**UNIVERSITY OF EDUCATION, WINNEBA**

**COLLEGE OF TECHNOLOGY EDUCATION, KUMASI**

# A STUDY INTO PRACTICAL SKILLS ACQUISITION OF WELDING STUDENTS: A CASE STUDY AT ST. JOHN'S VOCATIONAL TECHNICAL INSTITUTE, IN THE NANDOM DISTRICT OF UPPER WEST REGION

**PATRICK NAAZIE**

**AUGUST, 2017**

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**A Dissertation in the DEPARTMENT OF MECHANICAL TECHNOLOGY EDUCATION, Faculty of TECHNICAL EDUCATION, submitted to the School of Graduate Studies, University of Education, Winneba in partial fulfillment of the Requirement for the award of the Master of Technology Education (Mechanical Technology Education) degree.**

**AUGUST, 2017**

# DECLARATION

## CANDIDATE'S DECLARATION

I, **Naazie Patrick**, declare that, this dissertation with the exception of quotations and references contained in published works which have all been identified and acknowledged, is entirely my own original work, and it has not been submitted, either in part or whole, for another degree elsewhere.

SIGNATURE…….…….....

DATE…….....……..

## SUPERVISOR'S DECLARATION

I hereby declare that the preparation and presentation of the dissertation were supervised in accordance with the guidelines on supervision of dissertation laid down by the University of Education Winneba.

SUPERVISOR‟S NAME: **Engr. Stephen K. Amoakohene**

SIGNATURE……

DATE…….....……

## DEDICATION

This study is dedicated to the Almighty God and to the Leaderships of the Brothers of the Immaculate Conception (FIC), Ghana Province, 2012 -2018 for the sponsorship and the moral support given to me.

I have not also forgotten of my parent, both living and dead throw whom God has given me life, their parental care and material support.

To all those who inspired me, Formators, teachers and many others, I am grateful. The list of dedication remained endless if I don"t mention my able Supervisor, Engr. S.K. Amoakohene.

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## ABSTRACT

This study sought to investigate the factors that affect acquisition of skills among the welding students of St. John‟s Vocational Technical of the Nandom District of the Upper West Region. It intends to seek the opinion of students‟ attitude towards welding programmed regarding the Vocational/Technical Skills offered to them. To see whether or not how the qualification of the teachers can influence the learners/students‟ acquisition of skills? That is to say if the teacher is qualified and knows the subject matter, he/she will be able to deliver and influence the student. For that matter, he/she could even simplified the learning procedures for students to grasp the essence of the skills been taught. On the other hand, lf the teacher has a very little knowledge in a particular training concept would make the training boring and will not be able to arose the interest of the students. Through the findings of this study, the poor attitude of some students and the general public attitude towards practical skills training may be addressed. The researcher adopted a descriptive survey design which involved two sets of questionnaires with closed ended, forty questionnaires items for welding students and thirty-six questionnaires items for the technical teachers. The target population includes seventy (70) students and twenty-two (22) teachers, all of St. John‟s Vocational technical institute-Nandom. Finally, the major findings were found on four (4) Tables and three (3) figures in chapter 4. On the Table 4.2 51(73%) of the respondents endorsed the statement that, many people do not really respect technical men and women. Ghana government has not been able to supply enough tools and equipment to Technical and Vocational Institution. Students‟ should put pride aside and learn the skills. This testified that some students had negative attitude towards practical skills training and as such reluctant to take the practical training very seriously for their own good.

# CHAPTER ONE

# INTRODUCTION

This chapter deals with the background of the study, the statement of the problem, purpose of the study, the research objectives, the research questions, the significance of the study, limitations of the study, delimitation of the study and organization of the study.

## 1.1 Background of the Study

Practical skill acquisition is best defined in the opinion of the learner as the process of obtaining knowledge of technical and practical nature from an individual, group or institution that can pass on knowledge (Ubong & Ogusor, 2007). Skills are largely used in trade context, while occupations and vocations aimed at practical purposes. Technical and vocational Institutions are intended to give full training intended to equip students fully into the field of work (Okoro, 1999). In his opinion technical and vocational institution train craftsmen in various fields of work like welding and fabrication, motor vehicle mechanics, plumbing and gas fitting, carpentry and joinery, Cabinet making, Building construction and others of which St. John‟s vocational/technical institute is not an exception.

According to Ubong and Oguzor, (2007) Teachers and schools teaching technical and vocational courses have the duty to emphasize on the practical aspect in the various specialties in vocational and technical education. However, the allegation is that, technical and vocational institutions are graduating students with inadequate or absolute lack of practical skills in the various trade areas as a result of lack of qualified teachers and lack of adequate teaching materials, equipment and tools (Ammani & Ogunyinka, 2011).

This portrays a desolate future for the attainment of the lofty ambition of the National strategy on Education, of producing technical institution graduates. Technical/ vocational education and training which are meant to equip students with employable skills is still not progressing as it should, owing to the fact that some technical graduates are roaming about on idleness. In my opinion, the underlining factor is practical application of what is taught, which should be relevant to the job market. Whether or not technical education will continue to be a core value in any developing country like Ghana. So therefore, there is the need to be circumspect in the way we perceive technical education. The way and manner technical education is perceived by the Ghanaian society is not helpful due to the fact that it is a means for those who are unable to function in the typical academic setting. This perception is a deficiency for a vocational technical education grow into, higher education (African Union, In reality this negative perceptions are not narrow down to those who have little or no understanding of vocational education. In 2002, a survey of public TVET teachers depicted that none of the 87 respondents was in view of their own children to study TVET programmes (Anamuah, 2004). Meanwhile, the nature of work is changing as a result of technological advancement, there is an increased public demand on vocational institutions to equip the individuals with the needed opportunities for the present and future prospect in various industries with enough skills for personal development and success so as to transform society (Moss &Liang, 1990). Technical and vocational education is an integral part for socio-economic development for individuals and the nation at large.

The educational implementations are very demanding because of the tools and equipment needed for vocational and technical institutions. It is sad when a technical or vocational student upon completion, cannot use a simple rule. All things being

equal, such a student cannot boast of any skills acquired over the student who completed the traditional senior high school.

Over the years, technical/vocational education and training have been relegated to the background due to various negative attitudes towards technical and vocational education. Anamuah (2004) indicated that technical and vocational education sector proven by existing research will continues to be constrained due to the negative perceptions which depicted by technical and vocational and training (TVET) as a downgrading of status and low educational path. These perceptions to some extent have hindered technical and vocational training from remaining a focus through which young people of Ghana can acquire the needed skills for the job market. Take for instance, the Ministry of Education in 2010 indicated that, 64,156 learners enrolled into formal TVET, most these learners were those in informal apprenticeships, representing 80% of vocational enrollments (Palmer, 2007).

Having said all this, I see technical and vocational education as a double edge sword thereby making students who pass through such education industrious. For the goal of practical skills acquisition to be accomplished, the Ghana Industrial Skills Development Centre was established in 2002. This centre, working in close partnership with the Association of Ghana Industries (AGI) and Ghana Employer Association (GEA), was tasked to control the financial and material resources required for excellent achievement in skill training (Roeske, 2003).

## 1.2 Problem Statement

In spite of the diverse interventions put in place to ensure that technical institution graduates are well trained and equipped with the needed practical skills for the job market, there is still a drift to the ideal (Palmer, 2005). Therefore, the need for

welding and fabrication students at St. John‟s Vocational Technical institute in the Nandom District to reconsider welding course and make it their own because, most technical graduates within the fields of welding and fabrication technology industry enter into employment in different fields of their study and training. Students who completed welding courses and work in different field of trade is a factor to some candidates who want to enter into welding course get deterred as a result. On the other hand, the poor economic conditions of Northern Ghana, leading to the transition from school to work by most of the youth has a great influence on TVET graduates, who are largely teenagers leave for the Southern part of Ghana for unskilled jobs.

This phenomenon is an indication that, the training programmes offered by the technical and vocational institutions probably has failed to develop the needed practical skills acquisition for our students for employment within and without the District. For the practical skills to be meaningful and beneficial to welding students, there are some basic areas of attention namely, theoretical, practical and exposure to the field of work. For this reason it, is important for the students to be exposed to practical situation where these skills are displayed and utilized to the full (Nwanaka & Amaechule, 2011). In view of the above statement, it expected that, welding students in their second year of training be given real work situation in a form of industrial experiences relevant to the course under study.

Besides, it is only the skillful student who is able to manipulate with the raw materials by adding value to it to make a finished product suitable for the market. The researcher realized lapses on the part of the student‟s practical skills acquisition and considered it worthwhile to investigate into the matter.

### 1.3 Purpose of the Study

This study is conducted in view of having an in-depth knowledge of the numerous challenges associated with welding student‟s acquiring practical skills at St. John‟s vocational technical institute of Nandom District. It is intended to help carve those students who pay no or little to practical lessons being taught.

- To examine the availability of relevant teaching, learning and training facilities in which skills could be obtained by welding students for upward development of themselves and the nation at large.
- To find out the attitude of welding students toward practical activities.
- To determine how often students and teachers are expose to practical activities in a week, whether or not the regularities or irregularities can affect their efficiency in the practical field.
- To let students understand that they can be self-reliant through the practical skills acquisition.

### 1.4 Research Objectives

i. To motivate welding students to appreciate practical skills and be serious with practical activities.

ii. To enlighten welding students on the importance of welding course and how it can help them eradicate poverty.

iii. To explore new approaches to practical activities to match the current public demand of finished artifact.

## 1.5 Research Questions

1. What are the challenges facing the acquisition of practical skills?
2. To what level of degree does the teachers‟ quality of teaching affect the acquisition of practical skills?
3. What are the challenges facing the effective preparation of technical students for the field of work in the welding industry?

## 1.6 The Significance of the Study

The result of this study, will help get rid of the negative attitude welding students have toward practical skills acquisition at St. John‟s vocational technical institute and discover the issues and problems relating to practical skills training among technical institutes within the District. It will also offer suggestions and recommendations to address these problems.

## 1.7 Limitations of the Study

The study was restricted to only St. John‟s Vocational Technical Institute welding students to be précised owing to the fact the researcher could not have covered a wider area for the study which could affect the financial status and time management of the researcher. As such the researcher was not able to exhaust the topic under study and may need further study.

## 1.8 Delimitation of the Study

The study is limited to assist welding students of St. Vocational Technical Institute-Nandom realize their potential regarding practical skills acquisition for the job market and to suggest possible solution that will help eradicate the negative

perception they have about welding programmed and its related activities and be focused on acquiring practical skills for a better living. A questionnaire will be administered seventy (70) students of the welding and fabrication department twenty-two (22) technical teachers of St. Vocational Technical Institute-Nandom, making a sample size of ninety-two (92).

### 1.8 Organization of the Study

In this study, the researcher elaborated on the background of the study which depicted negative perceptions some students have towards vocational and technical education which necessitated the study of the problem and the purpose in order to bring an attitudinal change to those students who have negatives attitude toward practical skills acquisition. Additionally, some objectives are set out to be achieved. In so doing, the researcher thinks questionnaire will be the appropriate instrument for measuring the negative perceptions of people regarding practical skills acquisition in the welding industry.

Questionnaire will be administered to both students and teachers making a total sample size of eighty (80). When the questionnaire is administered pretty well, people will learn to appreciate practical skills acquisition and stop being bias of the welding course.

Besides, literature will be reviewed to assist the researcher use quantitative approach method to collect data from the questionnaire so as to analyze the results and interpret the data and report, using Tables, Figures, bar and pie charts to present the findings and thereafter make some suggestions and recommendation. In the next chapter, the researcher is interested to review literature base on the problem statement.

Chapter three is intended to deal with the population, sampling and sample size using the data collection procedure whereby the design instrument (questionnaire) will be used within the geographical location of the study.

In the fourth chapter, the data collected will be analyzed and data finding discussed while the fifth chapter present the findings and discussion. The sixth chapter includes; research procedure, major findings, conclusion, recommendation and some weakness of the research for further research.

# CHAPTER TWO

# LITERATURE REVIEW

This chapter is the literature review in relation to practical skills acquisition. it is organized in sections dealing with the following subheadings; practical skills gap in training, practical skills in relation to the job market, The perception of technical-vocational education and training by students, stigmatization of vocational/technical education by students, Student/Teacher ratio in relation to welding craft programmed and the Research Gap all in relation to student‟ attitudes towards vocational skills acquisition, relevance of learning resources in supporting skills acquisition, courses offered.

## 2.1 Skills Acquisition Gap in Practical Training

The Technical/Vocational Education (TVE) Institution graduates in recent times seemingly has a deficiency in practical skills acquisition owing to the fact that most of the training facilities are outmoded and inadequate, thereby making it difficult to face the current trends needed for the industries (Olorufemi & Ashaolu, 2008). The Ghanaian industries are not directly involved in training, funding and the curriculum development of our technical and vocational institutions, which are the bedrock of industrialization in the developed countries, therefore, no interactions between industries and the technical and vocational institutions to research into activities of manufacturing (Olorufemi & Ashaolu, 2008).

The poor facilities available for practical skills training coupled with some students‟ negative attitudes towards practical activities is a contributing factor to students approach to learning practical skills. As a result, period on the timetable allocated for practical activities are expended in unfruitful activities leading to student

learning becoming fruitless when the fundamental principles are not unstated thereby leading to lack of eagerness in the training. One of the greatest challenges facing TVET in Ghana currently is the low prestige accorded it by the public. Most parents and guardians have never dreamed of their wards becoming Engineers if not Doctors, lawyers, or accountants. Therefore, trades like welding and fabrication, auto mechanics, building, and the like are considered and preserved for students who are challenged in their mental ability to pursue a University courses. These trades are also considered better suited for the marginalized in society of the socio-economic ladder. (Council for Technical and Vocational Education and Training, 2012-2013)

Besides, inadequate funds to run TVE institutions as well as negative impression of students towards technical education, in Ghana is characterized in general by other factors such as large numbers of poorly educated, unskilled students compared with the facilities available owing to the fragmented delivery systems is a big obstacle to technical education in Ghana (African Union, 2007). Additionally Akpan (1983) added that inadequate equipment and workshop tools hampered students receiving training to meeting the standards to be employed in industries or related fields of work. In the way Barky (2005) emphasized on the fact that, availability of instructional resources has a great influence on the choice of teaching methods and materials. With non functional workshop tools and equipment, the technical instructor is handicapped and may not go anywhere with the use of demonstration method only in his teaching, as such TVE has a limit for the theory, if the tuition and learning surpasses that limit, acquisition of skill will be relegated to the background and TVE will turn to be “theoretical education”. It is not astonishing, that Ibehim (1994) expresses dissatisfaction that graduates of TVE programs were being rejected by industries due the wrong kind of training they had in schools. The wrong

kind of training received by TVE graduates was not aligned with the practicals leading to their inability to gratify the industrial demands. All in all, the problem of TVE is the poor and non-functional training facilities namely, workshop tools and equipment.

## 2.2 Practical Skills in Relation to the Job Market

A large number of technical graduates are indebted to practical skills acquisition in their approach to practical activities. This is confirmed by UNESCO (2004) when they found out that two fundamental objectives have not been met by Technical and Vocational Education (TVE) as they failed to train the students for self-employment and needed to increase productivity of the informal sector of the economy. They added that dearth of resources has led to a very little training received by students in the public institutions. These drastic reductions automatically are an impediment to pursuing the main goals and objectives of providing training and increasing production. Taking into an account of the expensive manner of TVE as a type of education, it is imperative that an extended system with the needed and adequate facilities and equipment be put in place to improve the system.

