in schools perpetrate this as they consider practical subjects to be for the less academically gifted pupils, hence parents assumes that practical subjects can be passed by anyone even with the slow learners, students in turn develop negative attitude towards practical subjects as they are afraid of being labeled as failures (Chakamba et al 2013). Kohoe (2007) concurs that the practical subject route is encouraged to those who shows that they are unlikely to success in academic work. Therefore, students see no reasons of taking practical subjects serious hence no skills for life after school will be acquired.

### **Potential employer's expectations**

Chakamba et al (2013) propounded that some of the employer's demands create and perpetrate negative attitudes towards practical subjects. Some potential employers single out certain practical subjects as "irrelevant" when advertising for training and employment. A local newspaper the Sunday Mail 6 January 2013 had a post of a certain health institution advertising for a general nursing training program specifying that for the 5 O' levels required passes in practical subjects such as Woodwork, Fashion and Fabrics and Metalwork were not considered

(Chakamba et al, 2013). Such types of advertisements demotivate both parents and pupils to take practical subjects seriously as they are considered useless. This discourages parents, school administrations and the society at large to support students who prefer to take practical subjects, therefore hindering the effective implementation of Technical Vocational subjects in schools.

## **2.7 Mitigation strategies**

### **2.7.1 Better synergy between Technical Vocational schools and Industry**

The Sunday Mail (3- May 2015) with the headline “O’ level pupils to go on internship” proposes that as an intervention strategy to equip school leavers with relevant skills for self-reliance, form 4 pupils should go on industrial attachment after completing their O’ level examinations while awaiting their results. Thus it has been seen that to improve industrial skills acquisition there is need for best cooperation between Technical Vocational schools and the world of work.

The secretary for Primary and Secondary Education Dr Sylvia UteteMasango argues that attachment of O’ levels to industries will help them to develop life skills and to engender a culture of productivity, (The Sunday Mail 3 May 2015)

There is also a need to engage the business sector in strategies to improve Technical Vocational implementation, Kapungu (2007) propounded that there is little engagement between students and business or employers. Thus schools should form partners with business world and industry. This will enable employers to visit schools giving their information and material contributions as to the implementation of Technical Vocational education and at the same time the teachers and students visit business and employers to see the demands of the industry and hence make amends on their teaching strategies so as to meet the demands of the job market.



Providing Industrial attachment to students or internship for trainees will foster self-reliance skills acquisition. Afeti (2014) argues that in order for Technical Vocational education to effectively support economic growth and poverty reduction, skills training must be of high quality based on modern information communication technology and relevant to the need of the industry. Thus schools can only know the needs of the industry if the two institutions engage in better synergy.

The World Bank (1991) argued that the quality of training in Technical Vocational Institution is poor and there is considerable mismatch between training and the needs of the industry, thus training and labour market skills demand should match and this can be improved by offering industrial attachment to students.

### **2.7.2 Reviewing of Technical Vocational school curriculum as an intervention strategy**

To enhance chances of school leavers becoming employers and self-reliant the Zimbabwe school curriculum need to be reviewed. The Herald of Thursday 29 July (2010) posits that the curriculum is still in need of reform. The paper quoted Minister David Coltart lamenting that the present state of the curriculum is not that comprehensive as it was last updated over 2 decades ago.

According to the Nziramasanga commission of inquiring (1999) the country should see the need to shift from academic examination driven school curriculum to a more utilitarian education that views each learner as having potential to develop and contribute positively to the society. This is supported by the Sunday Mail article of 3 May (2015) headed “New School graduates to become employers.” The paper posits that a revised school curriculum will produce graduates with potential to create employment instead of being job seekers. The new curriculum will equip learners with entrepreneurial skills. The Deputy Minister of Primary and Secondary education

Professor Paul Mavhima is quoted in the paper saying that the objectives of revising the curriculum is to produce self-reliant graduates who has the fundamentals of business and wealth creation.

Munikwa et al (2011), Bvekerwa et al (2013) and Afeti (2014) suggest that Zimbabwean education curriculum places more emphasis on examinations such that teachers are now teaching for examinations rather than for skills acquisition. This implies that drilling methods are employed in classroom situation such that at the end of four years a student can pass the subject not because he or she has mastered the concept but has simply memorized the examination tips and answering techniques. Such a product of the school will not be able to use available resources for self-reliance. Thus, a reform in the curriculum is recommended so that it will help the country to encourage continuous assessments as opposed to the present examination based grading system. The Sunday Mail 3 May (2015) posits that curriculum review framework places emphasis on continuous assessment at all levels, 'O' level will be based an 40% theoretical examination, 30% practical examinations and 30% continuous assessment.

Huge numbers of poorly educated, unskilled and unemployed youth are a result of mismatch between what schools are training and labour markets demands (Afeti, 2014). Thus curriculum, review will enables the government to see the gaps between what the schools are offering and what should be offered to a skilled graduate. Afeti (2014) further argues that lack of employer's inputs into curriculum design is partly blamed for the mismatch. High unemployment among graduates is caused by absence of entrepreneur training in the school curriculum, hence the need to review the curriculum.

### **2.7.3 Regular capacity building for those handling Technical Vocational Education**

Chikoore (2014) and Afeti (2014) argues that as a best practice and strategy to mitigate challenges faced in the implementation of Technical Vocation subjects as well as enhancing chances of employability and self-reliance among school leavers, the government should see that professional and pedagogical competence of the technical teachers is vital for the successful implementation of Technical Vocational education. Thus, the Zimbabwean government should therefore, make efforts to train and retrain technical teachers in the system. Teaching skills should be constantly upgraded. If Technical Vocational teachers are to produce manpower for the industry it is therefore vital for the government and industry to provide opportunity for these teachers to regularly update their workplace experience.

It is crucial for the Ministry to design refresher course and staff development programs for the practical subjects teachers (Chikoore, 2014). There are a number of teachers who have trained in the old system, time have changed and new innovations have erupted hence the need for those trained to be retrained. Chikoore (2014) supports that old system teachers are not knee to teach some of the topics in Technical Vocational subjects due to lack of appropriate knowledge and skills, hence they need to be capacitated through staff development programmes for example in-services, workshops and seminars.

Nomatter how good initial teacher education is, further learning is crucial in improving professional expertise such that one will cope in their areas of specialization (Chigumira, 2011). This implies that for practical subject teachers to equip learners with relevant skills that match the current job market in the prevailing economy one has to switch on to new methodologies and current content. By in servicing teachers, educational standards raises since teachers are the main agents of curriculum implementations.

According to Chigumira (2011) the major goals of staff development is to ensure that students benefit from the teacher's improved teaching skills and knowledge. Therefore all teachers young and old experienced and inexperienced should be given time to develop in order to meet the needs of today's economy. Scholarship to study further can also be made avail to practical subjects teachers this both motivates and improves implementation of Technical Vocational education.

