

UNIVERSITY OF EDUCATION, WINNEBA
COLLEGE OF TECHNOLOGY EDUCATION, KUMASI

**A CRITICAL STUDY ON THE IMPACT OF THE NEW VOCATIONAL
EDUCATIONAL SYSTEM IN GHANA: A CASE STUDY OF ASSIN FOSU
AND BIRIWA VOCATIONAL INSTITUTES**



BY

SAMUEL EKOW AMOAH

AUGUST, 2016



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**SAMUEL EKOW AMOAH
(7141210012)**

**A Dissertation Submitted to the Department of FASHION AND TEXTILES
DESIGN, Faculty of VOCATIONAL EDUCATION, School of Research and
Graduate Studies, University of Education, Winneba in Partial Fulfilment of the
Requirements for the award of Master of Technology Education
(Fashion and Textiles) Degree**

AUGUST, 2016

DECLARATION

CANDIDATE'S DECLARATION

I, Samuel Ekow Amoah, 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.....

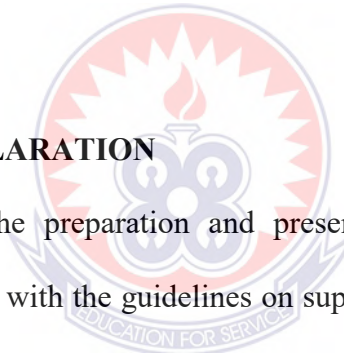
SUPERVISOR'S DECLARATION

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: Mr. Stephen K. Amoakohene

SIGNATURE.....

DATE.....



ACKNOWLEDGEMENTS

I express my sincere gratitude to the Almighty God whose divine intervention, care and protection saw me through the period of the programme successfully.

The production of this dissertation could not have been possible without the active encouragement, moral support and actual participation of other people especially Mr. Stephen K. Amoakohene my supervisor. I am indeed most grateful for the supervisory role he played, suggestions and encouragement that made the completion of this work possible.

I also wish to recognize and acknowledge Mr. Ernest Nyarkoh (a. k. a. Maths Doctor), a tutor at Siddiq Senior High, Agona Nyarkrom, Mr. Losford Kwadjo Doe, M. Tech student of Fashion and Textiles Design Department at the University of Education, Winneba-Kumasi campus and Dr. Daniel K. Danso, Head of Department of Fashion and Textiles Design at the University of Education, Winneba-Kumasi campus who offered pieces of advice and encouragement that made this work a success. I am indebted to my family (my wife and children) for their co-operation and understanding during the period of this work. They enabled me to devote much time, attention and financial resources to the preparation of this work.

DEDICATION

This dissertation is dedicated to my beloved wife Mrs. Edith Abena Amono-Amoah and my children Kojo, Ekow and Adwoa.

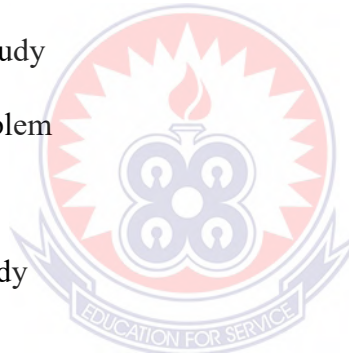


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ABSTRACT

The need for Vocational Education as a result of advancing technology development worldwide has prompted many nations to re-examine their education curricular (Ginner, 1996). Ghana is no exception in this global phenomenon hence the introduction of the Educational Reforms programme with emphasis on vocational and technical education into Ghanaian school curriculum. Since 1987, education in Ghana has had series of setbacks because of lack of proper planning and the inability of Vocational Education to relate properly with the economy. For a nation to become fully developed it must make good use of science and technology. Qualitative research design approach was adopted for the study. The researcher used different methods to gather data for the research work. Questionnaires, interviews, observation and document analysis were carried out in order to make the work successful and its content reliable and valid. The investigation focused on relative importance of vocational education development to what extent graduates find job to support economic growth. The major results of the study indicated that students performance in vocational schools were appreciable. The outcome of the study was that, few of the respondents especially students bought their own materials which were used for their practical work. It was also revealed that, machinery were not adequate and even those available needed proper maintenance in all departments of the National Vocational Training Institutes at Biriwa and Assin Fosu. The researcher realised that, great effort has been made towards the industrial attachment and it was helping to shape the students a lot in terms of practical work. Even though the nation has benefited from vocational education, the impact is not so great and that the government needs to do more by putting in place special funds that will cater for vocational education. Industries should be made to plough back some of the profits to develop vocational education.