According to Islam and Mia (2007) both formal and non-formal TVE fall short of an efficient link between training and the world of work. They added that as a result of its deficiency of coherent method, practical skills training do not produce the required skillful people for the labor market. Furthermore, the trainees also have a deficit in the training experience, initiative and enthusiasm to carry out their work effectively.

It is in this vein that Technical and Vocational Education and Training TVET is anxious of preparing learners for employment, through the prerequisite practical

skills and attitudes sought-after in the field of work, its involvement to industrial and national development cannot be taken for granted. TVET will continue to be the country‟s hope of eradicating the high level of poverty and deprivation because whether the person is working on the farm, in the office or workshop, among others, the technology, which is a prerequisite requirement, depends on a workforce of skilled, competent enough to match the world needed level technologists and craftsmen (Nsiah-Gyabaah, 2009).

In this regard, TVET concerned itself for enhancing integral development namely, economical, social and industrial developments. Consequently, it is an indispensable approach in preparing the needed human resources within the educational economical system. TVET on its own does not generate jobs, but is advantageous when it is associated with the concrete needs of the labour market. Hence the rationale for TVET programmes in Ghana to match current and future labour market needs. An average TVET is anticipated to mobilize resources needed to face the current problems and future challenges. Due to its concentration on the genuine needs of labour market and focus on the output, it should designs flexible programmes that best serve the requirements for production and service sectors and aim at practices and learning experiences that best suite job requirements (Johanson and Adams, 2004).

In view of reducing poverty, Technical and Vocational initiation in the general is the education of youth for the purpose of eradicating poverty in the country should fulfill the educational requirements of all spheres of interest and abilities. It is largely hope that TVET can equip men and women for the job market or self employment, thereby increasing their self-reliance and self-confidence. It is therefore seen as a

means to promote human resource development and thus, can be regarded as a universal remedy to combat ever growing poverty problem in Ghana.

The deficiency in TVET system in Ghana, in years past, has created a series of constraints for the development of the system. Largely among these have been the shortfalls in national policy framework to steer the management and implementation of TVET programmes in a corresponding manner. Inadequate resources provision to the TVET sector persists and this has succeeded in weakness of the system. These among other things include old-fashioned and inadequate training equipment and tools, insufficient of training materials, inadequate number of qualified instructors with requisite industrial practical knowledge, lack of partnership between training institutions and industry and lack of irrelevance training in our institution to the needs of industry. According to Akyeampong (2010), employment rates of TVET graduates in Ghana are very low, implying that TVET has lost the target but focuses on training which has a very low market requirement. Gondwe and Walenkamp (2011) also added that the real content of the TVET programmes does not meet the needs of the field of work.

## 2.3 The Perception of Technical-vocational Education and Training

According to Adiele (2008) defines it as the "special ability to do a particular job or activity, especially one that renders service to other people". In the same way, Okoro (1991:1) defines vocational education as the "type of education which provides the skills, knowledge and attitudes, necessary for effective employment in a specific occupation". Technical-vocational education is characterized by an education that exposes the learner/student to the acquisition of practical skills that could be translated into economic benefits (Akerele, 2007). Technical and Vocational

Education is oriented towards national development strategies in many societies because of its effect on productivity and economic development. Vocational education is aimed at the production of the educated man/woman who can effectively work with his/her head, heart and hands. This helps in the development of the economy and promoting self-reliance and self-sustainability in the driving force of the vocational/technical programme. Technical-vocational education is, therefore, understood to be a way of preparing for occupational skills geared towards effective participation in the field of work thereby alleviating poverty (Obanya, 2005).

However, it is generally accepted that all forms of education will assist people to improve themselves and to get better jobs, but many parents are of the view that only a university education will earn their wards the prospect to acquire an excellent job. Consequently, many countries find that the number of graduates from universities far more than the capacity of the labour market to provide appropriate employment. Additionally, these countries failed to attract enough people to train for those positions they think are of greater need, which might be ‚blue collar' jobs that might appear to involve labour-intensive, be dangerous, dirty and difficult to manage (Commonwealth of Learning, 2001). Additionally, some scholars are of the views that technical education has one prominent emergent theme which begins to surface; to such an extent degree that it should prepare students for future employment (Cole & Thompson, 2002).

### 2.4 Stigmatization of Vocational/technical Education by Students

Considering the three divergent curricula to comparative analysis indicates that while the traditional academic education developed the cognitive and affective domains of learners/students, the technical and vocational systems developed the

cognitive, affective and psychomotor skills thereby giving training to the learners/ students.

The traditional education was the only prerequisite to pursuing diploma and degree progammes in universities, however, all the technical and vocational graduates could progress up to the advanced craft or technician part III level in the polytechnic with the exemption of Ordinary Technician Diploma (OTD) graduates who could only offer diploma in technical courses at Kwame Nkrumah University of Science and Technology. In industry Technical and vocational graduates could only be given the position of artisans, foremen and supervisors who always worked as subordinates to their contemporaries who had traditional academic education and progressed to the university to pursue diploma and degree programmes. The conditions of service in industry regarding remuneration, progression, incentives and others were tilted to favour the senior staff that had university education (Agyarkoh, 2013).

This has created a gap between vocational/technical and traditional education in the three dominant areas of the educational system. The drawback of TVET systems in African countries has created an opinion that TVET is second class to traditional academic education. This is because graduates from a traditional grammar education are employed in white colour jobs whereas TVET education leads to blue-colour jobs which are downgrading and less prestigious (Maiga, 2013). Consequently the stigma on TVET in Nandom the Northern part of Ghana and in Africa as whole is that many parents and guardians discourage and prevent their wards from pursuing TVET programmes owing to the limited academic opportunities in the academic ladder and the lack of prestige that characterized TVET in Ghana in yesteryears. This unfortunate situation to some extend has affected the enrolment of students into the TVET institutions in Ghana in which St. John‟s vocational technical institute is not an

exception particularly in the welding department. Besides students‟ contributions and innovation have been watered down by the nation‟s look warm attitude of not providing all the necessary facilities in order to completely reap the requisite expectation of the Technical Vocational Education. Internationally, technical and vocational associated universities and polytechnics are accountable for the training needs and development of artistic workers with inventive scope, intellectual capability and inventive skills to bring into being the needs of the country. (Essel, 2013b)

## 2.5 Student/Teacher Ratio in Relation to Welding Craft Programmed

Most Junior High pupils after completion preferred traditional education to vocational/technical education therefore creating the impression that vocational/technical education is a second class education leading to low enrollment especially in the welding programmed (Maiga, 2013). In some institutions especially St. John‟s Vocational technical, the teacher/student ratio is woefully inadequate with the students being less than the teachers terms of the ratio.

An assessment of students‟ was made in comparison regarding enrolment into TVET programmes in Europe and Africa reveal an extremely low patronage of TVET in Africa. From African Centre for Economic Transformation (ACET) in 2009 Germany had 53.2% in TVET colleges; Finland had 55.1%, Ireland 33.9%, and South Korea 24.4%. In Africa, Angola had 72.19%, Burkina Faso 20.9%, Cameroon 22.4%, Ethiopia 59.5%, Ghana 13.2%, Kenya had 1.0% and South Africa 9.7% (Maiga, 2013).

There was a survey conducted by Artwatch Ghana in secondary technical schools and technical institutes in the central region of Ghana in 2013, disclosed

uninterrupted decline of enrolment into technical programmes especially, Welding and fabrication and others.

This called for the need to identify what went wrong in the case of Africa. "Vocationalization" of education has succeeded in many developed countries as a result of its influence on economic terms unlike the case in Ghana and other African countries whose primary goal for the introduction of vocational education has always been the "development of socially appropriate character, as a means of halting social problems such as urban migration and joblessness" (Yamada, 2005).

However, technical and vocational education is the basis of the success stories of most flourishing economies in the world. However, the youth of today doesn‟t know the importance of technical education with welding being the least patronized course. Another obvious effect of public negative perception towards welding and fabrication still under the umbrella of TVET in Ghana and in St. John‟s in particular is the failure of technical-based tertiary institutions to lead into industrialization. In truth, much of the future depends on technical-based tertiary institutions if there will be any expectation of a complete take off to serious industrial progress. But blaming these TVET based institutions only for the nation‟s failure to implement industrialization would be unfair to TVET.

A general weakness in these training institutions could be trace to factors such as teaching and learning facilities including equipment and classrooms. Appropriate teaching and learning facilities have lingered grossly the inadequacy of the practical preparation of students. These inadequacy of the training facilities replicates in the situation where training sessions are undertaken without the convenient practical activities that may be necessary to fetch out the best of students‟ gifts and talents. Most of the few tools and equipment are old and outdated (Dzigbede, 2009).

Netherlands Organization for International Cooperation in Higher Education, 2010; Dasmani, 2011)

## 2.6 Research Gap

The researcher regarding this research have not been able to exhaust all the necessary ideas/information needed to make it holistic one and so, further research may be needed. Besides the Researcher has not been able to create a conducive environment for interaction between the technological institutions and the few industries in so far as research activities and manufacturing are concerned (Olorufemi & Ashaolu, 2008). Additionally, the current he has only echoed on the negative perception peoples/learner have towards vocational/technical education but has not been able to open disabused in the minds of the many youth in our society the importance of technical education which is a panacea to poverty reduction.

Some researchers and scholars (Dzigbede, 2009; Duku, 2012; Dasmani, 2011) have made an acknowledgement of the problems facing vocational and technical education that rendered TVET programmes less productive in Africa and in particular, St. John‟s vocational/technical institute. The current writer is making emphasis on the stigma bewildered technical education and to convey to the fore is that the stigmatization of TVET in Africa and for that Ghana after the colonial rule was the brainchild of the African governments and intellectuals as well as policy makers, curriculum developers and reviewers who should have placed much emphasis on TVET instead of Grammar education had failed the TVET system.

On the other hand, the researcher has not been able to provoke Government intervention to reconsider technical and vocational education as very little attention is

usually given to TVET as its budget is less than 1% of the Government of Ghana"s annual budget (Baffour-Awuah and Thompson, 2011).

# CHAPTER THREE

# METHODOLOGY

## Introduction

In chapter two (2) the literature review identified some of the factors that influenced inadequate practical skills acquisition by students. This chapter covers a great deal with a quantitative research in which the researcher used quantitative technique and (the procedures to collect information on practical skills acquisition by the welding and) Fabrication technology students. As such the discussion is presented on the population sample, sampling and sample size, techniques, data collection instrument, design of instrument, data collection procedure, data analysis and their interpretation.

The study area was St. John‟s Vocational Technical Institute of Nandom District in the Upper West Region of Ghana. Nandom district has a number of second cycle institution establishments. Namely, St. John‟s Vocational Technical Institute, St. Michael senior high school-Nandom, St. Anne‟ s Vocational Institute-Nandom, Ko senior high school, and midwifery Training Institute-Nandom.

## 3.1 Research Design

This is overall plan for collecting data in order to answer the research question. Also it includes the specific data analysis techniques or methods that the researcher intends to use (Fraenkel & Wallen, 2003).

The research design used for the study was a descriptive survey because, the researcher found it suitable for achieving the existing condition of phenomenon within the locality Again, the survey approach is appropriate for educational fact-finding because they provide a great deal of accurate information (Yin, 1984). The

intention of survey research is to gather data at a particular point in time and to use it to describe existing conditions. The descriptive nature of research was used in order to gain information on whether or not, technical education or practical skills acquisition is anything attractive to the welding students and the youth.

## 3.2 Research Questions

The following research questions are used.

1. What are the challenges facing the acquisition of practical skills?
2. To what level of degree does the teachers‟ quality of teaching affect the acquisition of practical skills?
3. What are the challenges facing the effective preparation of technical students for the field of work in the welding industry?

## 3.3 Target Population

The target population group for the research is based on all students of welding and Fabrication technology department of St. John‟s Vocational/technical institute-Nandom and the technical teachers of the same school.

## 3.4 Sampling Technique and Sample Size

Convenience sampling technique (sample based on availability of data) was adapted to select both the students and teachers for the study. The sample was chosen with due consideration to what is relevant in acquiring practical skills. Eighty (90) people were chosen for the study. This comprises of seventy (70) students and twenty (20) technical teachers.

### 3.5 Data Collection Instrument

The data collection instruments were two set of structured questionnaires used for the study. The researcher used questionnaires with closed ended questions in order to avoid fallacy of ambiguity and give detailed level of content. The questionnaires contained information on personal details, information about courses offered and resources available. Questionnaires were administered to respondents. This is because the method yields high response pace at a relatively low cost and enables the researcher to structure the questions for the respondents Fraenkel and Wallen (2000).

Two similar set of questionnaires comprising of forty (40) text items of YES or NO combined with a 5 point Likert scale were designed for one group that is the students to facilitate the understanding level of the students and to eliminate strenuous factors. While thirty-five (35) test items of a five Likert scale of strongly agree, agree, neutral, disagree and strongly disagree questions for the teachers‟ respondents.

### 3.6 Design Instrument

A structured questionnaire is designed for the students and technical teachers to facilitate the researcher obtain relevant information on the students‟ attitude towards practical skills acquisition and training in the school. YES or NO as well as a five Likert scale type of questionnaire item was selected for the students, while STRONGLY AGREE, AGREE, NEUTRAL, DISAGREE and STRONGLY DISAGREE including an opened-ended question were used for the teachers to enable the researcher acquire and analyze the data precisely. The teachers formed part of the study in order to give the teachers view point of practical training in the workshop and that of the students „to be compared and contrasted to give a well balance study in this regard.

The researcher used a set of questionnaires for both the students and teachers will be found in the appendixes A, B and C.

### 3.7 Data Collection Procedure

The researcher made a visit to all the three classes of welding students and introduced his mission and topic to them and the assistance he needed from them in order to achieve the purpose for the study after having obtained permission from the Principal of the school. He explained further to the target population/students the essence of the questionnaire.

Having aroused and won the interest of the students, the researcher came to an agreement with the respondents about the time limit for completing the questionnaire by filling. The researcher further assured the respondents of absolute confidentiality. Thereafter a structured form of questionnaires were distributed to them for the purpose of this study with test items of "YES or NO" for respondents to tick YES or NO that best suit their answer. Yet another set of questionnaire with five (5) options ranging from STRONGLY AGREE, AGREE, NEUTRAL DISAGREE and STRONGLY DISAGREE level of agreement were used concurrently with the Yes or No test items.

Thus, when the data is collected and analyzed, it would give a well balanced interpretation and analysis. To facilitate conceptually the findings, tables, bar charts and pie charts were used.

### 3.8 Location of the Study

The study environment was St. John‟s Vocational Technical Institute of Nandom District in the Upper West Region of Ghana. Nandom district has a number

of second cycle institution establishments. specifically, St. John‟s Vocational Technical Institute, St. Michael senior high school-Nandom, St. Anne‟ s Vocational Institute-Nandom, Ko Senior High School, and midwifery Training Institute-Nandom. The district is one of the newly created barley five years ago.

# CHAPTER FOUR

# DATA ANALYSIS AND DISCUSION OF THE FINDINGS

The findings of this study are discussed in this chapter. The findings are in three sections. Demographic information on the respondents is analyzed in the first section in a tabular form. The second section discusses various factors affecting acquisition of vocational skills in the area of study regarding the respondents (lie students/teachers view). Tables, pie and bar charts and discussions will be used. Summary of the responses makes in the last section.