## **2.8 Summary**

The chapter focused on reviewing related literature on how Technical Vocational education is being implemented in schools. Literature was reviewed under the following headings selection methods, quality and quantity of teachers, assessment of Technical Vocational programmes, challenges faced in implementing Technical Vocational subjects to include shortage of human and material resources, stakeholders' attitudes and poor funding. Mitigation strategies include review of the curriculum, better synergy between schools and industry and capacity building of teachers. The next chapter will dwell on methodology used to collect data.

## CHAPTER 3

### RESEARCH METHODOLOGY

#### 3.0 Introduction

The chapter will present the direction that the study is going to take in collecting data that will be analyzed by the researcher. The main purpose of the research methodology is to explain the nature and purpose of research in order to enable readers to conduct their own research (Welman, Kruger and Mitchel, 2005). Thus the chapter will provide an overview of the research methods to be used, research design, population, sample and sampling procedures, research instruments and data collection procedures.

#### 3.1 Research design

Bell (2011) defines research design as a framework of obtaining data which encompasses the methodology and procedures employed to conduct research. Hence it can therefore be said that the research design is a comprehensive plan on how the research will be conducted. This study used a descriptive survey to provide answers. Chiromo (2006) propounded that a descriptive survey involves studying limited number of cases and is designed to describe the characteristics or behaviour of a particular people in a logic way. Hence a descriptive survey was used to obtain complete and accurate data on how Technical Vocational subjects are being implemented in Gutu East Secondary Schools. As a result data was collected directly from teachers, pupils and school heads who are currently implementing Technical Vocational subjects.

Data collected includes feelings, beliefs and personal background, hence descriptive survey was the most appropriate design for this study. A better understanding of how Technical Vocational subjects are being implemented in schools was achieved through the use of questionnaires,

interviews and observations as supported by Chiromo (2006) that a descriptive survey involves describing what you are seeing, what you are hearing and observing. The descriptive survey was the most appropriate for this study because it involves studying a sample and generalizing the findings to the population hence the researcher was able to see over and beyond the horizon (Chiromo, 2006).

### **3.2 Population**

Population is defined as a collection of people and things the researcher is interested in (Chiromo, 2006 and Kumar, 2008). These people possess one or more characteristics that are of interest to the researcher (Chiromo, 2006). In this study the population comprised of Technical Vocational secondary school pupils from four secondary schools in Gutu East district, 60 Technical vocational teachers and 20 school heads as provided by Mr Maguchu the Gutu East Schools Inspector. These were chosen because they were assumed to be implementing Technical Vocational education in an area with numbers of school leavers who are unemployed and are failing to sustain themselves through skills acquired in secondary school years.

### **3.3 Sample**

A sample is a small proportion of a population selected for analysis (Kumar 2005, Best and Khan, 1993). A sample therefore is drawn from the population. In this study 4 heads of schools were drawn from the total population of 20 heads of schools thus the sample size was 20% of the population. This is a manageable size for research as supported by Borg and Gall (1992) that a sample size of 10 to 15% of the target population is recommended. The aim of sampling is to save time and to obtain consistent and unbiased estimates of the population status in what is researched.

### **3.4 Sampling procedures**

To select the schools simple random sampling was used. A hat system was used where four pieces of papers were printed YES and 16 others printed NO, those school heads who picked the YES automatically becomes the sample schools, this simple random sampling technique was good for this research because a sample chosen by this method was free from bias and is a true representation of the population (Chiromo, 2006).

For the four heads of schools and 12 Technical Vocational teachers to be included in the sample purposive sampling technique was used. This is because the school heads and teachers possess the characteristics that are of interests to the researcher, these characteristics included being school administrators and being classroom practitioners in the teaching and learning of Technical Vocational subjects. These traits have a significance in relation to the research topic.

Simple random sampling was used to select students for the sample. At each of the 4 schools selected a hat system was used to select 10 pupils who take practical subjects, thus 10 papers were printed YES and others were printed NO. This has the advantage that the sample becomes manageable.

### **3.5 Research instruments**

In this study the researcher used questionnaires, interview guides and observation schedule.

#### **3.5.1 Questionnaire**

A questionnaire is an instrument used to gather data which respondents answer systematically (Welman et al, 2005). Thus a questionnaire is arranged data collection mechanism involving a range of question format and they are completed in print. According to Best and Khan (1993) a questionnaire is used where factual information is wanted. A questionnaire was relevant for this study because it made data collection easy and possible for a huge number of respondents even

when time and resources were limited. In this study questions addressed several objects simultaneously. It was therefore appropriate to use a questionnaire in this study because it presented questions in writing for the respondents and requires a written down response targeting information as per research questions (Chiromo, 2006). Questions were linked to what was required therefore reduces irrelevant responses.

In this study a questionnaire was appropriate because it guaranteed anonymity to the respondents. Respondents gave answers without fear. According to Best and Khan (1993) a questionnaire saves time and is an inexpensive way of surveying a large cross section of people that is a questionnaire is self explicitly hence respondents did not take time to complete them.

The research used both closed and open ended questions. Open ended questions allowed the respondents to have a wider opinion of different response (Chiromo, 2006). Thus respondents were free to express themselves and were not restricted to select answers from the list as a result respondents gave deeper and wider opinions. Closed questions were quick to answer and easy to compare. The inclusion of both open and closed questions helped the researcher to draw up accurate conditions.

Mhlanga and Ncube (2003) purports that in some cases subjects other than the intended might complete the questionnaire. Thus failure to verify authenticity of information given is a weakness of a questionnaire as a research instrument. Respondents will not get chances to seek clarity on some questions and this becomes another demerit. To counteract the disadvantages of this instrument the researcher administered the questionnaire personally and collect them as soon as they were completed. Self-administered questionnaire were cheaper since no postage cost were required.



### **3.5.2 Interview guide**

Bogdan and Biklen (2006) describe an interview as a face to face interaction with two way communication. For this study interview was appropriate for it had improved response rate and feedback was provided immediately. Mhlanga and Ncube (2003) supports that data can be cross checked immediately for authenticity. Through use of interview the researcher was able to probe further and motivate respondents to reveal more information.

An interview was an appropriate instrument for this study because highly personalized data was obtained (Chiromo, 2006), hence through use of interview one will be able to collect in-depth data from the participants, data which may not be able to be collected by a questionnaire.

Chiromo (2006) propounded that interviews show the linguistic behavior of the participants as well as the nonverbal behavior of the participants. That is at times the linguistic behavior can contradict the nonverbal behavior since nonverbal is uncontrollable and the researcher noted all this down (Bogdan and Biklen, 2006, Chiromo, 2006).

In this study the interview comprised of structured questions. These have pre-prepared questions that are very specific as supported by Bogdan and Bilken (2006) that the questions are just specific to the point and reduce chances of bias due to the fact that each member was asked the same question.