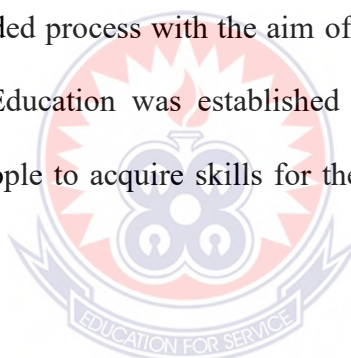
CHAPTER ONE

INTRODUCTION

This chapter discusses background to the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, scope of the study, limitations, delimitations of the study and definitions of terms and abbreviations.

1.1 Background to the Study

Education is defined as the process by which people acquire knowledge, skill, habits, values or attitudes, (The World Book Encyclopedia, 1995). Chitty (1986) also defines education as an open-ended process with the aim of transforming a student's view of the world. Vocational Education was established during the colonial era by past governments to train people to acquire skills for their personal development and the society at large.



In his Ruskin College speech of October 1976, James Callaghan pointed out ... „there is no virtue in producing well-adjusted members of a society who are unemployed because they do not have the skills“. (Entwisted, 1990). Over the years, Vocational Education has produced a sizeable number of skilled personnel towards the country's infrastructural development. In this present age, the government of the day views Vocational and Technical education as „the engine of growth“ which implies that, graduates from such institutions can readily enter into the adult world of work. The government's focus is on rapid economic and industrial growth, which means that Vocational Education has an impact on the realization of those goals which in the long run, will benefit the Ghanaian society.

Since economic, social and technological change set in, people everywhere need to develop their knowledge and skills on a continuous basis that they can live and work meaningfully in the knowledge society.

Education and training contribute to an individual personal development, increase his or her productivity and incomes at work, and facilitate everybody's participation in economic and social life. Following the route of education and training can also help individuals to escape poverty by providing them with skills and knowledge to raise their output and generate income. Investing in education is therefore, an investment for the future. Knowledge and skills are the engine of the economic growth and social development. The development of vocational-technological education is very clear to the heart of successive government in Ghana. The industrialised or improved nations today such as Britain, U.S.A, Canada, Japan, Germany, etc. became great through the early promotion of vocational training and education. (J. C. Caldwell, 1967). Necessary assistance and technical knowhow were provided to improve upon their technologies and service for their industrial development and growth. Vocational Education system has been with us since the colonial era and it is recognized by all governments worldwide as an engine for industries and national growth. In 1957 accelerated development plan for education bill was laid before parliament by Dr. Kwame Nkrumah. He proposed among others that, four secondary technical schools and four technical schools were to be set up in Tarkwa, Accra, Kumasi, and Sekondi-Takoradi, and that the government trade school at Tarkwa be upgraded to a technical institute and to increase scholarship to secondary Technical and Tradesmen for further training abroad, Graham (1976 p. 113). On March 22nd 1956, a trade school was commissioned at Kpando at a site where one Mr. Asamany was training youth using

the indigenous methods, by Dr. Kwame Nkrumah himself. Some of the early products were Mr. Acquaye formerly of the Technical Division of the Ghana Education Service, Major General (rtd) H.K. Anyidoho the immediate past Commander of the Northern Command of the Ghana Armed forces. After independence in 1957, there were demands for more craftsmen to man newly created departments in the public services as well as the private sector. The existing Technical institutes and Junior Trade Schools were expanded and College of Technology was also expanded, upgraded and renamed Kwame Nkrumah University of Science and Technology (KNUST). Due to that the government sponsored about 107 artisans to be trained in Russia and Great Britain to encourage students to pursue Vocational Education. Among other people who benefited from the scholarship schemes were Mr. J. A Korley once a principal of Takoradi Polytechnic, Ho Technical institute and Accra Polytechnic and Mr. P.C Noi former principal of Kpando and Tamale Technical institute. The need to train middle-level manpower became apparent as the country began to develop and to achieve its aim; the courses run in the Technical/Vocational schools in Accra, Takoradi, Kumasi were upgraded and renamed Polytechnics in 1963. The Junior Technical institutes were also upgraded to Technical/Vocational institutes in 1964 and more Technical/Vocational institutes were built at Kikan, Sunyani and Ho. The accelerated development plan of the government necessitated the need for the government to ask for assistance from UNDP which arranged ILO experts to set up the National Vocational Training Institute in 1969. The first director was Real Admiral Hanson and in January 1970, a Commissioner of trade testing was appointed. The purpose of establishing national vocational training institutes and other training institutes in the country, according to Dr. Kwame Nkrumah are;