## 4.1 Demographic Details

**Table 4.1: Demographic Details of the Respondents by Category.**

| **Respondents category** | **Number of questionnaires distributed** | **Number of questionnaires answered** | **Percentage of return rate** |
|---|---|---|---|
| Welding students | 70 | 70 | 100 |
| Technical teachers | 22 | 20 | 91 |
| **Total** | **92** | **90** | **95.5** |

Table 4.1 reveals that ninety-two (92) questionnaires have been administered by the researcher to the two categories of respondents and ninety (90) questionnaires were collected after they have been answered by the students and teachers representing 95.5 percent.

### 4.1.1 Personal data and age bracket of students' respondent.

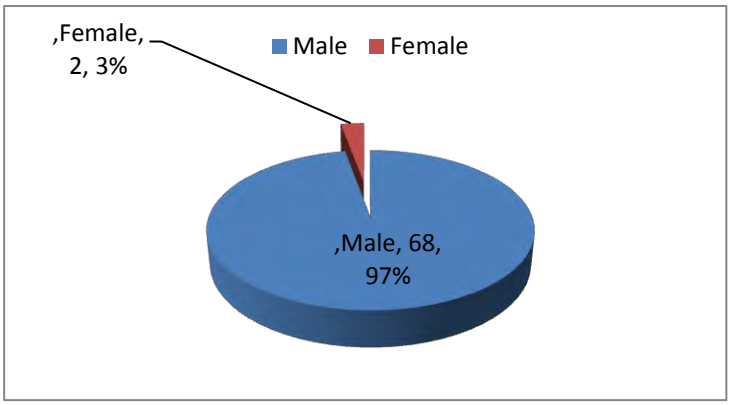


**Figure 4.1 Sex of the students' respondent**.

Figure 4.1 Indicated that only two respondents representing 3% were girls while 67% of the respondents were boys. This shows that, among the welding and fabrication had only two girls enrolled on the programmed.

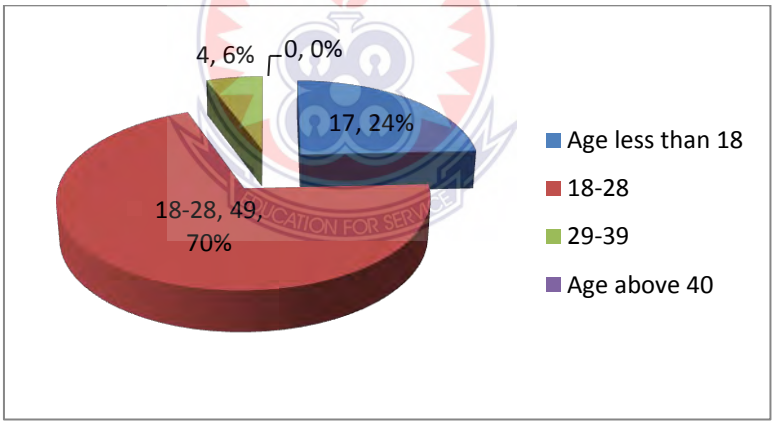


**Figure 4.2 Age bracket of the students' respondents**

Figure 4.2 has proven that majority of the students respondents are within the age bracket of 18-28 representing 70%, only 4 students were attained the age bracket within 29-39 stood at 6%.

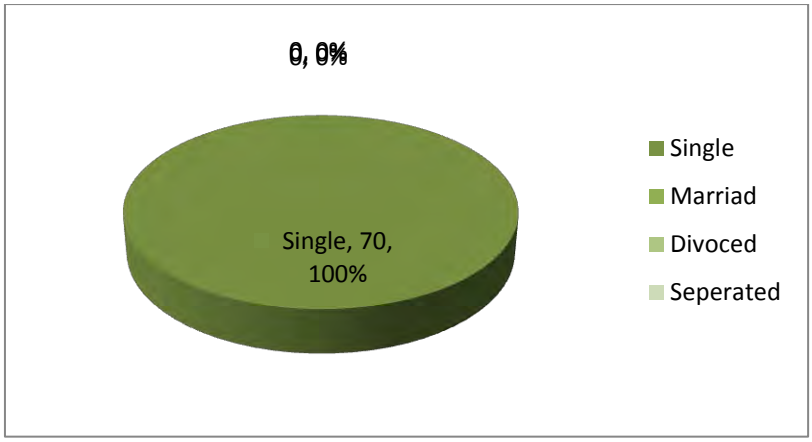


**Figure 4.3: Marital status of student' respondent**

Figure 4.3 Indicated that all the students‟ respondents were unmarried. Therefore, 100% percent of the respondents did not marry.

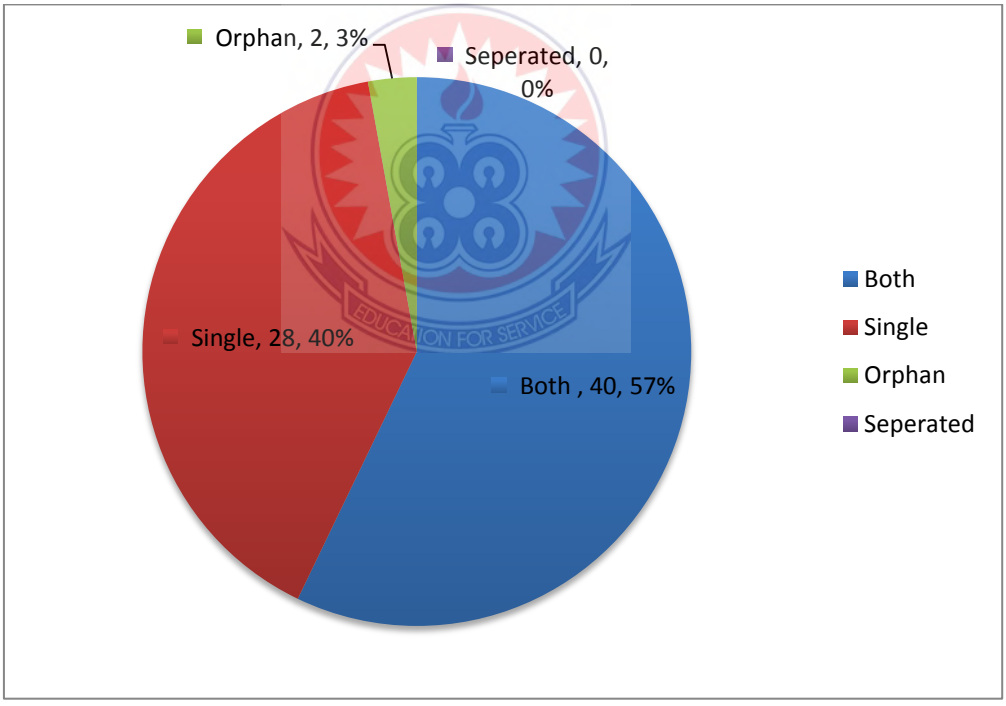


**Figure 4.4 Parental status**

Figure 4.4 revealed that, 40 (57%) of students‟ respondents had both parents still alive, 2 % of the students registered orphans. However, none of the students‟ parents separated.

**Section B:**

This section seeks to know more, whether or not welding students are interested in practical skills training particularly in area of welding.

**Table 4.2 The attitudes of students towards practical skills training.**

| | | Yes | | No | | Remarks |
|---|---|---|---|---|---|---|
| **S/N** | **Statement** | **F** | **%** | **F** | **(%)** | |
| 5 | Practical training is very difficult and boring. | 14 | (20) | 56 | (80) | Not satisfactory |
| 6 | Is Practical skills training important in my District? | 67 | (96) | 3 | (4) | satisfactory |
| 7 | Practical training is meant for those who are academically weak. | 4 | (6) | 66 | (94) | Not satisfactory |
| 8 | Many people do not respect practical men and women. | 51 | (73) | 19 | (27) | satisfactory |
| 9 | Practical work is meant for dirty people. | 5 | (7) | 65 | (93) | Not satisfactory |
| 10 | It is highly unsafe taking to practical training | 39 | (56) | 31 | (44) | satisfactory |
| 11 | Welding course is not good because, one can easily get blind. | 18 | (26) | 52 | (74) | Not satisfactory |
| 12 | If I were given the chance, could divert from my welding course to building | 14 | (20) | 56 | (80) | Not satisfactory |
| 13 | Technical skills training can help develop a district and a country as a whole. | 67 | (96) | 3 | (4) | satisfactory |
| 14 | Among all the technical courses, welding is the last option I could ever consider. | 66 | (94) | 4 | (6) | satisfactory |
| | **Total** | **345** | **(494)** | **355** | **(506)** | |

**Source:** Researcher"s On Field (2017)

Table 4.2 contains 10 statements, all of which are on the attitude of students towards practical skills training. The Table shows that 50% of the respondents found five statements satisfactory and reality regarding skills acquisition by the youth. On the other hand, 50% of the statements shows the reality in respect to the skills acquisition by the learners/students.

**Table 4.3 The attitudes of students towards practical skills training (cont)**

| STATEMENTS | SD | | D | | N | | A | | SA | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | F | (%) | F | (%) | F | (%) | F | (%) | F | (%) | |
| 15. There is no prestige in technical education. | 21 | (30) | 3 | (4.) | 2 | (3) | 6 | (9) | 38 | (54) | *Not in favour* |
| 16. Inadequate tools and equipment makes practical training extremely difficult. | 38 | (54) | 19 | (27) | 0 | (0) | 2 | (3) | 11 | (16) | *In favour* |
| 17. Lack of training materials is the cause for lack of interest in practical training. | 40 | (57) | 14 | (20) | 1 | (1.4) | 2 | (3) | 13 | (19) | *In favour* |
| 18. Practically handicap teachers cannot influence students in practical skills training. | 27 | (39) | 12 | (17) | 3 | (4.) | 8 | (11) | 20 | (29) | *Not in favour* |
| 19. Technical teachers spent much time doing outside jobs at the neglect of teaching their students. | 22 | (31) | 13 | (18.5) | 4 | (5.7) | 11 | (15.5) | 20 | (28.5) | *In favour* |
| 20. I attend Technical school because I have no option. | 14 | (20) | 4 | (5.7) | 0 | (0) | 8 | (11) | 44 | (63) | *In favour* |
| 21. Technical training is accident prone area to undertake. | 19 | (27) | 13 | (18.5) | 5 | (7) | 6 | (9) | 27 | (39) | *In favour* |
| 22. Students should not be forced to undertake practical skill training. | 18 | (26) | 8 | (11.4) | 8 | (11.4) | 8 | (11.4) | 28 | 40 | *In favour* |
| 23. I do not want practical skill training because it is less important. | 14 | (20) | 3 | (4) | 0 | (0) | 13 | (19) | 40 | (57) | *In favour* |
| 24.. I do not want welding, course because I have seen many technical men/women who are doing different courses after completion | 18 | (26) | 6 | (8.6) | 4 | (5.7) | 4 | (5.7) | 38 | (54) | *In favour* |
| **Total** | **231** | **(330)** | **95** | **(134.7)** | **27** | **(38.2)** | **68** | **(97.6)** | **279** | **(399.5)** | |

**Source:** Researcher"s On Field Study (2017)

In Table 4.3, the questionnaire items were given a five likert scale of which the respondents had five options within which they could choose one, from STRONGLY DISAGREE, DISAGREE, NEURAL, AGREE AND STRONGLY AGREE.

As such, 80% the statements were answered in favour of the statements posed to the respondents. However, only 20% were answered otherwise. This mean those, majority of the students are of the view that inadequate tools and lack of training material makes practical training extremely difficult. Besides, the students‟ responses indicated that skills training are accident prone area; therefore they should not be forced, into practical training and for that matter, practical training is the last resort owing to the fact that they saw welding students doing work outside their field of trade after completion. However, the students also endorsed that practically handicap teachers can not influence their skills acquisition.

**Section C: The general public perception on practical skill training.**

This focuses on the general public notion on the importance of practical skills training. How they perceived practical skills training, are interested or not.

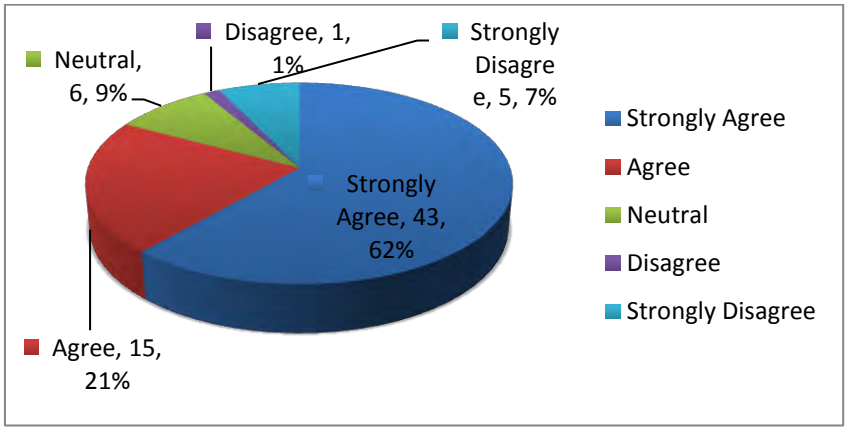


**Figure 4.5 General public awareness of practical skill training being important**

Figure 4.5 has indicated that 59 of the respondents representing 83% are in favour of the general public awareness of practical skill training. While 9% are neither in favour nor against.

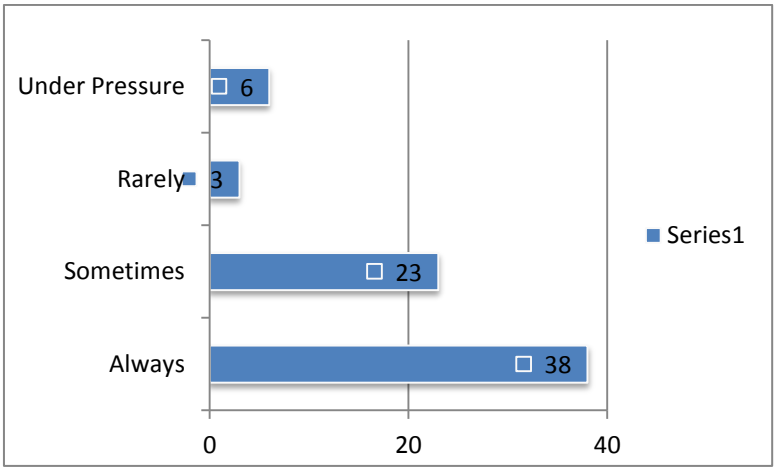


**Figure 4.6 How often people are seen doing practical skill training**

Figure 4.6 indicated 38 (54%) respondents have been frequently seeing people doing practical training. While 23(33%) of respondents sometimes see people undergoing practical training. However, 3 (4%) respondents hardly seen people undergoing practical skill training and only 9% of the respondents saw that when they were a pressure.