However, interviews are time consuming and very expensive to conduct. Mhlanga and Ncube (2003) purports that respondents may give the researcher what they think he or she want to hear. As a demerit interviews have shortcomings in that interviewing and recording at the same time spoil the flow of the interview. To overcome this weakness the researcher used an audio tape recorder, hence eye contact was maintained with respondent ending in an interesting conversation.

### **3.5.3 Observation schedule**

Observation involves collecting data from events or people often without asking questions (Chiromo, 2006). The researcher observed what was happening in real situations and records the happenings. This was useful to this study because the researcher obtained, firsthand information, the kind of information that people are not willing to give was accessed through observation. Information such as types of machinery and specialist rooms used for the implementation of Technical Vocational subjects were observed.

However observation has its own drawbacks as warned by Cohen et al (2011) that it is time consuming as the researcher take part in activities and spent time in the group. Again if the subjects are aware the findings will suffer from “mere presence effect” or what is called the Hawthorne effect, thus a temporary change in behavior.

### **3.6 Data collection procedure**

Giddens (2009) purports that data collection procedures are the process of gathering information. Thus the researcher obtained a letter from Midlands State University and ask permission from the Ministry of Primary and Secondary Education. A letter of permission was received for the researcher to carry out the research. This letter was taken by the researcher to the district Education officer who then granted permission to go to schools. School heads in Gutu East Secondary Schools then introduced the researcher to the Technical Vocational departments of the schools.

Questionnaires were self-administered to the 4 schools for pupils to complete, 12 teachers and 4 school heads were interviewed focusing on how pupils choose Technical Vocational subjects as well as challenges faced by schools in implementing Technical Vocational subjects. Workshops and equipment, were observed through participative observation.

### **3.7 Data presentation and analysis procedures**

Frankel and Wallen (2009) suggest that data analysis procedures places items or data collected into categories. In this study data collected was organized using coding system. Coding system is an analysis process in which data in both questionnaire and qualitative are categorized to facilitate analysis (Hay, 2010). Data from questionnaires and observations was presented in tables, pie charts and bar graphs. Tables were used to classify data, pie charts and graphs were used to increase visibility so that the points will be quickly noted. The research looked at how Technical Vocational subjects are implemented in Gutu East Secondary School.

### **3.8 Summary**

Simple random sampling was used to select schools and pupils from the population. School heads and teachers were purposively selected since they possess the characteristics that are of interests to the researcher. Descriptive survey was the best research design for this research for it enables generalization of the findings to the population. Explanations of questionnaires, interviews and observation guides has been given, their advantages and shortcomings were discussed. The procedure to be followed has been laid down. The next chapter will deal with data collection, analysis and discussion.

## CHAPTER 4

### DATA PRESENTATION, ANALYSIS AND DISCUSSION

#### 4.0 Introduction

This chapter focuses on presentation, analysis and interpreting data collected related to the research questions of the study. The chapter presents findings on the implementation of Technical Vocational subjects in Gutu East Secondary Schools. Data was collected from sample schools through questionnaires, Interviews and observation. The findings will be presented in form of tables, graphs and pie charts.

#### 4.1 Presentation of findings

**Table 1: Practical Subjects offered in Secondary Schools** N=4

SUBJECT	Frequency	%
Agriculture	4	100%
Fashion and Fabrics	4	100%
Food and Nutrition	1	25%
Computer studies	2	50%
Building Studies	0	0%
Wood Work	0	0%
Technical graphics	0	0%
Metal Work	0	0%
Art	0	0%

Table 1 shows that four schools offer Agriculture, four schools offer Fashion and Fabrics, one school offers Food and Nutrition, two schools offer Computer Studies and none of the schools offer subjects such as Building Studies, Woodwork, Metalwork, Technical graphics and Art

The table shows that Agriculture and Fashion and Fabrics are the common subjects offered in all the four schools followed by Computer Studies offered in the two schools while Food and Nutrition is not that common as it is offered by only one school

Three schools are offering a number of three practical subjects while one school only offers two subjects. However the Technical Vocational school curriculum has wide range of subjects on offer and these includes Agriculture, Fashion and Fabrics, Food and Nutrition, Computer studies, Art, Wood Work, Technical graphics, Metal Work, Building Studies and Home Management (Coltart 2012).

From the above table most secondary schools in Gutu East are offering Agriculture and Fashion and Fabrics. All schools indicated that they are in a capacity to offer Agriculture and Fashion and Fabrics mostly due to non-availability of human and material resources in their schools. Munikwa et al (2011) pointed out that the policy circular of Technical Vocational Implementation in schools left the initiative to the school heads to offer practical subjects depending on available facilities and teachers on the station. As a result skills acquisition in schools is limited to Agriculture and Fashion and fabrics hence school leaves cannot use the available resources for self-sustaining. If building studies and woodwork were offered this would improve and foster self-reliant programs such as building huts for the local people as well as making of cooking utensils by the woodwork pupils using local trees.