1. Planning suitable manpower requirement for the country's economic expansion.

2. Providing adequate number for fully trained industrial and office employees.
3. Upgrading and updating employees to higher level of skills.
4. Formulating national standards in skills and assessing the achievement of skills at different levels.
5. Developing a care of instruction training officers who will turn train apprentices and workers.
6. Periodic assessment of training needs.
7. Adopting existing training arrangement as necessary.
8. Training national counterparts to take over on continuing basic, the function of the international experts.

In March, 1972 the Ministry of Education submitted proposal on a new structure and content of education for public discussion under the chairmanship of the reverend Dr. N.K Dzobo of the University of Cape Coast. Subsequently, at the instance of the government, the report of the Dzobo Committee together with comments of the Ministry of Education was published in July 1973. This was blending the proposals of the Dzobo committee, the ministry's views and those of the public. The publication listed five basic principles which constituted the rationale for restructuring the educational system of the purpose of this study, the researcher shall pick the principal number four which stated inter-alia" that practical programmes which lead to the acquisition of skills should be an essential part of all formal education." The development of practical activities and the acquisition of manual skills etc. (Ministry of Education, 1973). This new Educational structure, led to the setting up of Experimental Junior Secondary Schools (J.S.S) in all the districts and other selected places. The Provisional National Defence Council (P.N.D.C) was convinced that the

most basic condition for the economic and national growth of Ghana was the national development of its human resources. This calls for quick and effective education which will be relevant to the needs of this country. The policy states that we should have a system that may be evolved, it should be capable of supporting agriculture productivity, promoting self -employment and encouraging small scale industries, it should reduce the level of widespread poverty, under nutrition, and under employment. There is urgent need for a review of our education strategy and other things to include pre-vocational pre-technical and technical education, reorganization and upgrading of Polytechnics and Universities rationalization programme. Training manual for national service personnel posted to Technical and Vocational Institutes (1991, p. 22). The aim among other things are technical and scientific concept much needed in any country's development is being given new emphasis in the junior secondary school (J.S.S). The provisional National Defence Council in 1987 promulgated a law that started the whole new reform enmasse to provide for the academic, technical, vocational and commercial subjects.

According to Antwi (1992, p. 45) "The objective of the reforms to predispose and expose every Ghanaian child at an early age to the acquisition of a range of skills, encourage the child to be self- reliant, resourceful, creative and productive and ever-developing world of science and technology". Under the 1987 reforms, subjects like Technical Drawing, Technical Skills, and now pre-technical skills were made compulsory subjects in every basic school to tune the minds of the students towards technological and scientific initiative. However, when products from junior secondary schools enter technical institutions they cannot find their rhythm. As a vocational teacher, I have come to realize that all those ideas about vocational or skills oriented

subjects have not been given the needed support and the public have not changed their perception and negative attitude towards vocational training.

There is the general belief that school drop-outs and low academic achievers take up craft courses. This notwithstanding has a lot of effects on the teaching and the learning of the subjects as well. The researcher is convinced that Vocational is unique and has appropriate functions for the development of a nation. It is the promotion of this type of education that enables the world produce the necessary manpower to produce goods and services for the economy of a nation to grow.

1.2 Statement of the Problem

Vocational education has been described by many as a school for the „non-do wells“ and as a result, its impact on the socio-economic development of the nation is nothing to write home about. Vocational education has long been recognized by most countries around the world including Ghana; as a pivot catalyst for technological achievement and economic growth.