**Table 4.4 C: The general public perception on practical skill training (cont)**

| | SD | | D | | N | | A | | SA | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | F | (%) | F | (%) | F | (%) | F | (%) | F | (%) | |
| 27. What does it profit a student to complete technical school without tools to work with? | 19 | (27) | 10 | (14) | 14 | (20) | 7 | (10) | 20 | (29 ) | *Not in favour* |
| 28. The society looks down upon technical skill training. | 29 | (41.4) | 15 | (21.4) | 3 | (4) | 2 | (3) | 21 | (30) | *In favour* |
| 29. Technical skill training is for school drop outs. | 9 | (13) | 1 | (1.4) | 2 | (3) | 2 | (3) | 56 | (80) | *In favour* |
| 30. Technical skill training is the most widespread and the single most effective way of developing a less developed district and country. | 33 | (47) | 17 | (24) | 2 | (3) | 5 | (7) | 13 | (19) | *Not in favour* |
| 31. Most of us see practical skill training in Ghana as not necessary | 27 | (39) | 6 | (8.6) | 3 | (4) | 6 | (8.6) | 28 | (40) | *In favour* |
| 32. Government pay lips service to technical education | 27 | (39) | 14 | (20) | 5 | (7) | 6 | (8.6) | 18 | (25.5) | *Not in favour* |
| 33. Most of the infrastructural development in developed countries came as a result of technical education. | 48 | (68.5) | 13 | (18.5) | 2 | (3) | 0 | (0) | 7 | (10) | *Not in favour* |
| 34. Technical education is supposed to be a solution to our increasing poverty. | 30 | (43) | 12 | (17) | 2 | (3) | 4 | (6) | 22 | (31) | *Not in favour* |
| 35. Technical works is viewed by many Ghanaian as a second hand (mediocrity) activity. | 20 | (28.6) | 12 | (17) | 7 | (10) | 6 | (8.6) | 25 | (35.7) | *Not in favour* |
| 36. Technical education is meant to promote self employment. | 41 | (58.6) | 14 | (20) | 2 | (3) | 3 | (4) | 10 | (14) | *In favour* |
| 37. Many Ghanaians don‟t like self employment. | 22 | (31) | 13 | (19) | 3 | (4) | 7 | (10) | 25 | (36) | *Not in favour* |
| 38. Technical education is very expensive | 33 | (47.1) | 12 | (17.1) | 3 | (4.2) | 5 | (7.1) | 17 | (24.2) | *Not in favour* |
| 39. It is the economically poor parents children who attend technical education | 14 | (20) | 6 | (9) | 1 | (1.4) | 6 | (9) | 43 | (61) | *Not in favour* |
| 40. Most parents do not want their children to become engineers. | 21 | (30) | 11 | (16) | 1 | (1.4) | 10 | (14) | 27 | (39) | *Not infavour* |
| Total | 373 | (533.2) | 156 | (223) | 50 | (71) | 69 | (98.9) | 332 | (474.4) | |

**Source:** Researcher‟s On Field Study (2017)

In Table 4.4, the factors were given in a five likert scale of which the respondents had five options within which they could tick the one that best suite them, from STRONGLY DISAGREE (SD), DISAGREE (D), NEURAL (N), AGREE AND STRONGLY AGREE (SA).

Table 4.4 indicated that, 71.4% of the statements are in opposing views with the respondents. As a result they could not agree with the fact that technical education is very expensive, it is the poor parents‟ children who attend technical education, and that technical education is mediocrity activity and that, society look down on technical training.

On the contrary, 28.5% of the statements on the same Table indicate that students approved the statements regarding skills acquisition on the fact that practical skills training is not necessary, it for school drop outs, society look down on skills training. Besides, Ghanaians do not want self employment.

**Section D: personal data on teachers' respondents**

In this section, the attention is on the personal data of the teachers respondents‟ gender, age, marital status and educational background expressed in figures and percentages.

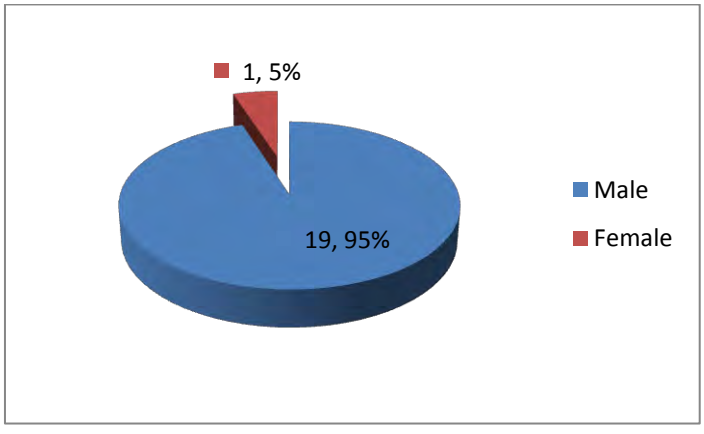


**Figure 4.7 Sex of technical teachers respondents**

The teacher‟s respondents on figure 4.7 have shown that only one technical teacher was a female. However, 19 (95%) were male technical teachers.

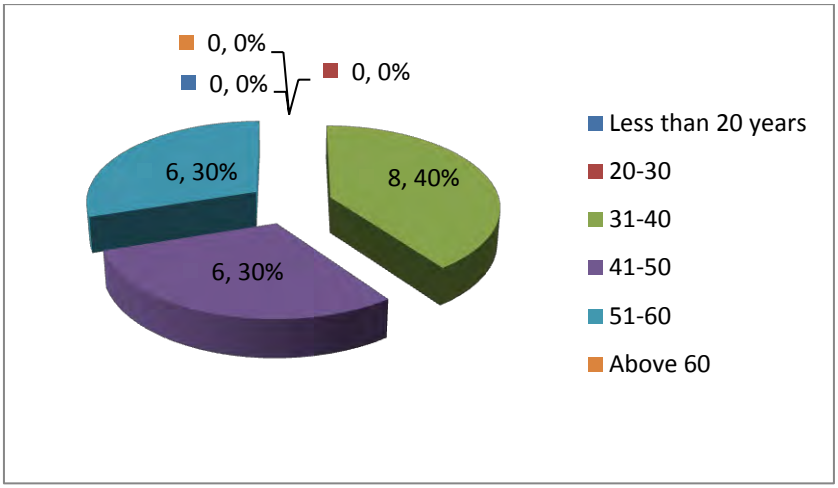


**Figure 4.8 Age groups of teachers respondents**

Figure 4.8 in respect to the technical teachers age group respondents indicated that 8, (40%) respondent attained the age of 41-50 years, 6 (30%) attained 51-60 bracket with 31-40 of age. However, there was no one above 60years.

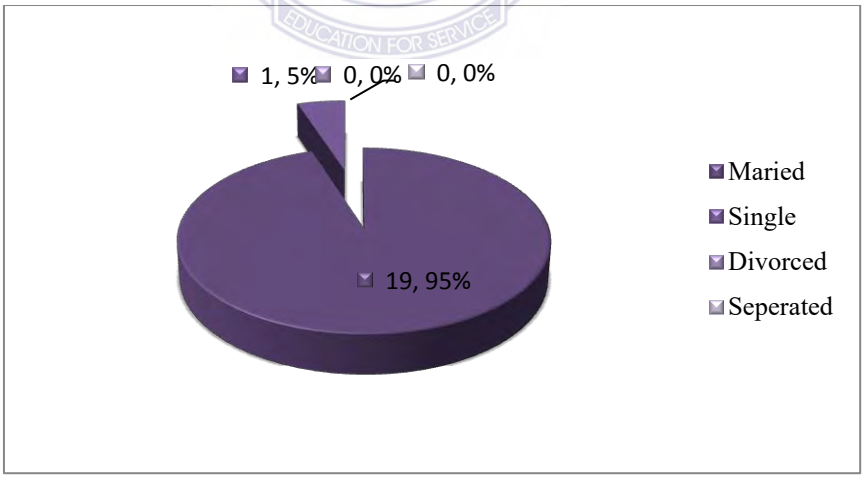


**Figure 4.9: Marital status of teachers respondents**

Figure 4.9 has shown that among all the 20 teachers, 19 of them representing 95% were married and 1 teacher a bachelor. This means that almost all of the teacher had marriage responsibility.

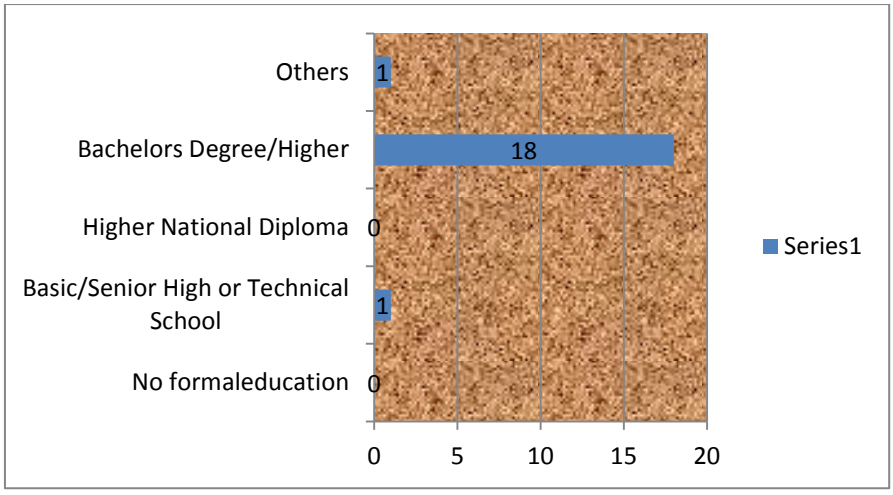


**Figure 4.10 Highest educational levels of teachers**

Figure 4.10 has depicted that, 18 (90%) of teachers had bachelors degree, a teacher has advanced certificate (5%), and the other has certificate in Education also (5%). Consequently, majority of the teachers are Degree holders.

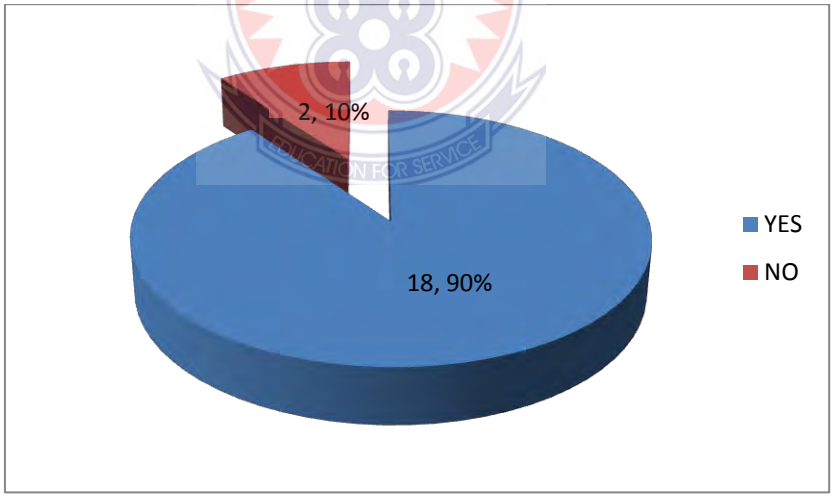


**Figure 4.11 Further technical training of teachers**

Figure 4.11 has indicated that18 (90%) of the respondents have gone for further training after their initial training. Only 2 teachers have not been able to for further training.

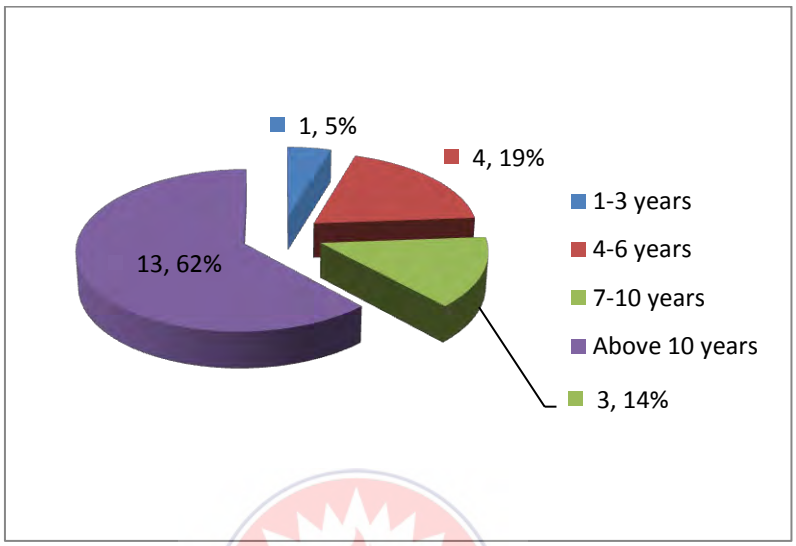


**Figure 4.12 Teachers' respondents working experience in years**

Figure 4.12 indicated that 13 (62%) of the teachers respondents have working experience over 10 years, 4 (19%) teachers respondents had 7-10 years working experience. However, only one teacher (5%) had 1-3 years working experience. This means that, majority of the teachers representing 81% have been in the teaching field for at least 7 years.

**Section E: The attitudes of students towards practical skills training.**

In this section, the technical teachers will look at the students‟ attitude regarding practical skills training.

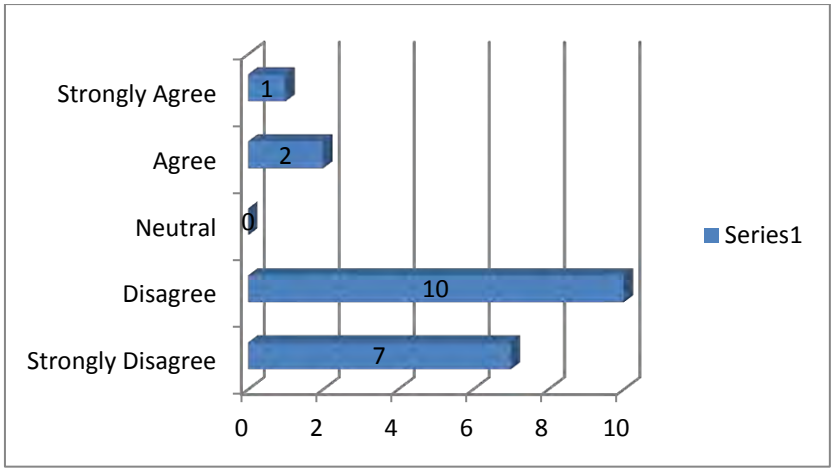


**Figure 4.13 Respondents' opinion upon the difficult and boring nature of practical training.**

In Figure 4.13, a bar chart 17 respondents (85%) disagree with the statement that practical training is difficult and boring. While 3 (15%) respondents were in favour with the statement that practical skills training is difficult and boring.

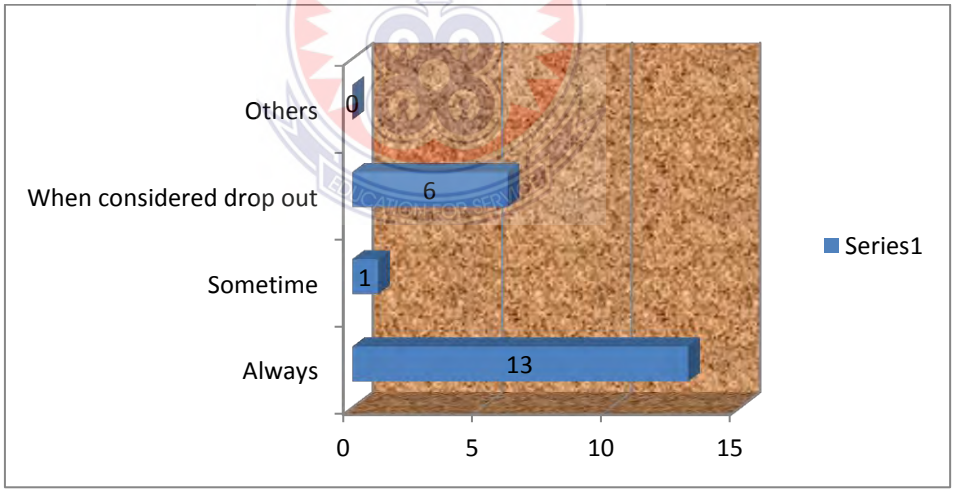


**Figure 4.14 When doe practical works become important in my District?**

Figure 4.14 indicates that 13 (65%) of the teachers respondents found practical training always important in their District, while 6(30%) of the respondents found it important when they are drop out from traditional senior high school.