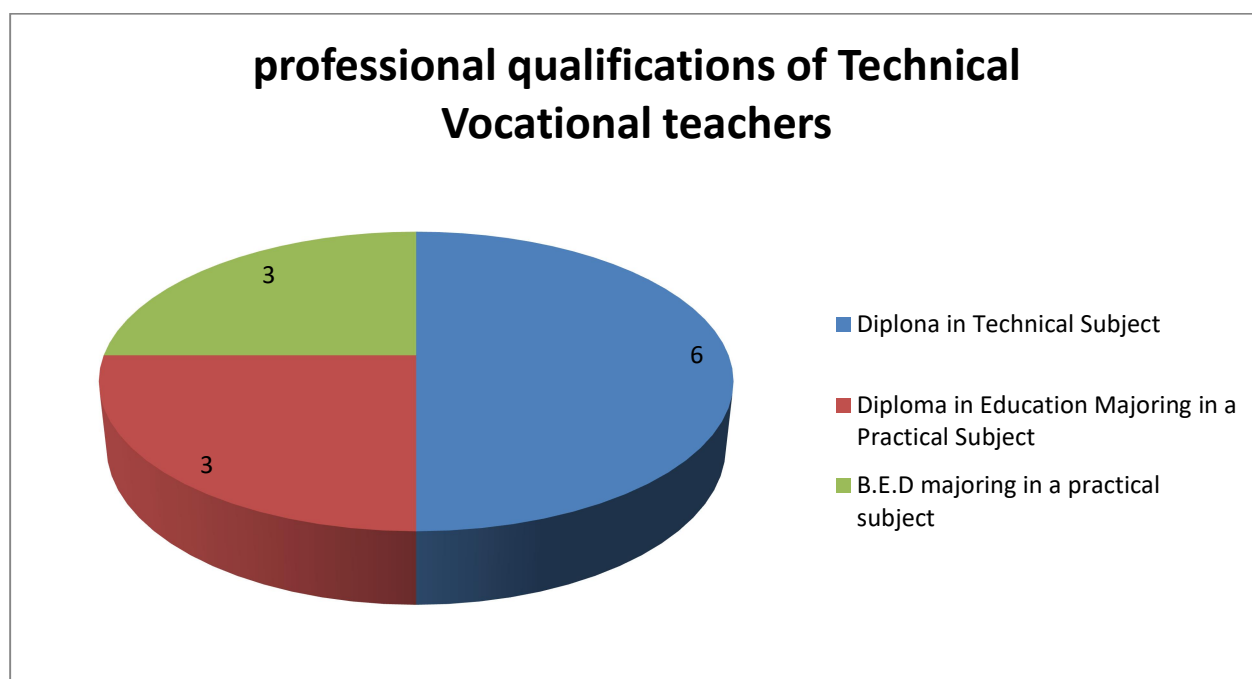
**Table 2: Teacher Experience****N=12**

<b>Teaching Experience</b>	<b>Number of respondents</b>
0-2 years	1
3-5 years	8
6-8 years	2
Above 9 years	1

Table 2 shows that 1 teacher has two or less years of experience, eight teachers have three to five years of experience, two teacher have six to eight years of teaching experience and only one teacher has over nine years of experience of teaching.

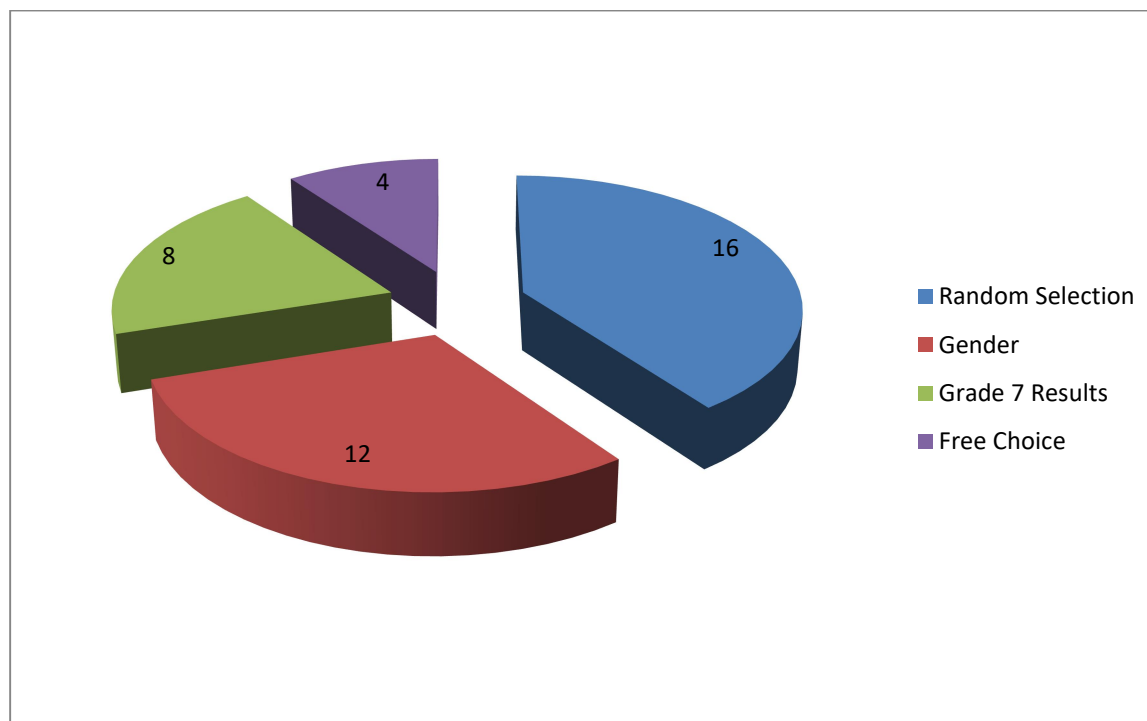
The above findings show that majority of Technical Vocational teachers in Gutu East have less than 5 years of teaching experience. This implies that Gutu East schools have less experienced teachers. This is supported by David Coltart (2012) that these rural schools are shun by experienced teachers due to poor infrastructure, hence pupils are passing through hands of inexperienced Technical Vocational implementers. Finally it can therefore be concluded that skills for self-reliance and employment are difficult to be acquired by Gutu Secondary School learners since they are passing through the hands of inexperienced Technical Vocational implementers.

Experience helps the teacher to master the content and skills acquisition of classroom management to deal with different types of classroom problems (Stringfield and Teddline, 1991).



**Fig 1: Professional Qualifications of Technical Vocational Teachers.**

Fig1 shows that six teachers possess Diploma in either Clothing Technology, Hot Culture or Computer Studies from Polytechnics and training centres around the country, three of the teachers are qualified with Diploma in Education majoring in a technical subject while other three are holders of a Bachelor of Education Degree majoring in a practical subject. Fig 1 shows that six out of twelve teachers are teaching without knowledge of teaching methods and six of the teachers are qualified teachers for Technical Vocational Education. This implies that students are being taught by teachers without skills of imparting knowledge. Moyo (19895) supports that for one to have better understanding of principles underlying student motivation for learning there is need for extensive studies into psychology of learning.



**Fig 2: Selection criteria used to channel students into Technical Vocational subject**

The pie chart shows that 16 pupils are allocated practical subjects through use of random selection where a hat system was employed. Teachers indicated that papers with the practical subjects to be done will be handpicked from the hat by all students and after picking there is no chance for negotiating for a different subject, one has to do the picked subject whether you like it or not. 12 pupils are allocated practical subjects on the basis of gender. Boys are allocated to Agriculture and computer Studies while girls are allocated Fashion and fabrics and Food and Nutrition, 8 pupils said they use grade 7 results, those who did well being allocated to Computer Studies and those who did not do well allocated to Agriculture and Fashion and Fabrics as well as Foods and Nutrition, 4 pupils said they were given a chance to choose among the subjects offered at school.



Fig 1 above shows that there is no uniform design system used to channel students into Technical Vocational subjects and in most cases students have no choice over the vocational channel they want to pursue. It lies in the hands of the school administrators to dictate what one should take as a Technical Vocational subject, hence in most cases pupils are forced to do practical subjects they do not have interest in. Only 4 said they are doing the particular subjects as per their choice.

Free choice of practical subjects is limited in most school hence this defies the term Vocational which means a strong impulse or inclination to follow a particular activity or career and as a result pupils learn the given subjects for the sake of obeying their teachers but do not place any value in such subjects. Objectives of freedom of choice is that after graduating from secondary school, school leavers should have acquired the relevant knowledge and skills which they will be proud to use in life after school.