The training of the youths to acquire skills in certain disciplines was dear to the heart of many governors and governments that have come and gone. This activity manifested in the various commissions set up during the pre-independence and post-independence era, yet, due to poor implementation and lack of logistical support among others, it fell short of expectations in terms of coverage, quality, equitableness and economic (White Paper on the Report of the Education Reform Review Committee, 2004). There has been an increasing number of Rural-Urban-migration into our cities which has a negative effect on the economy. Many unemployed youths

have also been moving on the streets in search of non-existing jobs. All these problems have come about as a result of lack of employable skills by the people. For the country to achieve rapid economic and technological growth there is the need to pay maximum attention to vocational education in order to produce people with employable skills to meet the needs and aspirations of the society in which they will live to operate. Hence the need for this study.

1.3 Purpose of the Study

The main purpose of this study is to delve into and ascertain the impact of the new Vocational educational system in Ghana's socio-economic development. The study would also critically assess or examine, whether our students from Vocational institutions are able to establish on their own business or are absorbed by industries. This would also verify the truth or otherwise of the public perception that Vocational Education is for the less intelligent people.

The study would be used to examine the benefits of investing money into Vocational Education. The study would find out if Vocational Education has a positive or negative impact on the Ghanaian society. This would enable the researcher to offer suggestions and recommendations for policy makers to address for the betterment of the vocational advancement in Ghana.

1.4 Objectives of the Study are to:

- Examine colonial era education and educational reforms in Ghana.
- Find out how methods of lesson presentation can affect the delivery of Vocational Education in Ghana.

1.5 Research Questions

With the background given and the problem stated already, the researcher would like to find answers to the following questions;

- What is the extent to which graduates of vocational programme acquire skills?
- What is the extent to which graduates from Vocational Education contribute to the nation's development?

1.6 Significance of the Study

The significance of the study is to address an issue of Vocational Education and its impact on agriculture, industry, commerce and economic development. Also whether the training and skills impart on the students are leading to provision of operatives artesians, craftsmen, technicians and other middle level personnel. It will help the citizenry to fully understand and appreciate the role of Vocational Education in the society so that those who look down upon it, will change their minds and embrace it. Again, it will enable the citizens know whether Vocational Education is doing better in producing well trained graduates to propel the economy into a middle income status. It will also help all stakeholders in Vocational Education to have a firsthand knowledge of the situation on the ground which may call for a restructure so that the nation can reap it full benefits of Vocational Education.

Furthermore, it will provide trained manpower in science and technology. Lastly, it will equip individuals with entrepreneurial skills for self-employment as well as it identified and train Vocational Education trainees.

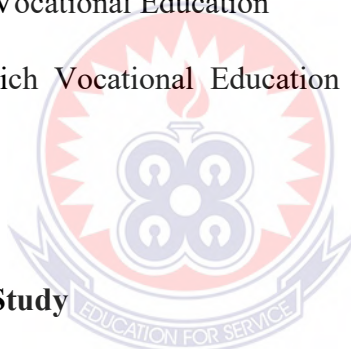
1.7 Scope of the Study

The study covered Two Vocational schools situated in the Mfantseman West District and Assin North Central District of the Central Region, which included Biriwa National Vocational Training Institute and Assin Fosu National Vocational Institute respectively.

The researcher also sought the views of Vocational teachers and students in the aforementioned institutions, employees, supervisors of small scale enterprise and opinion leaders selected within the districts.

The following issues were considered:

- The relevance of Vocational Education
- The extent to which Vocational Education has benefited the people in the districts.



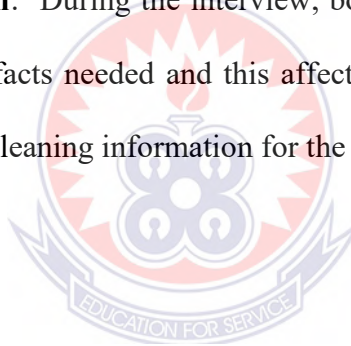
1.8 Delimitation of the Study

The researcher concluded this study at Biriwa National Vocational Training Institute and Assin Fosu National Vocational Training Institute departments. The researcher targeted form three (3) students offering a course in Vocational skills. This is because the researcher wanted the vocational students to be aware of their potentials so as to help achieve the objectives of the study.