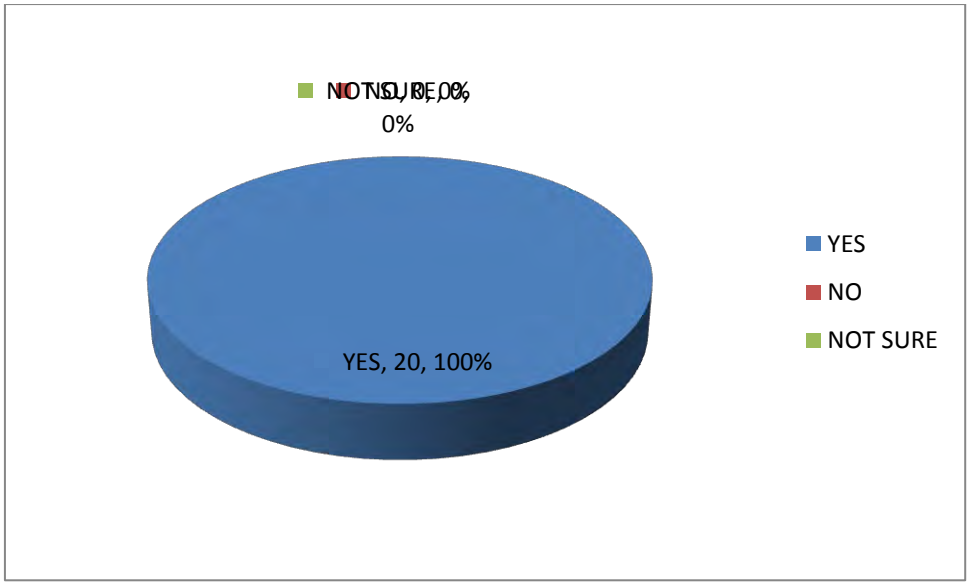


**Figure 4.15**: **Technical skill training can help develop and a country as a whole.**

Figure 4.15 shows that all the respondents have confirmed that practical skill training can develop the District and country as a whole. As such practical skills training should be encouraged.

**Table 4.5 The attitude of students towards practical skills training**

| | SA | | A | | N | | D | | SD | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Statement | F | (%) | F | (%) | F | (%) | F | (% ) | F | (%) | |
| 10. Welding shop is very easy to establish | 2 | (10) | 3 | (15) | 2 | (10) | 11 | (55) | 2 | ( 10) | Not in favour |
| 11. Technical education is an eye of envy in Nandom District. | 4 | (20) | 8 | (40) | 3 | (15) | 4 | (20) | 1 | (5) | In favour |
| 12. Technical education is for pleasure not for practical training. | 1 | (5) | 1 | (5) | 0 | (0) | 3 | (15) | 15 | (75) | Not in favour |
| 13. Everybody can undergo practical training at any where besides formal education. | 3 | (15) | 14 | (70) | 1 | (5) | 1 | (5) | 1 | (5) | In favour |
| 14. I attend Technical school because I am being forced to go to Technical to school. | 1 | (5) | 2 | (10) | 1 | (5) | 6 | (30) | 10 | (50) | Not in favour |
| 15. Practical skills training is very difficult to undertake | 3 | (15) | 5 | (25) | 1 | (5) | 6 | (30 ) | 5 | (25) | Not in favour |
| 16. People should not be asked to undertake practical skill training against their wish | 8 | (40) | 9 | (45) | 1 | (5) | 1 | (5) | 1 | (5) | In favour |
| 17. I do not want practical skill training because it is not important in my District. | 1 | (5) | 0 | (0) | 0 | (0) | 5 | (25) | 14 | (70) | Not in favour |
| 18. I do not want to undertake Technical training because I have seen many technical men who are looking wretched in societies. | 1 | (5) | 2 | (10) | 2 | (10) | 7 | (35) | 8 | (40) | Not in favour |
| Total | 24 | (80) | 44 | (220) | 11 | (55) | 44 | (220) | 57 | (285) | |

**Source:** Researcher"s on Field Study (2017)

Table 4.5 presented nine (9) statements of which 6 (66.7) of the statements were not favour with the respondents opinion. While 3 (33.3%) of the statement found favour in the respondents scrutiny. However, respondents did not agree that it as the of result being a technical man/woman makes him/her wretched, or been forced into practical skills training and it is not for pleasure that they undergo skills training.

After all, it not even easy to establish a welding shop but, very important in their District.

**Section F: The general public perception on practical skill training**

Section F has its emphases on the general public notion on practical skills training, how their perceive it and how it can affect or influence the students‟ skills acquisition.

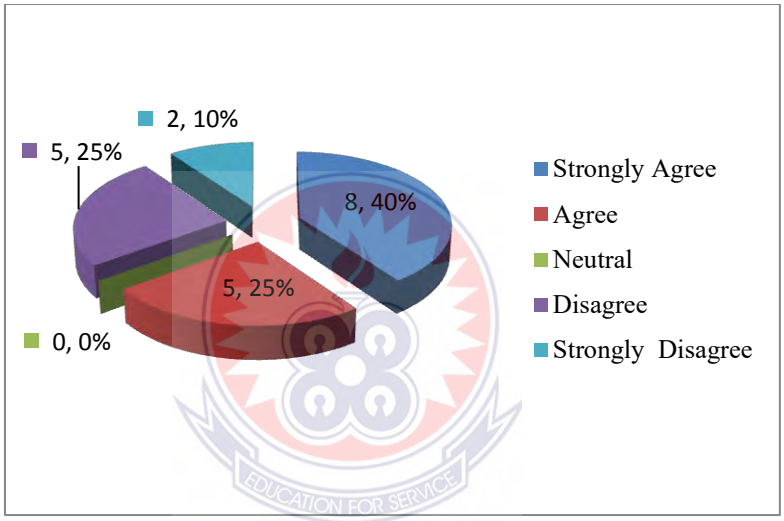


**Figure 4.16 The General public is very much aware of the use and importance of practical skill training.**

**Source:** Researcher‟s on Field Study (2017)

From Figure 4.16,13 (65%) of the teachers were in favour of the statement, while 7(35%) teachers disagree with the statement. In the respondents‟ opinion, it is clear enough to note that the general public is very much aware of the importance of skills acquisition. However, the awareness and the doing are two different things. They are aware but pay little or no heed to it.

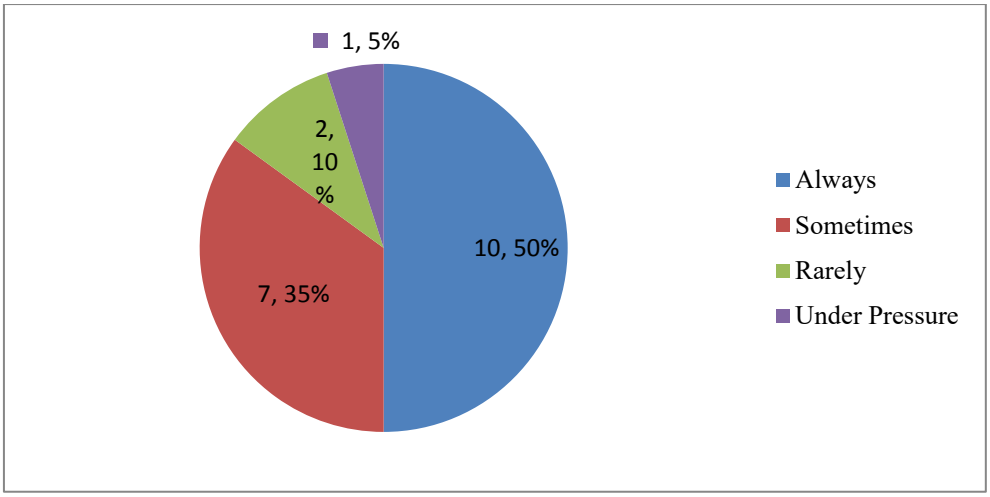


**Figure 4.17 How often do you see people undergoing technical skill training in Nandom District?**

**Source:** Researcher"s on Field Study (2017)

From Figure 4.17, 10 (50%) respondents acknowledged that they always see people doing practical training, 7(35%) sometime see yet, 2 respondents approved that they hardly see people undergoing practical training. At least 50% of the respondents have seen such under taking in the District.

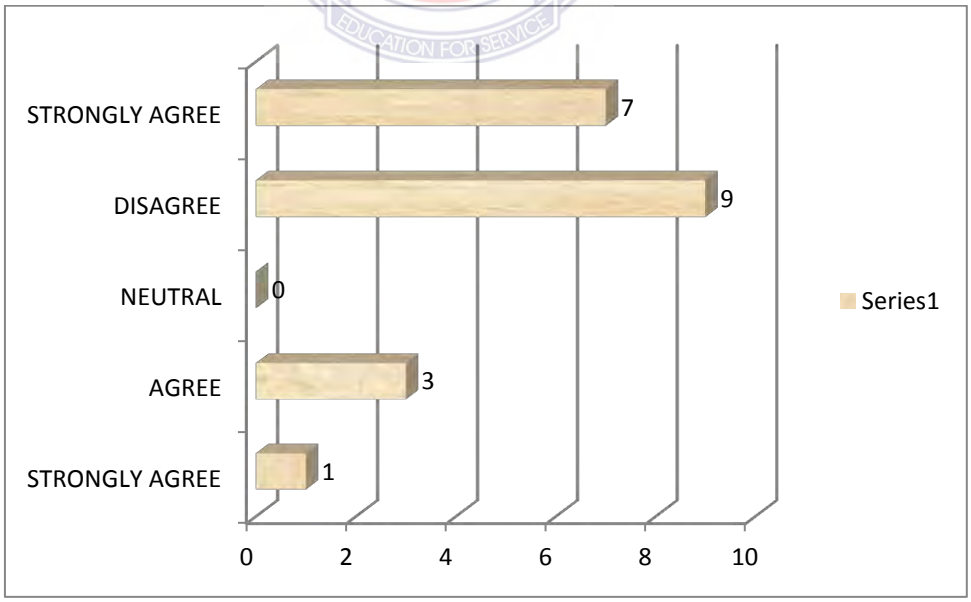


**Figure 4.18 I do not like practical skill training because of the risk involved.**

**Source:** Researcher"s on Field Study (2017)

Figure 4.18 indicates that 16 (80%) respondents disagreed with the statement on the risk involves in practical skill training, while 4(20%) agreed to the statement. In their response, majority of the respondents‟ believe that it is risky to venture into practical skill training and as such most of JHS graduates are scared because of the risky nature of the job.

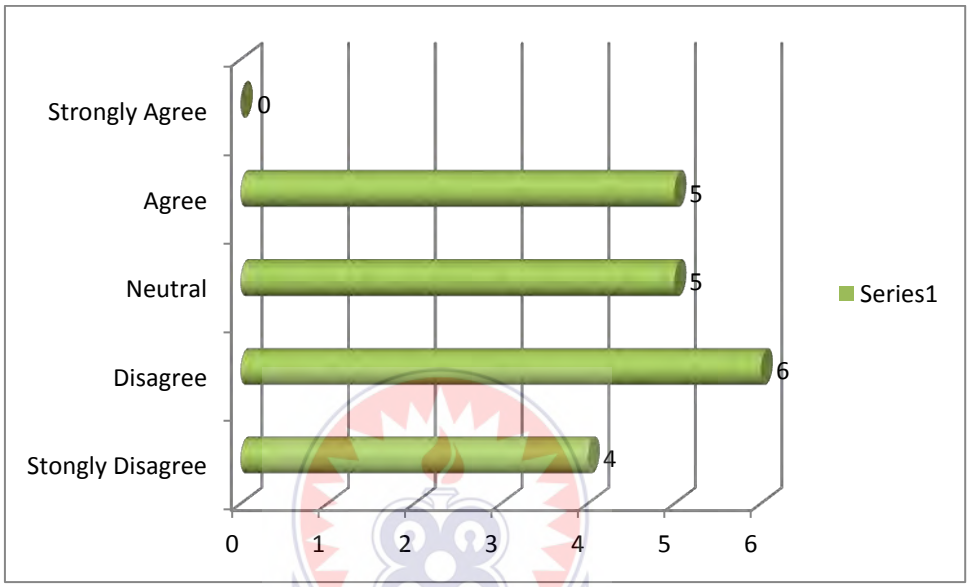


**Figure 4.19 The society frowns upon technical skill training.**
**Source:** Researcher‟s on Field Study (2017)

Figure 4.19 depicted that 10 (50%) of the respondents did not agree that society frown upon technical training. however, 5(25%) agreed while 5(25%) could not tell. The 25% of the respondents are trying to testify the society negative attitude towards skills training.

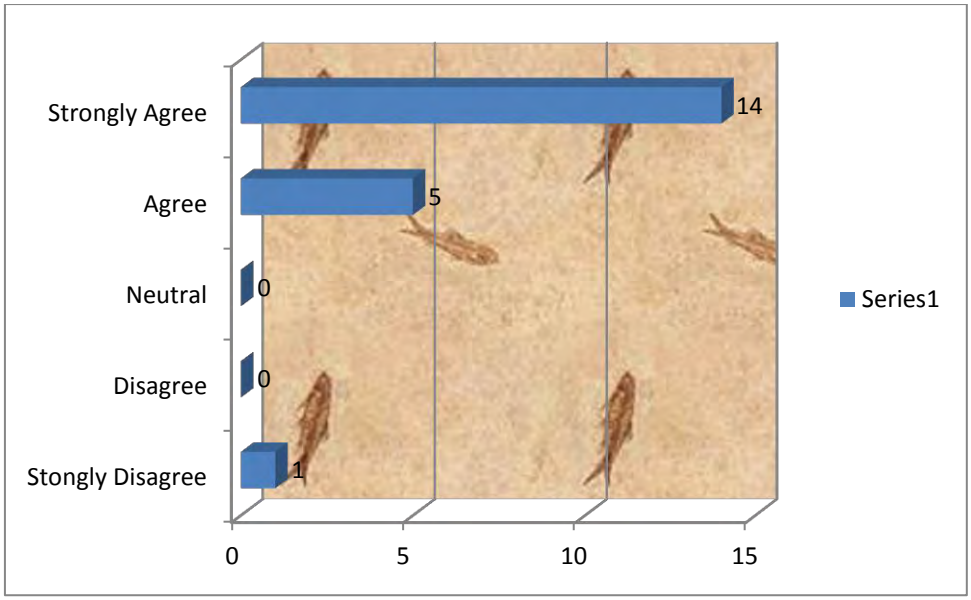


**Figure 4.20 Technical skill training is for school drop outs.**

**Source:** Researcher‟s on Field Study (2017)

Figure 4.20, the respondents were of the view that technical skill training is for school drop outs representing 95%. While one person (5%) strongly agreed. This shows that technical education is a secondary matter to them. For that matter, there is no prestige associated with skills training.