**Table 3: Availability of specialist rooms**

School	Subject	Yes	No
A	Agriculture		✓
	Fashion and Fabrics	✓	
	Computers	✓	
B	Agriculture		✓
	Fashion and Fabrics	✓	
	Foods and Nutrition	✓	
C	Agriculture		✓
	Fashion and Fabrics		✓
	Computers	✓	
D	Agriculture		✓
	Fashion and Fabrics		✓

From the above findings computer studies has a specialist room in all the schools that offers the subject. This is due to the nature of the computers, they are too fragile and can be easily broken if carried from one place to the other. This is supported by one teacher who says before the computers arrive at the school the school head and the School Development Committee prepared the room for the machines so that they will be safe and avoid being broken.

Of all the 4 schools that offer Fashion and fabrics only two of them do have specialist rooms for the subject. One school that offers Food and nutrition has a specialist room for the subject while of all the 4 schools that offers Agriculture not even one of the schools has an agriculture complex or specialist room. At one of the schools it has been observed that an Agriculture room was built and labeled nicely "Agriculture complex" with tool rooms well laid out but was used by the lower sixth form for their lessons. This shows the extent to which school administrators disregarded or put little importance on practical subjects.

In schools where subject specialist rooms are not available Teachers and students were observed using overcrowded classrooms to fit in their sewing machines on thin desks that are not even suitable for laying and cutting out in the cases of fashion and fabrics. Two teachers said that the situation of moving machines from one place to the other is demotivating and spells danger to the kids who carry machines on daily bases. This is supported by Mckenzi and Burnes (1999) that buildings which are overcrowded, dilapidated or fitted with obsolete equipment and teaching materials depress the spirit of both learners and teachers and make it hard to teach and learn effectively hence skills for self-reliance cannot be gained.

**Table 4: Availability of financial and material resources****N=4**

<b>Resources</b>	<b>Available</b>	<b>%</b>	<b>Not Available</b>	<b>%</b>
Minute equipment	2	50%	2	50%
Heavy Duty machines	-	0%	4	100%
Hand Tools	1	25%	3	75%
Consumables	1	25%	3	75%
Textbooks	-	0%	4	100%
Funding	-	0%	4	100%

The table above shows that a number of useful material resources in the Implementation of Technical Vocational subjects are not available in Gutu East Secondary School.

### **Minute equipment**

Of the four schools, two proved from the observations made that they are in position of such small machinery and two do not have the small machinery for the subjects offered. Small machinery includes drilling machines, sprays, toasters and rice cookers among others. These prepare students for the world of work. Lack of these items denies students the necessary exposure of the subject. This observation of lack of small machinery led to the conclusion that half of the secondary schools in Gutu East do not have the required equipment for the teaching of Technical Vocational subjects and as a result skills acquisition for self – reliance and for employability are compromised.

### **Industrial machines**

In all the schools heavy duty machinery for cooking, computer studies and sewing were not available. This implies that machines used in schools do not tally with machinery in the industry hence learners cannot fit in the industry, they lack skills in the use of industrial machines hence pupils are not prepared for the world of work as they are still using outdated machinery. Technical Vocational Education should facilitate the acquisition of productive skills employed in productive activities in the labour market. If there is no co-ordination between what the schools are teaching and what the industry needs for productive operations Technical Vocational education would not be preparatory grounds for those who intent to venture into the labour market of today's economies.

### **Hand tools**

Three of the schools indicate that they do not have hand tools to use in practical subjects while one of the schools have the required hand tools to use. These tools includes, shovels, hoes, scissors and cooking spoons among others. These hand tools are critical in lesson delivery of the subjects, they enable students to translate theory into practice (Bvekerwa et al 2011). The fact that three of the school do not have these tools means that students lack psychomotor skills required and this may result in poor skills acquisition for the word of work. On graduating from school such students will be unable to make simple items for individual use or for self-reliance hence the aim of self-reliance will not be achieved.

### **Consumables**

The table above shows that of the 4 schools 3 indicates that they have a challenge in consumables to use during practical lessons. These consumables include, paper for patterns,

glue, cloth, threads, fertilizers, seeds and food ingredients. These consumables are said to be very expensive though needed for training purposes for example food bought for demonstration during lessons draws back no profit. The findings above led to the conclusion that schools in Gutu East have a challenge in acquiring consumables to teach practical subjects.

Hence practical lessons are being taught theoretically by most schools. Therefore this indicates that pupils leave school after completing form 4 without the necessary skills for self-reliance.

### **Textbooks**

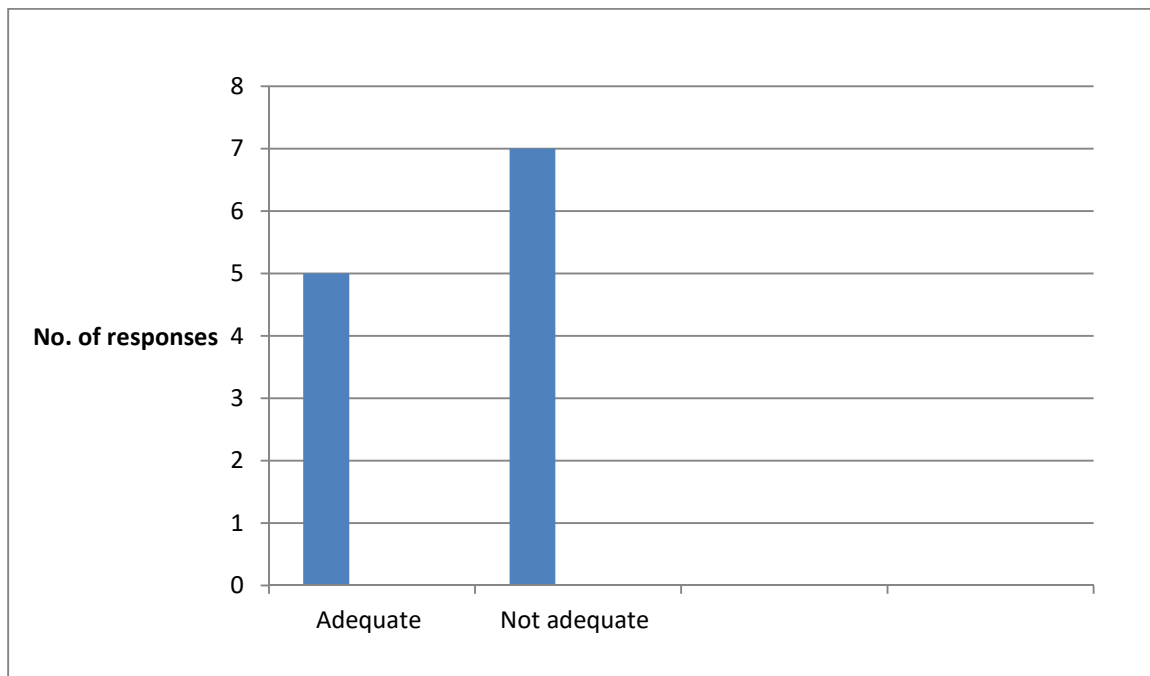
The above table shows that all the four school did not have textbooks for use in Technical Vocational subjects. Thus all of the Secondary Schools in Gutu East are operating without this important resource. Bvekerwa et al (2011) argues that the majority of students in rural schools rely on textbooks as their main source of information due to the fact that they have no access to internet. Thus lack of textbooks implies that pupils rely on the teacher's notes. Coltar (2012) postulates that an average of 30 pupils shares one textbook in Zimbabwean schools. Lack of textbooks means that pupils are not able to study during spare time. Even though the number of schools in the study indicated that they offer computer studies as a practical subject, it is unlikely for such schools to have internet facilitator while they do not have funds to buy textbooks.