1.9 Limitations

During the course of carrying out the research work, the researcher encountered some difficulties. Notable among them have been highlighted below.

- **Time:** There was limited time for the organization of study materials alongside the teaching. Identification of the problem, collection of data, conducting interviews, observations and research work at the library, all took a lot of time and it retarded the researcher's activities.
- **Funding:** A lot of money goes into this research work. For instance, throughout the researcher's travels, stationary, printing of interview and questionnaire schedule, as well as typing and binding of final project work cost a lot of money.
- **Non-Cooperation:** During the interview, both tutors and students concerned did not give out all the facts needed and this affected the research as the researcher had to do extra work of gleaning information for the work.



1.10 Definitions of Terms and Abbreviations

P N D C – Provisional National Defence Council

N V T I – National Vocational Training Institute

U N D P – United Nations Development Programme

W S I S – World Summit Information Systems

N G O – Non - Governmental Organisations

T E U – Technical Examinations Units

N A C V E T – National Co-ordinating Committee on Technical/Vocational and Training

T V E D – Technical/Vocational Education Division

N I T V E T – National Institute of Technical and Vocational Education and Training

T V E T – Technical/Vocational Education Training

U N E S C O – United Nations of Educational and Scientific and Cultural Organisations

P S I – President's Special Initiatives

G E S – Ghana Education Service

C C M A – Cape Coast Metropolitan Assembly

B D T – Basic Design and Technology

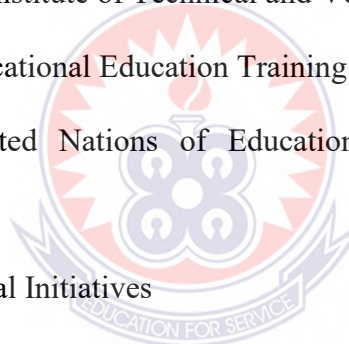
J H S – Junior High School

S H S – Senior High School

J S S – Junior Secondary School

S H S T – Senior High Secondary Technical

N C C – National Craftsmanship Certificate



CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter seeks to review literature on the research topic and to come out with the views of some authorities. The literature would be reviewed along these lines, traditional education, colonial era education and educational reforms, societal perception towards voctech education, methods of lesson presentation, both published and unpublished books, journals, newspaper publications and any relevant information concerning what others have said about this topic. It is the hope of the researcher is that all the information gathered will help to make research work authentic on a critical study on the impact of the new vocational educational system in Ghana.

2.2 Traditional Education

Before the arrival of the Europeans in 1491 to Gold coast now Ghana, there was a form of education used to transfer knowledge to both the youths and the adults. The aim of education at that time was to prepare the child to acquire specific vocational training and to develop a healthy attitude towards an honest labor, this training with traditional society was largely based on the apprenticeship in which relatives and master craftsman unselected field train children for their chosen vocation as to ensure discipline and efficiency. Even through the type of engineering technology used at those days was acceptable to them, however, when compared with modern techniques it seemed primitive.

Vocational education is a type of education designed to prepare skilled personnel at lower levels of qualification for one or a group of occupation, trades or jobs (UNESCO, 1994). In this present time vocational education is viewed as a tool to meet the needs of the work force; first from agricultural priority to industrial priority and then to today's emphasis on an information and service economy (Ashmore, 1986).

Education according to Archer (1997) may be seen as a way of transmitting, conserving and renewing of culture of the people of the society. It could also be concerned with the acquisition of values, skills and the development of attitudes and interest. From the above it could be noted that the curriculum of any country's educational system should cover those aspects, to make the citizens useful.

However, curriculum defined by Adentwi (1999, p. 3), states that "it's the sum total of educationally valuable experiences that learners undergo under the auspices of the school". Education is preparation for life, for the satisfaction of or formation of personality. Without it, the culture which is essential for the continuity of the society could not have been transmitted by the older to young generation and Ghanaian society could not have continued to exist. It is therefore imperative that Education planners take cognizance of reviewing on going educational systems and make the necessary adjustment. Changes have occurred in the educational planning of the country (Ghana), since the missionaries era to the currently. Free compulsory universal basic education (fCUBE).