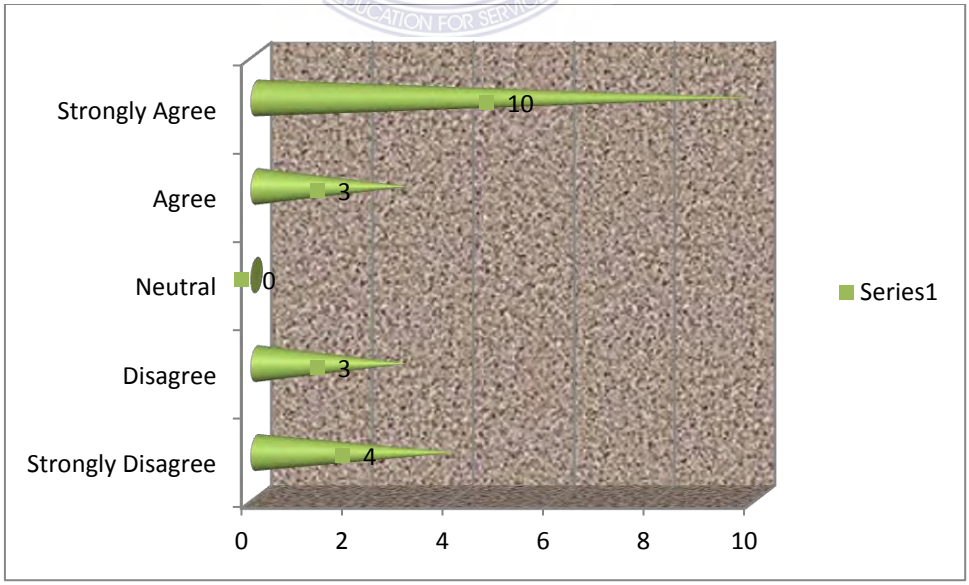


**Figure 4.21 Technical skill training is the most widespread and the single most effective way of developing a less developed district**

**Source:** Researcher‟s on Field Study (2017)

The information on Figure 4.21 shows that 65% of the teachers‟ respondents approved the statement, while 35% of the respondents disagreed. For the teachers, skills acquisition is the fastest means in developing the District infrastructural development.

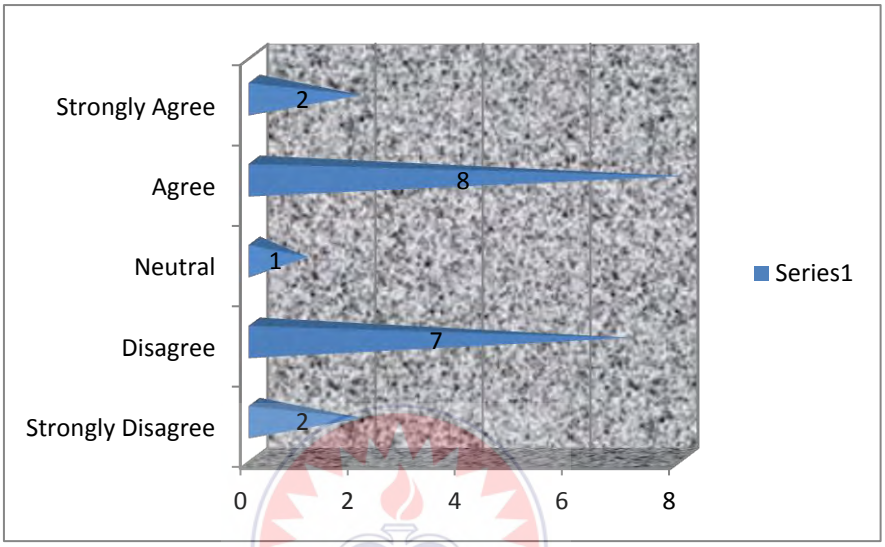


**Figure 4.22 Most of us see practical skill training in Ghana as not necessary**

**Source:** Researcher‟s on Field Study

Figure 4.22, shows that 10 (50%) respondents affirmed the statement that skill training does not matter, 9(45%) respondents disagreed. Yet one undecided. This shows that majority of the respondents have shown that practical skill training is not necessary.

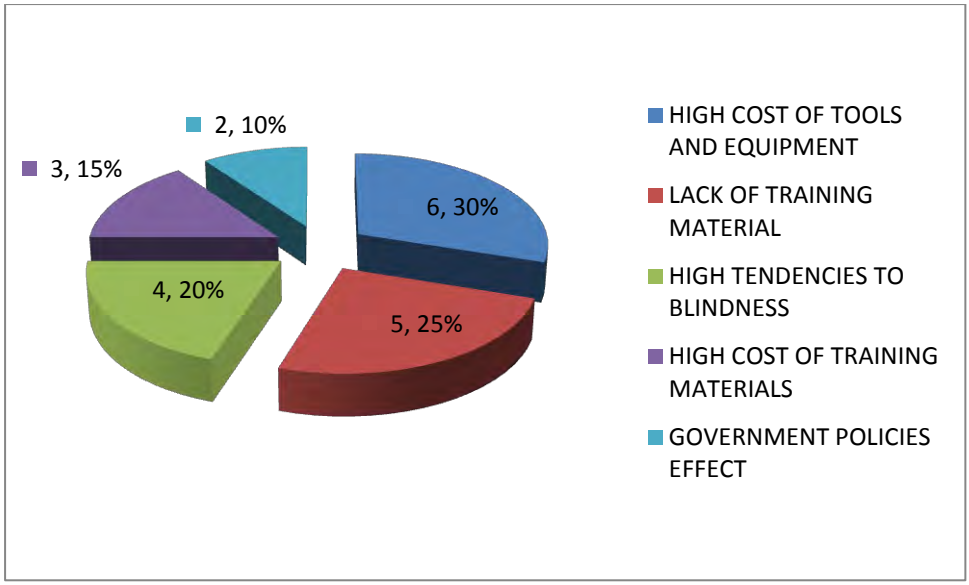


**Figure 4.23 Other reasons on practical skill training in welding (please state)**

**Source:** Researcher"s on field study

Figure 4.23 has shown that 6(30%) claimed that tools and equipment are costly, thereby making training very difficult 5(25%) shared the opinion that, lack of training materials affect the skills training negatively, 4(20%) of the respondents were afraid that one could get blind as a result of welding. On the other hand, 2(10%) think that government policies is also a factor that affects the skills training.

**Section G: Technical Teachers background in skill Training practical**

Section G intends to investigate the efficacy and technical knowhow of teachers can affect the skills acquisition of the students.

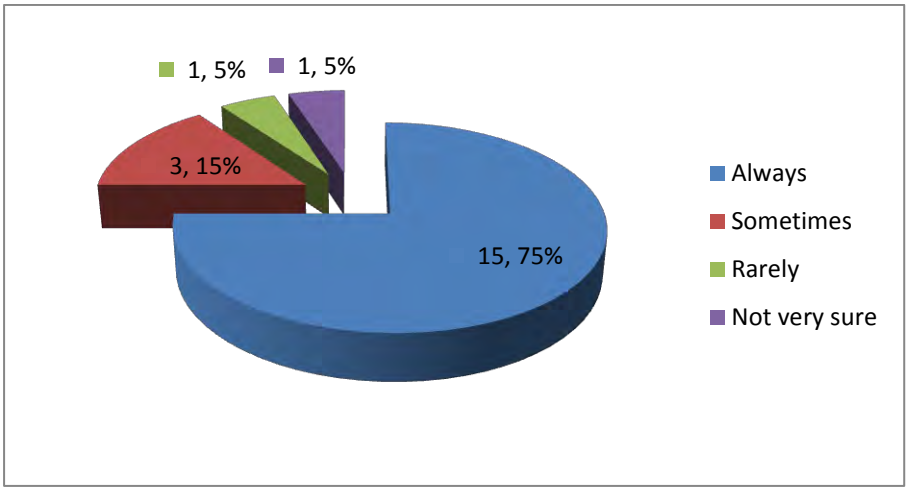


**Figure 4.24 Teachers with good knowledge in practical skill training make training interesting and simple.**
**Source:** Researcher"s on Field study

Majority of the respondents 15 (75%) on Figure 4.24 agreed to the statement that teachers with good knowledge in practical skill training make training interesting and simple, 3 (15%) said it is sometimes the case, while 5% of the respondents person was not very sure. This presupposes that if the teacher knows the subject matter, he/she can still make an impact in spite the limited resources available.

**Table 4.6 Technical Teachers background in skill Training practical**

| | SA | | A | | N | | D | | SD | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | F | (%) | F | (%) | F | (%) | F | (%) | F | (%) | |
| 28. Practical skill training is aimed at providing employment to graduates | 8 | (40) | 11 | (55) | 0 | (0) | 1 | (5) | 0 | (0) | *In favour* |
| 29. Technical teachers without Technical skill training but can teach can equally give practical skill training to students. | 0 | (0) | 1 | (5) | 0 | (0) | 8 | (40) | 11 | (55) | *Not in favour* |
| 30. Technical teachers need in-service training on practical skills training. | 11 | (55) | 8 | (40) | 0 | (0) | 1 | (5) | 0 | (0) | *In favour* |
| 31. Inadequate training materials in training centres are hindering practical skill training. | 9 | (45) | 6 | (30) | 0 | (0) | 4 | (20) | 1 | (5) | *In favour* |
| 32. Large enrolments couple with inadequate equipment lead to poor acquisition of practical skill training in St, John‟s Vocational Technical institute welding students. | 14 | (70) | 5 | (25) | 1 | (5) | 0 | (0) | 0 | (0) | *In favour* |
| 33. Less attention is given to practical skills training in Technical Vocational institutes. | 3 | (15) | 3 | (15) | 0 | (0) | 9 | (45) | 5 | (25) | *Not in favour* |
| 34. Qualified technical teachers are not available to handle practical Skills training. | 5 | (25) | 3 | (15) | 0 | (0) | 9 | (45) | 3 | (15) | *Not in favour* |
| 35. Government Policies are affecting practical skills training in Vocational Technical Institutes | 3 | (15) | 4 | (20) | 0 | (0) | 6 | (30) | 7 | (35) | *Not in favour* |
| **Total** | **48** | **(265)** | **41** | **(205)** | **0** | **(0)** | **38** | **(190)** | **27** | **(135)** | |

**Source:** Researcher‟s On Field Study (2017)

Table 4.6 is a continuation of the skillfulness of teachers‟ background towards skills training. The table has eight statements of which 5(50%) of the statements are in harmony with the respondents opinions on the idea that, they still need in-service training, nonetheless the inadequate training materials availability in the midst of large enrolment numbers even though the skill training aimed providing self-employment to youth graduates.

However, 5 (50%) of the statements did not meet the opinions of the respondents for the mere fact that Governments policies affect the training process as little time allocation for practical training as well as lack of qualified technical teachers thereby, leaving the trainees at the mercy of unqualified teachers. This alone is drawback in skills training.

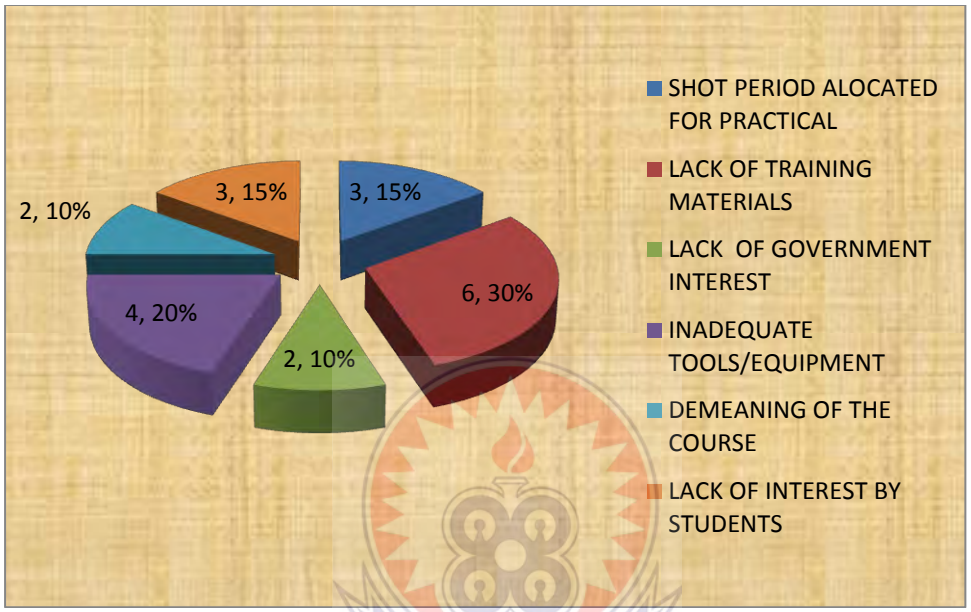


**Figure 4.25 Please state other reasons that affect the acquisition of practical skills Training in Vocational Technical Institutes……**

**Source:** Researcher‟s on Field Study (2017)

In Figure 4.25, 6 (30%) respondents were of the view that lack of training material affect the students‟ skills acquisition. 4(20%) respondents complained of lack tools affecting skill skills acquisition. On the other hand, 3 (15%) of the respondents said the time allocated for practical is woefully inadequate. 2 (10%) respondents expressed lack interest by Government.

# CHAPTER FIVE

# DISCUSSION OF RESULTS

The fifth chapter of this study, data findings resulting from the two set questionnaires administered to both technical teachers and welding students shall be presented and discussed the following listed below regarding skills acquisition by the students.

- Personal data of the respondents
- The attitude of students towards practical skills training
- The general public perception on practical skill training
- Technical Teachers background and opinion in skill Training

## 5.1 Personal data of the Respondents

The research have revealed that the respondents regarding Figure 4.1 indicated that the welding students has only two (2) girls of 3% out of seventy (70) students‟ respondent, representing 97% of the welding students were boys.

Figure 4.2, shows that the students‟ respondents indicated that 49 students representing 70% were found to be less than 18 years of age and 17 students of 24% were found within the age bracket of 18-28, while only 4 (6%) attained the ages between 29-39 years old. This means that, none of the respondents attained the age of 30 years old.

Figure 4.3,among the students‟ respondents, two students were found to be orphans while 28 students had single parent and 40 students had both parents alive. Besides none of the students‟ got married.

**Section B The attitude of students towards practical skills training**

From Figure 4.4, Majority of the students, 56 (80%) have attested to the fact that practical training is neither boring nor difficult. However, 14 (20%) students found practical training boring and difficult at the same time. On the contrary, 67 (96%) of the respondents acknowledged practical training very important in their district.

Nonetheless, 66 (94%) the students disagree to the fact that practical training is meantfor the academically weak. On the Table 4.2 51(73%) of the respondents endorsed the statement that, many people do not really respect technical men and women.

However, the respondent did not agree and annulled the statement that, practical work is meant for dirty people by 93% against 7% of the respondents. Absolute majority did not think that practical training is meant for dirty people but only their mind set of orientation.

On the other hand, majority of the respondents, 56% established that it is truly highly unsafe taking to practical training, while 44% of the respondent said no.

Table 4.2 also indicated that 74% of the respondents did not agree that, those people doing welding can easily get blind, while 26% welcomed the statement that one can easily get blind. As such, people with this kind orientation will do welding course.