### **Funding**

All the 4 schools indicates that funding of the practical subjects is below anticipated. Four schools indicated that financial support is a major challenge hindering implementation of Technical Vocational Subject. School based Technical Vocation is financed from public funds, since such funds are limited there is limitation to kind of skills acquired by pupils. Schools rely on school fees to buy the consumable and of recent pupils are no longer paying fees as school

heads are no longer allowed to sent pupils home to collect the school fees. Kanyongo cited in Chakamba et al (2000) purports that in most schools parents incur extra costs apart from school fees to buy the consumables. However not all parents can afford to meet such cost. This result is practical subjects being taught theoretically and at last most pupils drop the subjects hence school leavers will fail to sustain themselves.

Kohoe (2007) supports that what used to be once thriving Woodwork and Metalwork departments in various schools have deteriorated due to poor and inadequate funding, to make matters worse these two subjects have been removed from school curriculum by most heads because they cannot fund them, hence pupils are limited in skills acquisition.



**Fig 3: Time adequacy**

The above Fig shows that 7 teachers said that time allocated from practical subjects is inadequate while five teachers indicated that time is adequate to acquire skills. Of the five who indicates that time is adequate, they instead blamed poor funding and lack of resources in their department as a

hindrance to skills acquisition. One of these five teachers said two hours are enough for practicals if pupils were not sharing the absolute machinery.

From the observations made all practical subjects in the four schools have a total of six periods, per week to use for both theory and practical from form 1 – 4 while the ministry recommends 8 periods for O' levels. This is supported by Mupfumira (2011) that time allocated for practical subjects is inadequate in both rural and urban schools.

One pupil also indicates that time is one of the challenges they face because most of the time they are called for weekend practical lessons to complete coursework items

From Fig 3 above it is clear that time is not enough for students to learn both theory and practical aspects of the subjects. Nhewa (2014) supports that allocating few hours for practical activities affect student's ability to engage in such activities after leaving school because lack of practice, breeds imperfection. Therefore failure of schools to give pupils adequate time leads to production of graduates who are not confident to join the world of work, all they have is partial skills acquired in theory lessons and these are not enough for self-reliance.

**Table 5: Careers Pupils hope to do after graduating from school****N = 40**

<b>Response</b>	<b>Frequency</b>	<b>%</b>
Teaching	4	10%
Police Officers	10	25%
Law	2	5%
Medicine	4	10%
Nursing	10	25%
Technicians	6	15%
Self employed in practical activities	4	10%
<b>TOTALS</b>	<b>40</b>	<b>100</b>

The above table shows response by pupils on types of careers they hope to do after school, 30 pupils indicate that they aim to end up in white collar jobs and these includes, teaching, nursing, law and medicine among others while 10 pupils shows interests is manual or blue collar jobs, 4 out of the 10 indicate that they would want to be self-reliant in the practical channels they have chosen.

Table five shows that even though most schools are trying to after Technical Vocational Skills to pupils for self-reliance and employment most of these pupils are not knee to use the acquired skills in life after school. One pupil indicates that doing a practical subject will only help him to get the required 5 O' levels that will see him through to A- Level. Munikwa et al (2011) support that parents and guardians encourages their children to take seriously subjects that will give them chances of prosperity in life and those that take the route to better jobs and incomes such as



lawyers and doctors. Hence it is the duty of the government to change perception of all stakeholders through enhancing the status of Technical Vocational Education.

Ten pupils showed interest of Technical Vocational jobs either as employed technicians or self-employed, this shows that offering Technical Vocational subjects to schools pupils stimulate the desire to create artifacts and earn a living from that. Therefore these and more others should be encouraged to increase public perception of Technical Vocational Education.

**Table 6: Challenges faced by school leavers in seeking employment and organizing self-reliant projects.**

1	Most school leavers have less than 5 O' Levels
2	Do not have skills needed
3	They have negative attitudes towards manual labour
4	Lack of funds and equipment to start new projects

The above findings show that teachers and school heads have the opinion that it is difficult for most school leavers with Technical skills to get employment because most of them do not have 5 O' Levels. This is supported by ZIMSEC result analysis for 2013 that the pass rate is fluctuating between 18% to 23%. The problem begins when these pupils were channeled into practical subjects because they were slow learners. At O' Level these pupils worked hard passed the Technical Vocational subjects but fail to get the required 5 O' Level to get employed. One teacher indicates that a number of her pupils went home with A and B in Fashion and Fabrics only. Such a pupil cannot find employment in Zimbabwe because employers ask for 5 O' levels.

Another responses shows that skills offered in schools are limited because of number of factors and these includes poor funding, inadequate resources and the exam driven nature of the

curriculum. All twelve teachers indicates that more emphasis is put on examinations such that they are now teaching for examination. Drilling methods of teaching are used instead of hands on approaches. If pupils fail you get blamed by parents, head and ministry and to avoid this embarrassment teachers teach pupils to memorize exam tips hence acquire limited skills. Therefore when seeking employment they are found with low skills. Another teacher said pupils fail to get employment and to start self-reliant projects because they do not have skills such as pattern making. The school syllabus places more emphasis on the use of commercial patterns which are no longer available on the market, hence when completing school pupils cannot make their own patterns hence fail to organize self-reliant projects. Another finding indicates that students fail to start self-reliant projects because they have negative attitude towards manual work. Students have the feeling that manual work is for the failures in life. Hence parents, communities and schools should apply Buker T. Washington's philosophy which teaches pupils the dignity of labour, the value on technical skills and the application of hand. Pupils should be taught to love dirty if they are to earn a living after school.

Another factor raised for failure of students to get self-employed after school is lack of funds. The country is experiencing challenges in economic issues hence school leavers lack financial support to start something tangible after leaving school.