2.3 Colonial Era Education and Educational Reforms

The European introduced castle schools to educate African children. The primary aim of such education was to give religious instruction to the African children and to teach them how to read and write and to make simple calculations. In effect the education was to make the Africans help them in trading (Antwi, 1992).

The missionaries brought some changes. The Basel and Wesleyan's contribution in Vocational Education were for many years unique in this country industrial establishment was opened and courses like joiners, carpenters, blacksmith, shoemakers, book binders etc. This education was not only for self-employment but by their study output of craftsman, caused general improvement in standard of living and particularly in house building (Mcwilliam, 1975 p.31).

Lieutenant Governor H.W. Hill in 1844 tried to bring some reforms into education in the then Gold Coast, but the colonial office rejected the reforms. Two years later, his successor Winniette made it for vocational education by arguing that at present there is not employment for educated boys, except teachers in schools and clerks in government and mercantile establishments and hence the result of education not pleasing as they may and also not healthy as they would be if they were associated with various branches of mechanical knowledge. Science and technology are to interdependent broad subject that have gained high recognition for global advancement in years (Agyeman, 1993).

This confirms that for efficient economic, every country ought to have the skills and creative abilities, and such has yielded the emphasis and inclusion of Vocational

Education in the current curriculum of education for the country. The Advanced learner Dictionary of current English (2000) defines Reforms as changes made in order to remove imperfection. This suggests that reform take place when an existing system or structure is found not to be working effectively or producing the desired results. New things are introduced into it to make it function more effectively. Education reforms can then be deduced as the changes introduced into an education system to make it meet the needs and aspiration for which it has been establishment. Education reforms take place when the existing education policies, structures and philosophies are falling or have failed save the purpose for which they have been set up. Reforms have also take place since formal education was introduce in this country. One of them is Accelerated Development plan of Dr. Kwame Nkrumah in 1951, then in 1961 Education Act, the Kwarpong committee which recommended the continuation school system and the 1972 Dzobo committee report were that “Every Ghanaian child must have knowledge in science and technology so that the child can understand and live completely in today’s world. Ghana is a developing country and her people need to able to reach untapped resources to her needs (Annoh 1989) According to Yankah in Ghanaian Times (19/03/04, p. 11) National Development means a condition where people’s standard of living and wellbeing have improved, where various aspect of life have undergone a positive change or improvement, leaching to general wellbeing or positive impact on the lives of the people.

2.4 Societal Perception towards VOCTECH Education

Margu (1968) described attitudes as the general tendency of an individual to act in a certain way under particular conditions. It is generally agreed that behavioral changes should be motivated by a change in attitude that attitudes are reflected in behavior and

that attitude change should result from national decision making (malonrey and ward, 1973). Aidoo (1989) addresses that” in Ghana the perception of the society for the purpose of education has affected and continues to affect adversely the development of vocational and technical education”. While the first academic school in the Gold coast was established in 1644. It was as late as 1909 that the first government Vocational and Technical school was established in Accra and later transferred to Takoradi. This was due to lack of interest the Africans shown in vocational and technical education.

The country appears to have neglected the vocational sub sector of education. Thus whereas there are over 474 senior secondary schools country wide, there are only 29 vocational and 23 technical institutions. In the Central Region there are 49 senior secondary schools as against 4 N.V.T.I and 2 technical institutions and 3 teacher training institutions. The Ghanaian Times (19- 03- 04 page 11). There are 345 public TVET institutions, with a total enrolment of almost 24000 students in 2003-2004. 1.2% of the total national education budget is spent on TVET (Palmer 2005).

A lot of efforts were made by Colonial governments as well as the missionaries to enhance the development of the country’s technological advancement, but little was achieved from their toils. According to Annoh (1995 page 235) these attempts went into the background due to the following reasons:

- There was lack of qualified persons to give Vocation Education.
- The missionaries did not have enough money to buy equipment for Vocational Training.

- The people saw that office work carried more prestige than manual work and that there was less respect for those who did manual work.
- The people preferred imported articles such as knives and hoes to those produced locally.
- Most school children saw education with the vocational bias as something meant for the unfortunate or not clever enough to do vocational academic work.