Still on the Table, it is obvious that 56 students out of the 70 preferred welding course to any other course, while 14 students thought otherwise. On that note, (80%) of the respondents disclosed their willingness to do welding while (20%) would prefer other courses

In line with that, the Table continues to indicate that, 94% of the students were of the view that technical skills training can help develop a District and a Country as a whole against 4% of the respondent who did take it so.

However, 94% of the respondents were of the view that, welding course would be their last option to consider against 6% of the respondents. This means that they are interested in other skills training but not welding programmed for the mere fact that welding course will be their last option

On Table 4.3 presented ten statements of which the respondents collectively answered eight statements representing 80% in favour of the posed questionnaires while 20% of the statements on the same Table were not in favour of the statements. The respondents indicated that inadequate tools and equipments, lack of training materials are factors of lack of interest in the skills training by the students. Besides some of the students are forced to pursue the welding course against their will attributing it to the fact that some technical teachers spent much of the time doing outside jobs at the expense of their teaching. As such students are most likely to miss the desire result of the training. Additionally, they think skill training is accident prone area especially in the welding industry.

On the other hand, the (20%) of the statement are not in favour of saying that technical men/women has no prestige. besides they are not in favour the fact practically handicap teachers can not influence students in practical skill training.

**Section C This section is about the general public perception on technical education**

In Figure 4.6, (62%) of the respondent strongly backed the statement that the general public is aware of the importance of technical education. However, they two things involve here, the awareness and the practicing. While 15 (21%) agreed. To some extent, those who strongly agree and those who agreed made up a total percentage of 83. Meanwhile 12 (17%) disagreed.

Figure 4.7 indicates that 38 (54.2%) respondents affirmed that they always see people doing practical training while 23(32,8%) respondents said they sometimes see people doing practical training, Yet 6 (8.5%) students said they saw that when under a pressure. That notwithstanding (4.2%) of the respondents hardly sees people doing practical skills training.

Table 4.4 presents fourteen statements the general public perception on technical education of which the respondents collectively answered four statements representing 28.5% in favour of the posed statement while 71.4% of the statements on the same Table were not in favour of the statements. It therefore suggests that, majority of the respondent did not agree with the statements that it is of no used completing technical education without tools to work with. The respondents have not also agree that Government only pay only lips service to technical education, adding that technical education is not the only effective way to develop a District neither is technical education the panacea to poverty.

**Section D; personal data of teachers**

Figure 4.8 indicates that, among the twenty technical teachers who answered the questionnaires were nineteen male and only one female making 5% female and 95% males.

The age bracket on Figure 4.9 also indicated 8(40%) teachers were between the ages of 31-40 years, 6 (30%) teachers between 41-50 years and also 6 (30 %) teachers within 51-60 years. However, there was no teacher below 31 years and no teacher above 60 years.

Figure 4.10 presents that, out of the 20 (90%) of the teachers respondents were married, while 5% unmarried.

With reference to Figure 4.11, presented the educational background of the teachers that 18 teachers obtained bachelor certificates and above. However, two teachers, one had advanced certificate and the other, technician part 3(III). In talking about their further training, 18 (90%) of had various for further training after their studies while 2 (10%) teachers did not.

Looking at Figure 4.12, majority of the teachers representing 62% had more than 10 years working experience, 14% of the respondents also had 7-10 years working experience, yet 19 % of them also had 4-6 years working experience. Beside, only 1% person had only 1-3 years working experience. This therefore suggests that, 95% of the teachers had at least, three years working experience.

**Section E: The attitudes of students towards practical skills training.**

This section seeks the opinion of teachers about the attitude of students towards practical skills training.

On Figure 4.13, 85% of the respondents out rightly disagree with the statement that practical skill training is difficult and boring. However, 15% of the teachers were in support of the statement that in deed practical skills training is very difficult and boring as the results of the limited facilities and training materials.

With reference to Figure 4.14, 13 (65%) of the teachers found practical skill training a common practice in their District. While, 6 (30%) teachers were of the view that, practical training becomes important when one is considered drop out, (5%) of the teachers found it important when under pressure. Generally speaking, majority of the respondent found skills training very important in their district

On Figure 4.15, 100% of the respondents, out rightly supported the statement that, practical training can help develop the District and the country at large. As such practical training should be encouraged.

**Section F: The general public perceptions on practical skill training**

In this section, the teachers‟ respondents are to give their opinion on the general public perceptions on practical skill training

Figure 4.16, 8 (40%) strongly agreed that the general purpose is very much aware of the needs and importance of practical skills training, 5 (25%) of the respondents agreed making a total percentage of those who agreed to 65% while 35% disagreed with the statement.

In Figure 4.17, 10 (50%) respondents readily acknowledged that they have been seeing people doing practical. On the other hand,7 (35%) sometimes see people

on practical training ground, yet 10% of the respondents on rare occasion see people doing skills training.

In Figure 4.18, indicated that 16 (80%) dismissed the allege that skills training is very risky

**Table 4.5 a continuation of general public perception on practical skill training continues to seek the opinion of teachers about the attitude of students towards practical skills training.**

Table 4.5 presented nine (9) statements of which 6 (67%) of the statements did not conform with the respondents‟ opinion. While 3 (33%) of the were in line with the respondents‟ opinion.

In view of the 67% statements with regards to the respondents‟ opinions, establishing a welding shop is very easy. Moreover, technical education is not for a pleasure and so students should not be forced to undertake skills training. Besides 75% of the respondents on the said Table did not agree with the statements that technical men and women look wretched in the Ghanaian society.

**Section G shall consider the in-depth knowledge of the general public regarding technical education**

In Figure 4.19, 8(40%) of the respondents strongly agreed that the general public awareness of the importance of technical education, 5(25%) also agreed totaling 65% in favour of the statement. Meanwhile 2 (10%) of the respondents strongly disagreed, 5(25%) disagreed also making a total 35% not favour with the statement. In view of this, it deduced that majority of the respondents agreed as such, awareness one step moving into technical education.

Figure 4.20 presented four (4) options namely, ALWAYS, SOMETIMES, RARELY and UNDER PRESSURE for respondents to choose in view of how regular technical education is, within the District. In this Figure, it is illustrated 50% of the respondents always see people undertaking practical training in Nandom District. 35% of the respondents sometimes witness people doing practical training. However, 10% of the respondents attested that they hardly see people under going practical training. Yet 5% of the respondents witness that when people are under pressure.

Looking at figure 4.21, 35% of the respondents strongly disagreed that, it is not because of the risk involved in practical training that makes people not interested but something else. In the same line with that, 45% of the respondents also disagree making a total percentage 80 of those who disagreed. Furthermore, 20% of the respondents agreed that people are not interested in skill training especially in the welding arena because of the risk involved.

From Figure 4.22, it is clearly illustrated that, 50% of the respondents did not agree that society frown on technical education, 25% of the respondents agreed that indeed, society frown on technical education, yet 25% neither agree nor disagree.

In Figure 4.23 presented a statement on skills training targeted at school drop outs. On this Figure, 70% of the respondents strongly agreed that skill training is for school drop outs, 25% also agreed making a total of 95% of those who agreed. While 5% of the respondents strongly disagreed. For that matter, it assumed that technical education is for school drop outs.

Figure 4.24 shows a bar chart on the statement that, most of us see practical skill training in Ghana as not necessary On this Figure, 50% of the respondents agreed that affirmed that Ghanaians really do not border about technical education. Additionally, 45% disagreed and 5% not yet decided.

Figure 4.25 has shown that 6(30%) claimed that tools and equipment are costly, thereby making training very difficult 5(25%) shared the opinion that, lack of training materials affect the skills training negatively, 4(20%) of the respondents were afraid that one could get blind as a result of welding. On the other hand, 2(10%) think that government policies are also a factor that affects the skills training. This shows almost all these mention has to make a contribution to enable the system to work.

**Technical Teachers in practical skill training make training interesting and simple.**

Majority of the respondents 15 (75%) on figure 4.26 agreed to the statement that teachers with good knowledge in practical skill training make training interesting and simple, 3 (15%) said it is sometimes the case, while 5% of the respondents person was not very sure. This presupposes that if the teacher knows the subject matter, he/she can still make an impact in spite the limited resources available.

Table 4.6 presented eight statements on the technical teachers‟ background in skills training. On this Table, 50 % of the statements we are not in conformity with the respondents‟ opinion, of the fact that technically handicap teachers can equally give skill training to students. It therefore suggested, technical teachers who did not have the basis of skills cannot influence the students on the part training. As such, technical teachers need an in service training to be updated to new ideas, additionally; government policies are not favoring technical education even though qualified technical teachers are not many in the system upon paying very little attention to technical education. Meanwhile, 50% of the statements found favour in the respondents‟ opinion that technical training actually aimed at providing employment to technical graduates.

Figure 4.26 presented a pie chart on any other reasons that may affect the acquisition of practical skills training in the vocational institutions. On this figure, 30% of the respondents attributed that to lack of training materials. 4 (20%) complain of lack of modern tools and equipment. On one hand, 3 (15%) said that the time allocation for practical is woefully inadequate. while 10% of the respondents expressed lack of interest by government.

**5.2 Discussions on Data**

In discussion the data presented, it is realized that most of the statements especially on the major four (4) Tables did not find favour in respect to the respondents‟ opinion. With particular reference to Table 4.2, presented 10 statements of which all are on the attitude of students towards practical skills training. It is clearly that 50% of the respondents found five statements practically the reality regarding skills acquisition by the students. However, 50% of the statements show the reality in respect to the skills acquisition by the learners/students. To some extent, the respondents welcomed five statements on the Table but rejected the other five statements.

Moreover, Table 4.3 contained ten (10) questionnaire items given in a five likert scale of which the respondents had five options within which they could decide the one that is appropriate, from STRONGLY DISAGREE, DISAGREE, NEURAL, AGREE AND STRONGLY AGREE.

Arriving at the results majority, 80% the statements were answered in favour of the statements posed to the respondents. Although, only 20% of the statements were answered otherwise. This means that, majority of the students were of the view that inadequate tools and lack of training material makes practical training extremely

difficult. Besides, the students‟ responses indicated that skills training are accident prone area; therefore they should not be forced, into practical training and for that matter, practical training is the last resort owing to the fact that they saw welding students doing work outside their field of trade after completion. Consequently, the students also endorsed that practically handicap teachers can not influence their skills acquisition.

On the hand, Figure 4.5 presented on the general public perception on the importance on practical skills training, in which 83% of the respondents confirmed that indeed, the general public is aware of the need for technical education. However, 6% disagreed while 9% neither agree nor disagree.

In the same way, Figure 4.6 also posed a statement how regular practical skills‟ training is within the District. on that 38 (54%) respondents have been frequently seeing people doing practical training. While 23(33%) of respondents sometimes see people undergoing practical training. However, 3 (4%) respondents hardly seen people undergoing practical skill training and only 9% of the respondents saw that when they were a pressure.

Here also, Table 4.4 presented fourteen (14) still on the general public perception on technical education. Among these 14 statements, using a five likert scale of which the respondents had five options within which they could tick the one that best suits them, from STRONGLY DISAGREE (SD), DISAGREE (D), NEURAL (N), AGREE AND STRONGLY AGREE (SA).

Table 4.4 indicated that, 71.4% of the statements are in opposing views with the respondents. As a result they could not agree with the fact that technical education is very expensive, it is the poor parents‟ children who attend technical education, and

that technical education is mediocrity activity yet, society look down on technical training.

On the contrary, 28.5% of the statements on the same Table indicate that students approved the statements regarding skills acquisition on the fact that practical skills training is not necessary, it for school drop outs, society look down on skills training. Besides, Ghanaians do not want self employment.

Figure 4.7 revealed the gender of the teachers‟ respondents to be 95% males and 5% female. From Figure 4.10, it is realized that 90% of the teachers at St. John‟s Vocational School had bachelor‟s degree and above, while 5% had certificate in education and the other 5% had advanced certificate.

It is also realized that from Figure 4.12, most of the teachers, 62% had working experience ten years and above. 4 (19%) teachers‟ respondents attained 7-10 years working experience. Nevertheless, only one teacher (5%) had 1-3 years working experience. This means that, majority of the teachers representing 81% have been in the teaching field for at least 7 years.

Revelation from Table 4.5 shows that, nine (9) statements have been given to the respondents and only 33.3% of the statement met the respondents‟ favour with regards to their opinion. Although, respondents did not agree that it as the result of being a technical man/woman makes him/her wretched, or been forced into practical skills training and it is not for pleasure that they undergo skills training. After all, it not even easy to establish a welding shop but, very important in their District.

From Figure 4.16, 13 (65%) of the teachers were in favour of the statement, while 7(35%) teachers disagree with the statement. In the respondents‟ opinion, it is clear enough to note that the general public is very much aware of the importance of

skills acquisition. However, the awareness and the doing are two different things. They are aware but pay little or no heed to it. And this challenge to the general public.

Continuing from Figure 4.23, it is realized that 6 (30%) claimed that tools and equipment are costly, thereby making training very difficult 5(25%) shared the opinion that, lack of training materials affect the skills training negatively, 4(20%) of the respondents were afraid that one could get blind as a result of welding. On the other hand, 2(10%) think that government policies are also a factor that affects the skills training due to their failure to supply tools and material to the technical schools.

In Table 4.6, there are eight statements with respect to the skillfulness of the teachers‟ background towards skills training. On this Table, 5(50%) of the statements are in agreement with the respondents opinions on the idea that, they still need in-service training, nonetheless the inadequate training materials availability in the midst of large enrolment numbers even though the skill training aimed providing self-employment to youth graduates.

However, 5 (50%) of the statements did not meet the opinions of the respondents for the mere fact that Governments policies affect the training process as little time allocation for practical training as well as lack of qualified technical teachers thereby, leaving the trainees at the mercy of unqualified teachers. This alone is drawback and a challenge in skills training.

Figure 4.25 also indicates that 6 (30%) respondents were of the scrutiny that lack of training material affect greatly the students‟ skills acquisition. 4(20%) respondents complained of lack tools affecting skill skills acquisition. On the other hand, 3 (15%) of the respondents said the time allocated for practical is woefully inadequate. 2 (10%) respondents expressed lack interest by Government in technical

education. For the matter, not until government pays much attention to technical education, it will diminish in the faces Ghanaians in the near future.

# CHAPTER SIX

## SUMMARY CONCLUSIONS AND RECOMMENDATIONS

This is the last chapter of the study and shall present the research procedure, major findings of interest, conclusion, recommendations and above all areas of further study. Besides, references, Appendix A and B shall be added.

### 6.1 Research Procedure

The researcher used a survey procedure by which he tried to investigate into the acquisition of practical skills by the students in St. John‟s Vocational Technical Institute in the Upper West Region of Nandom. In doing so, the researcher administered two sets of questionnaires targeted at the welding students and the technical teachers St. John Vocational Technical.

### 6.2 Major Findings

In this study, the major findings are on four (4) Tables and three (3) figures in chapter 4. On the Table 4.2 51(73%) of the respondents endorsed the statement that, many people do not really respect technical men and women.

However, the respondent did not agree and annulled the statement that, practical work is meant for dirty people by 93% against 7% of the respondents. Absolute majority did not think that practical training is meant for dirty people but only their mind set of orientation.

Moreover, majority of the respondents, 56% established that it is truly highly unsafe taking to practical training, while 44% of the respondent said no.

Table 4.2 still indicated that 74% of the respondents did not agree that, those people doing welding can easily get blind, while 26% welcomed the statement that one can easily get blind. As such, people with this kind orientation will do welding course.