**Table 7: Enhancing Technical Vocational Education for employment and Self Reliance**

1	Allocating enough time for practical work
2	Reviewing of the curriculum
3	Provide attachment and internship for school pupils
4	Recruit experts and well trained teachers
5	Increase funding for Technical Vocational Education
6	Improve public perception on Practical subjects so that they are not seen as an option for slow learners.
7	Cooperation between schools and industry for example forming school industry committees
8	Change of employment patterns by recognizing Technical Vocational subjects
9	Regular capacity building for teachers

The above results shows responses of school heads and teachers on how Technical Vocational Education can be enhanced to improve chances of employment and organization of self-reliant projects by school leavers.

A number of teachers indicate that if time for practical subjects is improved pupils will have more practice, they will be able to make more practical articles and this will prepare them for the world of work. Nhewa (2014) support that more practical time should be allocated so that students will acquire practical skills to enable them to be employed upon leaving schools. Thus practice makes perfect and prepare students adequately for employment.

Teachers and school heads also indicates there is need to review the curriculum. By reviewing the curriculum, schools will be able to cater for individual differences. Curriculum review enables the ministry to address existing problems and identifying new ways to deal with the

problems. Gatawa (1988) support that curriculum changes whenever there are important changes in society for example change in technology. Through a revised curriculum the country will be able to include in the new curriculum such aspects as student attachment which is presently not in the school curriculum.

Table 7 shows that to enhance chances of employment and self –reliance pupils should be equipped with relevant skills needed in the Labour Market. Type of skills offered in schools should match with the requirements of the industry. This can be attained through introduction of industrial attachment. Through attachments pupils will be able to see and do practical work as required by the industry. An industrial attachment gives pupils exposure to the real world, formation of positive attitudes and characteristics of productive worker. Industrial attachments also foster social relations and give students experience to which workers are exposed to for example, pattern of subordination and hierarchy in the organization, labour management relations and fulfilling work schedules.

Table 7 also shows that the government should also recruit experts and well trained teachers in the area of Technical Vocational subjects. One teacher mentioned that how he can be expected to teach what is in the industry when he has never been to the industry himself. Therefore, teachers' colleges and industry should form partnerships in equipping the teacher with appropriate knowledge and skills relevant for the world of work.

The above table also show that there is great need for funding in schools. By improving funding resource acquisition will improve in schools. Students' practical activities depend on the number of facilities available (Nhewa 2014). Adequate funds will enable schools to buy textbooks, equipment and consumables as well as building specialist rooms. These materials foster skills

acquisition and enhance chances of employment. Vikalisa (2005) argues that school leavers from schools with scarcity of resources are likely to be described as unemployable in the labour market. This is because if a school lack funding it lacks resources and the majority of students from such schools lack necessary skills they need for life after school and as a result remain unemployed hence the need for improved funding in schools.

Other responses challenge the government to change public perception about Technical Vocational Education. Emmaculate (2006) postulates that this kind of Education is seen as a career path for the less academically privileged. Thus most school leavers did not want to engage in this manual work for fear of being labelled as academic failures by the public. Responses showed communities does not place value in tailors, builders and carpenters hence the need for changing public perceptions.

The table also show that cooperation between schools and industry can be a way of enhancing employability for school leavers. This can be done by forming school industry committees, this will give close coordination of what schools teach and what industry need hence increases chances of employment for school leavers.

The above findings also indicate that there is need to change patterns in the employment sector. As long as the industry prefers those students with academic subjects such as Maths, English, Science to Technical Subjects students will always choose academic careers and not technical Vocational careers.

The findings also shows that as the world keep on changing in technology there is need for regular capacity building for those handling Technical Vocational Education. Teachers should be

inserviced through refresher courses, workshops and seminars so as to keep on capacitating teachers to impart relevant knowledge and skills for employability and self-reliance to students.

#### **4.2 Summary**

The researcher found out that Secondary schools are facing challenges in the implementation of Technical Vocational subjects and these includes poor funding, lack of human resources and material resources, stakeholders' negative attitudes and inadequate time. The chapter also revealed that selection methods used for channeling students into Technical Vocational classes have an impact on how these subjects are later on used by the pupils. Textbooks have proved to be a scarce resource in most schools. However mitigation strategies were proposed to enhance student's chances of employment after leaving school and these were reviewing of the current school curriculum such that it caters for the changes in society and provide student attachment as a way of matching skills acquired in schools and those needed by the industry. Teaching staff should also be experts and highly trained in their areas of specialization, public perceptions should also be changed from negative to positive about Technical Vocational Subjects, cooperation between industry and schools should be encouraged as well as changing employment patterns. Challenges that faces school leavers when seeking employment were also highlighted and these includes poor skills acquired during years of secondary schools, negative attitudes towards manual labour, and lack of funds to start new projects.

## CHAPTER 5

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.0 Introduction

This chapter presents the summary of the research findings, draws conclusions from the data that has been collected and presented in the previous chapter and further presents recommendations on mitigation strategies that can be employed to address challenges faced in the implementation of Technical Vocational subjects as well as ways of enhancing chances of getting employment and starting self-reliant programmes by school leavers.

#### 5.1 Summary

The first section of the research looked at the background of the study were points that gave rise to the research problem were highlighted. These include the increasing number of school leavers who are unemployed and are failing to sustain themselves. School leavers were found to be unable to use the locally available resources to sustain themselves yet they have passed through a vocationalised secondary school curriculum. The study was delimited to Gutu East Secondary schools where school leavers who cannot sustain themselves were found to be increasing in numbers year after year. In this section the researcher came up with the research questions meant to answer how Technical Vocational subjects are implemented in Gutu East Secondary Schools.

The researcher gave an insight and critique to what different authors has written about the implementations of Technical Vocational subjects. Aspects such as design system used to channel students into Technical Vocational classes were discussed and these includes examination and non-examination procedures, the quality of teachers needed to implement Technical Vocational studies successfully was also discussed, Technical Vocational schools

curriculum shows that a number of subjects are on offer and assessment for Technical Vocational was viewed as one that places more emphasis on exams.

An insight into other authors' work reviewed that schools face challenges in implementing Technical Vocational subjects and these challenges were lack of human resources, material resources, poor funding and negative attitudes of pupils. Mitigation strategies shows the need to review the current curriculum, embarking on capacity building of teachers, offering industrial attachment for school pupils to acquire skills.

The researcher used the descriptive survey for the study which enabled studying of a limited number of cases and make inference to a wider population through use of data collected from the sample. The population comprised of forty Technical Vocational Secondary School pupils in Gutu East, twelve Technical Vocational subject teachers and four heads of schools in schools which offer Technical Vocational subjects.

Simple random sampling technique was used to select the pupils and schools for the school heads and teachers purposive sampling technique was used for these were in possession of the characteristic that were of interest to the researcher and these includes being Head of schools and implementers of Technical Vocational subjects.