The above stated problem still persisted in the 1987 reform education programme which made junior secondary school three (3) years to senior secondary school and also made senior secondary school three (3) years to university or polytechnic. However, it was silent on the vocational schools.

In 2004, the government decided to upgrade one senior secondary school in each of the one hundred and thirty-eight (138) districts not a single vocational school among these schools to be upgraded.

World summit on information systems (WSIS) have called an African countries to “use technology to facilitate development. They noted that African was seriously handicapped and left behind in terms of technological resources and that if the problem was not addressed, all effort made at development would come to naught” the people Daily graphic (19-01-05). Students and parents should not see the vocational education as being for the poor and less privilege or fortunate and the less academic ones but the problems may be due to its organization to reflect and achieving higher and even on to the University height. This therefore should make

people devoid of their negative perception about vocational programmes. The constraint lies at the heart of attempts to link education with productive work.

Commonwealth Caribbean societies accord higher status to academic curricular that they do to those of which are more practical and geared to preparation for the world. As a result, parent tends to put some resistance to their children participation in practical work. These facts further support the attitudes, action and therefore there is the need for certain structures to be put in place to create the necessary conducive atmosphere of interest among the citizens of the country.

Without proper personnel in industry, commerce and in the public service a country is not in a position to exploit its national resources (UNDP 1984). To support the promoting of vocation education, the United Nations Development Programme (UNDP) and the government of Ghana have jointly released 1.4 billion whilst the government also contributed 2 billion in The Daily graphic (13-04-1998 p. 18).

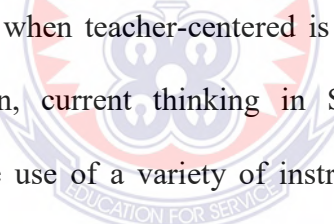
2.5 Methods of Lesson Presentation

Teaching strategy is the approach in which teachers use to present information, select resources and define role of students. It is a way in which instruction should be carried out on specific circumstances which involves varieties of instructional methods.

Teaching approach or strategy comprises learner-centered and teacher-centered. In teacher-centered approach instruction are highly structured and the teacher controls the learning situation. This approach treats learners as passive recipients where by the

teacher is viewed as holder and transmitter of knowledge. Some of teacher-centered methods include Lecturing, Questioning, Team Teaching and Guest speakers.

The other teaching approach is the learner-centered approach. This approach is where the teacher creates the enabling environment to help learners explore to achieve the learning objectives. The disadvantages are that teacher-centered teaching minimizes feedback from students, assumes an unrealistic level of student understanding and comprehension, and often disengages students from the learning process causing information to be quickly forgotten. Sarfo (2007) argued that no method is more effective than the other; it depends on the nature of the learners, and the content to be internalized.

The logo of the University of Education, Winneba, is a circular emblem. It features a central sunburst or starburst design in white and red. Below the sunburst is a stylized figure, possibly representing a person or a symbol of knowledge. The text "UNIVERSITY OF EDUCATION" is written in a circle around the top, and "EDUCATION FOR SERVICE" is written around the bottom. The logo is semi-transparent and overlaid on the text.

Although there are times when teacher-centered is the most appropriate method for disseminating information, current thinking in Secondary School teaching and learning suggests that the use of a variety of instructional strategies can positively enhance student's learning. Obviously, teaching strategies should be carefully matched to the teaching objectives of a particular lesson. Again Marcheggiani et al (1999) conducted a study to find out the effects of group teaching and lecture on student performance. Pecku (2011) advised instructors to adopt teaching methodology that need to be participatory in order to achieve excellent academic performance and prepare student adequately for the job market.

According to Antwi-Agyei (2002), "the best way of teaching and learning vocational skills is through practical activities". This is true because the process of reading about materials, tools and processes from text books and lecture notes is facilitated when the

students have the chance to observe, manipulate tool through practical activities. “Having interest in the subject serves as a motivational tool that urges the individual to find solution to problems” (Acquah, 2004). The researcher thinks this view is right if student are taught through practical activities.