Still on the Table, it is obvious that 56 students out of the 70 preferred welding course to any other course, while 14 students thought otherwise. On that note, (80%) of the respondents disclosed their willingness to do welding while (20%) would prefer other courses

In line with that, the Table continues to indicate that, 94% of the students were of the view that technical skills training can help develop a District and a Country as a whole against 4% of the respondent who thought otherwise.

However, 94% of the respondents were of the view that, welding course would be their last option to consider against 6% of the respondents. This means that they are interested in other skills training but not welding programmed for the mere fact that welding course will be their last option.

Table 4.3 laid bear ten statements of which the respondents collectively answered eight statements representing 80% in favour of the posed questionnaires while 20% of the statements on the same Table were not in favour of the statements. The respondents indicated that inadequate tools and equipments, lack of training materials are factors of lack of interest in the skills training by the students. Besides some of the students are forced to pursue the welding course against their will attributing it to the fact that some technical teachers spent much of their time doing outside jobs at the expense of their teaching. As such students are most likely to miss

the desire result of the training. Additionally, they think skill training is accident prone area especially in the welding industry.

On the other hand, the (20%) of the statement are not in favour of saying that technical men/women has no prestige. besides they are not in favour the fact practically handicap teachers can not influence students in practical skill training.

Table 4.4 has proven that, 71.4% of the statements are in opposing views with the respondents. As a result they could not agree with the fact that technical education is very expensive, it is the poor parents‟ children who attend technical education, and that technical education is mediocrity activity yet, society look down on technical training.

On the contrary, 28.5% of the statements on the same Table indicate that students approved the statements regarding skills acquisition on the fact that practical skills training is not necessary, it for school drop outs, society look down on skills training. Besides, Ghanaians do not want self employment.

Revelation from Table 4.5 shows that, nine (9) statements have been given to the respondents and only 33.3% of the statement met the respondents‟ favour with regards to their opinion. Although, respondents did not agree that it as the result of being a technical man/woman makes him/her wretched, or been forced into practical skills training and it is not for pleasure that they undergo skills training. After all, it not even easy to establish a welding shop but, very important in their District.

From Figure 4.16, 13 (65%) of the teachers were in favour of the statement, while 7(35%) teachers disagree with the statement. In the respondents‟ opinion, it is clear enough to note that the general public is very much aware of the importance of skills acquisition. However, the awareness and the doing are two different things. They are aware but pay little or no heed to it. And this is challenge to the general public.

Table 4.6 is a continuation of the skillfulness of teachers‟ background towards skills training. The table has eight statements of which 5(50%) of the statements are in harmony with the respondents opinions on the idea that, they still need in-service training, nonetheless the inadequate training materials availability in the midst of large enrolment numbers even though the skill training aimed providing self-employment to youth graduates.

However, 5 (50%) of the statements did not meet the opinions of the respondents for the mere fact that Governments policies affect the training process as little time allocation for practical training as well as lack of qualified technical teachers thereby, leaving the trainees at the mercy of unqualified teachers. This alone is drawback in skills training.

In Figure 4.25, 6 (30%) respondents were of the view that lack of training material affect the students‟ skills acquisition. 4(20%) respondents complained of lack tools affecting skill skills acquisition. On the other hand, 3 (15%) of the respondents said the time allocated for practical is woefully inadequate. 2 (10%) respondents expressed lack interest by Government.

In Figure 4.13, a bar chart 17 respondents (85%) disagree with the statement that practical training is difficult and boring. While 3 (15%) respondents were in favour with the statement that practical skills training is difficult and boring.

### 6.3 Conclusions

Ghana government has not been able to supply enough tools and equipment to Technical and Vocational Institution. Nevertheless, there are a lot of factors that are affecting skill acquisition predominantly among the students namely pride and lack of interest. According to the result, attitude of students is a big impediment to skill

acquisition; parents think that technical education is for the failures and school dropout. This has a negative influence on the learner‟s attitude towards vocational skills training.

Some of the privately owned centers could not operate well when learners had not paid their fee in time. The government owned ones were not being provided with sufficient funds to run them.

Other factors affecting acquisition of vocational skills were lack of knowledge of the general public and their none involvement in technical education. Another essential factor was established to be funding of technical institutions with respect to training materials.

### 6.4 Recommendations

All said and done, the researcher wishes to draw the attention of the youth to the following points:

- Students‟ should put pride aside and learn the skills. This is to say that some students negative attitude towards practical skills training and as such reluctant to take the practical training very seriously for their own good.
- Skills training can help reduce the chronic poverty in our society, provided the skill is well learned and put to good use will alleviate the unending poverty that is hanging around the necks many youth.
- Skill training is a means to self-reliance. Thus if the student is well trained and be equipped with the modern approach to practical activities could be industrious in his/her production therefore earning a living by reducing the increasing number of unemployment.

- The government of Ghana could put in place an incentive package for technical teacher and provide the appropriate learning needs to improve upon the existing facilities.
- The teachers‟ terms and conditions of service could be improved to reduce teachers‟ getting demoralized. They could be given the opportunity upgrade themselves in the various courses and improve their salaries as a form of motivation.
- All the stakeholders of vocational technical education should create the alertness on the needs and importance of vocational technical education and give it an affirmative approach than it has been over the years. This will draw many more youths to technical education.

### 6.5 Area for Further Research

Based on the findings of the study, further research areas which may enhance efficient achievement of vocational skills have been recommended from the issues that emanated from the study and were beyond the scope of the study. Replication of the same study in other parts of the region in order to establish the actual state of technical and vocational education in the Region is suggested.

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**APPENDIX A**

**UNIVERSITY OF EDUCATION, WINNEBA**

**COLLEGE OF TECHNOLOGY EDUCATION-KUMASI**

**DEPARTMENT OF MECHANICAL TECHNOLOGY EDUCATION**

**SCHOOL OF RESEARCH GRADUATES STUDIES**

## QUESTIONNAIRES FOR STUDENTS

The researcher is a student of the University of Education and is seeking your views on the challenges facing the acquisition of practical skills training among St. John"s Vocational Technical Institute students in Nandom District. Be assured that every answer will be treated with the utmost confidentiality.

**Please tick [√] the appropriate response(s) or give your views to the questions below.**

**Section A-Personal Data of Respondents**

1. Sex of respondents

A. Male { } B. Female { }

2. Age group of respondents in years

{ } Less than 18 { } 18-28 { } 29-39 { } above 40

3. Marital status

A. Married { } B. Single { } C. Divorced { } D. Separated { }

4. Parental status

A. Both { } B. single { } C. Orphan D. separated

**Section B: The attitudes of students towards practical skills training.**

**Please tick YES/NO [√] the appropriate response(s) or give your views to the questions below.**

5. Practical training is very difficult and boring.

YES { } No{ }

6. Is Practical skills training important in my District?

Yes { } No { }

7. Practical training is meant for those who are academically weak.

Yes { } No { }

8. Many people do not respect practical men and women.

Yes { } No { }

9. Practical work is meant for dirty people.

Yes { } No { }

10. It is highly unsafe taking to practical training

11. Welding course is not good because, one can easily get blind.

Yes { } No { }

12. If I were given the chance, could divert from my welding course to building

Yes { } No { }

13. Technical skills training can help develop a district and a country as a whole.

Yes { } No { }

14. Among all the technical courses, welding is the last option I could ever consider.

Yes { } No { }

Please indicate your reason for or against practical skills training using the Likert scale where; 1= Strongly Disagree (SD), 2=Disagree (D), 3= Neutral (NS), 4=Agree (A) and 5= Strongly Agree (SA).

| QUESTIONNAIRE ITEMS | OPTIONS | | | | |
|---|---|---|---|---|---|
| | 5 | 4 | 3 | 2 | 1 |
| 15. There is no prestige in technical education. | | | | | |
| 16. Inadequate tools and equipment makes practical training extremely difficult. | | | | | |
| 17. Lack of training materials is the cause for lack of interest in practical training. | | | | | |
| 18. Practically handicap teachers cannot influence students in practical skills training. | | | | | |
| 19. Technical teachers spent much time doing outside jobs at the neglect of teaching their students. | | | | | |
| 20. I attend Technical school because I have no option. | | | | | |
| 21. Technical training is accident prone area to undertake. | | | | | |
| 22. Students should not be forced to undertake practical skill training. | | | | | |
| 23. I do not want practical skill training because it will less important. | | | | | |
| 24. I do not want welding, course because I have seen many technical men/women who are doing different courses after completion | | | | | |

**Section C: The general public perception on practical skill training**

25. The general public is very much aware of the use and importance of practical skill training.

{ } Strongly agree { } Agree { } Neutral { } Disagree { } Strongly Disagree

26. How often do you see people undergoing technical skill training in Nandom district?

{ } Always { } Sometimes { } Rarely { } Under pressure

Please indicate your views on practical skill training using the Likert scale where; 1= Strongly Disagree (SD), 2=Disagree (D), 3= Neutral (NS), 4=Agree (A) and 5= Strongly Agree (SA).

| **QUESTIONNAIRE ITEMS** | **5** | **4** | **3** | **2** | **1** |
|---|---|---|---|---|---|
| 27. What does it profit a student to complete technical school without tools to work with? | | | | | |
| 28. The society looks down upon technical skill training. | | | | | |
| 29. Technical skill training is for school drop outs. | | | | | |
| 30. Technical skill training is the most widespread and the single most effective way of developing a less developed district and country. | | | | | |
| 31. Most of us see practical skill training in Ghana as not necessary | | | | | |
| 32. Government pay lips service to technical education | | | | | |
| 33. Most of the infrastructural development in developed countries came as a result of technical education. | | | | | |
| 34. Technical education is supposed to be a solution to our increasing poverty. | | | | | |
| 35. Technical works is viewed by many Ghanaian as a second | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| hand (mediocrity) activity. | | | | | |
| 36. Technical education is meant to promote self employment. | | | | | |
| 37. Many Ghanaians don‟t like self employment. | | | | | |
| 38. Technical education is very expensive | | | | | |
| 39. It is the economically poor parents children who attend technical education | | | | | |
| 40. Most parents do not want their children to become engineers | | | | | |

## APPENDIX B

**UNIVERSITY OF EDUCATION, WINNEBA**

**COLLEGE OF TECHNOLOGY EDUCATION-KUMASI**

**DEPARTMENT OF MECHANICAL TECHNOLOGY EDUCATION**

**SCHOOL OF RESEARCH GRADUATES STUDIES**

### QUESTIONNAIRES FOR TECHNICAL TEACHERS

The researcher is a student of the University of Education and is seeking your views on the challenges facing the acquisition of practical skills training among St. John"s Vocational Technical Institute students in Nandom District. Be assured that every answer will be treated with the utmost confidentiality.

**Please tick [√] the appropriate response(s) or give your views to the questions below.**

**Section D-Personal Data of Respondents**

1. Sex of respondents

A. Male { } B. Female { }

2. Age group of respondents in years

{ } Less than 20 { } 20-30 { } 31-40 { } 41-50 { } 51-60 { } Above 60

3. Marital status

A. Married { } B. Single { } C. Divorced { } D. Separated { }

4. Highest Professional or Educational level

{ } No Formal Education { } Basic/Senior High School or Technical

{ } Higher National Diploma (HND) { } Tertiary (Bachelors and higher)

{ } Others {please specify}……

5. Have you ever undergone technical training?

{Yes} {No}

5. How many years have you been working as a technical man or woman?

A.1-3 { } B. 4-6 { } C. 7-10 { } D. Above 10 { }

**Section E: The attitudes of students towards practical skills training.**

6. Practical training is very difficult and boring.

{ } Strongly agree { } Agree { } Neutral { } Disagree { } Strongly Disagree

7. How important is practical skills training in my District?

{ } Always { } Sometimes { } When considered a drop out

{ } For other reasons (please specify) ……..

8. Technical skills training can help develop a district and a country as a whole.

{ } Yes { } No { } Not sure

Please indicate your reason for or against practical skills training using the Likert scale where; 1= Strongly Disagree (SD), 2=Disagree (D), 3= Neutral (NS), 4=Agree (A) and 5= Strongly Agree (SA).

| QUESTIONNAIRE ITEMS | OPTIONS | | | | |
|---|---|---|---|---|---|
| | 5 | 4 | 3 | 2 | 1 |
| 9. Welding shop is very easy to establish | | | | | |
| 10. Technical education is an eye of envy in Nandom District. | | | | | |
| 11. Technical education is for pleasure not for practical training. | | | | | |
| 12. Everybody can undergo practical training at any where besides formal education. | | | | | |
| 13. I attend Technical school because I am being forced to go Technical to school. | | | | | |
| 14. Practical skills training is very difficult to undertake | | | | | |
| 15. People should not be asked to undertake practical skill training against their wish | | | | | |
| 16. I do not want practical skill training because it is not important in my District. | | | | | |
| 17. I do not want to undertake Technical training because I have seen many technical men who are looking wretched in societies. | | | | | |

**Section F: The general public perceptions on practical skill training**

18. The general public is very much aware of the use and importance of practical skill training.

{ } Strongly agree { } Agree { } Neutral { } Disagree

{ } Strongly Disagree

19. How often do you see people undergoing technical skill training in Nandom district?

{ } Always { } Sometimes { } Rarely { } Under pressure

Please indicate your views on practical skill training using the Likert scale where; 1= Strongly Disagree (SD), 2=Disagree (D), 3= Neutral (NS), 4=Agree (A) and 5= Strongly Agree (SA).

| **QUESTIONNAIRE ITEMS** | **5** | **4** | **3** | **2** | **1** |
|---|---|---|---|---|---|
| 20. I do not like practical skill training because of the risk involved. | | | | | |
| 21. The society frowns upon technical skill training. | | | | | |
| 22. Technical skill training is for school drop outs. | | | | | |
| 23. Technical skill training is the most widespread and the single most effective way of developing a less developed district. | | | | | |
| 24. Most of us see practical skill training in Ghana as not necessary | | | | | |

25. Other reasons on practical skill training in welding (please state) ……

……

……

……..

**Section G: Technical Teachers background in skill Training practical**

26. Teachers with good knowledge in practical skill training make training interesting and simple.

{ } Always { } Sometimes { } Rarely { } Not very sure

Indicate your views with a tick **[ √]** on practical skill training using the Likert scale where; 1= Strongly Disagree (SD), 2=Disagree (D), 3= Neutral (N), 4=Agree (A) and 5= Strongly Agree (SA).

| **QUESTIONNAIRE ITEMS** | **5** | **4** | **3** | **2** | **1** |
|---|---|---|---|---|---|
| 27. Practical skill training is aimed at providing employment to graduates | | | | | |
| 28. Technical teachers without Technical skill training but can teach can equally give practical skill training to students. | | | | | |
| 29. Technical teachers need in-service training on practical skills training. | | | | | |
| 30. Inadequate training materials in training centres are hindering practical skill training. | | | | | |
| 31. Large enrolments couple with inadequate equipment lead to poor acquisition of practical skill training in St, John"s Vocational Technical institute welding students. | | | | | |
| 32. Less attention is given to practical skills training in Technical Vocational institutes. | | | | | |
| 33. Qualified technical teachers are not available to handle practical Skills training. | | | | | |
| 34. Government Policies are affecting practical skills training in Vocational Technical Institutes | | | | | |

35. Please state other reasons that affect the acquisition of practical skills Training in Vocational Technical Institutes……..

……

……