Data collected was presented in pie charts, tables and a graph. From the findings it was noted that Gutu East Secondary Schools are facing challenges in implementing Technical Vocational subjects and these includes shortage of human resources, material resources, poor funding, unavailability of time for practice, poor infrastructure and poor attitudes of pupils towards manual careers. However, mitigation strategies to enhance skills acquisition in the Technical Vocational arena were highlighted and these includes the need for the government to review the



current curriculum such that it provides a chance for pupils to go for attachment, recruiting of trained teachers, increase funding of Technical Vocational education, improve public perception about manual work, changing employment patterns as well as forming cooperation between schools and industry so as to enable matching what is being taught in schools and the requirements of the job market.

## **5.2 Conclusions**

Despite efforts made by most rural schools to equip learners with relevant skills that would help graduates to engage in variety of practical activities upon graduating from schools. The major problem found from the findings was scarcity of human resources, material resources and financial resources. Data collected shows that schools are struggling to implement Technical Vocational subjects, this begins from the type of staff recruited to teach Technical Vocational subjects, majority of these teachers are not in possession of the required qualifications to effectively impart skills needed for self-reliance.

Lack of equipment and consumables also hinders practical skills acquisition. Consumables to teach pupils relevant aspects and skills for employability are nowhere to be found in schools. This means that products of such poorly equipped institutions will not acquire skills needed for the world of work because practical lessons are being taught theoretically due to scarcity of the much needed resources.

Funding of the Technical Vocational subjects is poor in most schools due to failure of pupils to pay school fees and practical fees. The government is also failing to provide funds to equip these practical departments such that schools acquire machinery, textbooks and equipment to expose students to relevant skills that meet the demand of the job market as well as for self-reliance.

Time allocated for practical lessons also proved to be limited hence pupils fail to acquire all the necessary skills for the world of work. The concept of practice makes perfect is not realized in schools due to shortage of time for practice. School heads shows that school time tables are overloaded that they can only offer 6 periods per week for practical subjects just like any academic subject and this present problems of poor practice of skills for students to be confident in the world of work.

Negative attitude of students towards manual work also hinders effective acquisition of practical skills, public perceptions about Technical Vocational subjects perpetrate these negative attitudes.

Too much emphasis of Zimbabwe's curriculum on exams also hinders skills acquisition by students. Teachers now teach for examination through drilling methods to escape the embarrassment of poor O' level results. The curriculum also proved to be outdate and in need of reviewing. The current one does not cater for individual differences and does not provide for industrial attachment for students to get exposure to the real world of work hence the need to review it. Findings also revealed that there is great need for cooperation between industry and schools so as to match the demand of the industry and skills imparted in schools.

### **5.3 Recommendations**

- The society should be sensitized about the importance of practical subjects. This can be done through career guidance at school; cluster and district level including parents so that they appreciate practical subjects.
- There is need to offer entrepreneurship skills to the Technical Vocational subject students so that they are capable of managing self-help enterprises

- Teacher's colleges should ensure that practical subject teachers are exposed to industrial attachment to provide them with industrial skills for the benefit of the child.
- The country need to invest heavily on capacity building programmes for teachers to keep ahead of new technical skills and methodologies, such programs include cluster workshops and seminars.
- The Ministry of Educations should offer exchange programmes for internship, attachments and school industry committees to enrich the practical skills of students and teachers to meet the demand of the world of work.
- The funding net should cover all stakeholders, communities can offer monetary and non-monetary support through molding of bricks and building of specialist rooms for practical subjects, to government improving funding in schools.
- Schools should form income generating projects to help in sustaining Technical Vocational subjects departments

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## APPENDICES

### Appendix 1: Observation schedule

Will look at the following

1. Availability of specialist rooms
2. Condition and amount of equipment and machinery in practical subjects workshops
3. Lesson observations

## **Appendix 2: Interview guide for school heads**

I am a Bachelor of Education Degree in Fashion and Textile student at Midlands State University. I am carrying out a research on the implementation of technical vocational subjects in Gutu East Secondary schools. Information that you will give will only be used for study purpose and will be treated confidentially.

1. Which practical subjects do you offer at your school?
2. Do you have Technical Vocational subject specialist rooms
3. What challenges does your school face in implementing Technical Vocational subjects?
4. What challenges do pupils who graduate from your school face in seeking employment and organizing self-reliant projects?
5. How should implementation of Technical Vocational subjects should be improved to enhance skills needed for employment and for self-reliance?
6. What should be done to equip learners with skills that matches the job market and for self-reliance

### **Appendix 3: Interview guide for teachers**

I am a Bachelor of Education Degree in Fashion and Textile student at Midlands State University. I am carrying out a research on the implementation of Technical Vocational subjects in Gutu East Secondary schools. Information that you will give will only be used for study purpose and will be treated confidentially.

1. What are your qualifications?
2. Which subject do you teach?
3. How many years have you been teaching?
4. How do you select pupils for Technical Vocational subjects offered at your school?
5. Do you have Technical Vocational subject specialist rooms?
6. What challenges do you face in implementing Technical Vocational subjects?
7. What challenges do pupils who graduate from your school face in seeking employment and organizing self-reliant projects?
8. What should be done to equip learners with skills that matches the job market and for self-sustaining?
9. What solutions do you recommend to mitigate Technical Vocational implementation challenges?

## Appendix 4: Questionnaire for the Technical Vocational pupils

I am a Bachelor of Education Degree in Fashion and Textile student at Midlands State University. I am carrying out a research on the implementation of technical vocational subjects in Gutu East Secondary schools. Information that you will give will only be used for study purpose and will be treated confidentially.

### Instruction

- Do not write your name on the questionnaire
- Show your response by ticking the respective answer box or complete in the space provide

1. Which practical subject(s) do you do?

Agriculture	<input type="checkbox"/>	Fashion and Fabrics	<input type="checkbox"/>	Food and Nutrition	<input type="checkbox"/>
Building Studies	<input type="checkbox"/>	Woodwork	<input type="checkbox"/>	Computer Studies	<input type="checkbox"/>
Technical Graphics	<input type="checkbox"/>	Home Management	<input type="checkbox"/>		

2. How were you allocated the practical subject you aere doing?

Use of entrance tests	<input type="checkbox"/>	Gender	<input type="checkbox"/>
Free choice	<input type="checkbox"/>	Random selection	<input type="checkbox"/>
Grade 7 results	<input type="checkbox"/>	Ability tests	<input type="checkbox"/>

3. Do you have Technical Vocational subject specialists rooms?

Yes

No

4. What challenges do you face in the learning of practical subjects?

.....  
.....  
.....

5. What careers do you intend to do after leaving school?

.....  
.....  
.....

6. What do you think can be done in the teaching and learning of practical subjects that will enhance of employment and self-reliance after graduating from school?

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.....  
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## **Appendix 5: Letter of permission**