Baidoo (2005), in his research explains that “the strategies employed by teachers, influence learners understanding”. If appropriate methods are used to present lessons meaningfully, students will understand. It is the researcher’s view that during vocational/technical lessons, questions to male students should be open-ended so that they will be motivated to answer them. Baidoo (2005) again suggest that, vocational trainers should act as facilitators while learners perform most of the activities”.

Using Learner-Centered Approach of Teaching to Improve Performance of Students offering vocational programmes

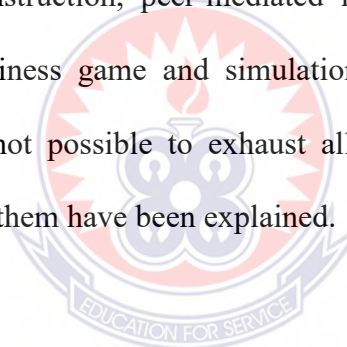
To obtain high levels of performance require effective presentation of instruction. That is, the focus of instructional objective is emphasis on students’ achievements rather than teaching achievement. Learner-centered teaching focuses on the process of learning and the teacher acts as a facilitator (Blumberg, 2008). In learner centered classroom the teacher acts as a facilitator and teacher’s goal in the learning process is guide students into making new interpretations of the learning material. As stated by Annoh (1997) excellent academic performance depends on the learner drive to learn, provided the right environment is created.

Based on this, many researchers argued that for proper learning to take place, there should be a shift from teacher-centered approach of instruction to learner-centered

approach of instruction. Based on Bill pierce summary, he stated that in 1996 a study confirmed earlier findings: 6% of college class time is spent on student participation. When the teacher dominates the learning, students take shallow approaches to learning. Sparrow and Swan (2000) said learner centered teaching is possible and it can be used to improved performance of learners.

Forms of Learner- Centered Approaches

Learner-centered teachers do not employ a single teaching method but emphasizes a variety of methods that shifts the role of instructors from givers of information to facilitate student's learning, (Blumberg, 2008). Some of the methods of teaching may include: individualize instruction, peer-mediated instruction, discussion, discovery methods, role play, business game and simulation, brainstorming, seminars, field trips, case study. It is not possible to exhaust all the forms of learning centered approach of but some of them have been explained.



Peer Mediated Instruction

First to be discussed is the peer-mediated instruction which includes peer tutoring and cooperative learning which deals with small study groups and teamwork. It is believed that students get better understanding on concepts which taught by peers. Hall and Stegila (2003) explain peer mediated instruction as alternative classroom arrangement where students take an instructional role with classmates and student. Peer tutoring is applied by asking a student to present his/her work or groups work to an entire class and explain the work to their colleagues. Here learners encouraged to teach each other for better understanding and to build positive self-confidence since they become motivational tools to each other. Peer tutoring help teacher to cope with

challenges such as limited instructional time, multiple curricula requirement and appropriated social engagement among students. Peer tutoring is where one student teaches the other, there are cross-age peer tutoring and same-age peer tutoring (Owusu-Banahene, 2008).

Macheady, Sacca and Harper (1987) reflect on cooperative learning approach as a collective method of learner centered approach. Here, students are grouped into small study groups where there are mixed abilities and diverse opinions from individual students. It creates an avenue for higher achieving students to monitor and help the performance of lower achieving students. Cooperative Learning is a systematic pedagogical strategy that encourages small groups of students to work together for the achievement of a common goal.

Individualized Instruction

There is also individualized instructional method which also allows the teacher to place attention on each learner to work at his own pace. Teacher pays a particular attention to such learners and redesigns his curriculum instruction to suit the pace of such learners. Individualized instruction is most effective when class size is small to allow teacher to address specific needs of individual students (Noel & Bigg 1990).

Discovery method

In discovery method of instruction, students find out things for themselves rather than being told everything by the teacher. Information is not directly passed into the minds of students, but learners are encouraged to explore their own world, discover knowledge reflect and think critically. Romiszowski (as cited in Sarfo, 2007) also stated that in using discovery strategy, the instructor presents opportunity for the

application of the newly acquired knowledge to real situation and problem. There are two forms of discovery learning. That is complete discovery; where there is no teacher mediation and guided discovery; where students are guided by the teacher. The complete discovery method is best instituted in tertiary level where as guided discovery is best for students in the Senior High School.

Role play

It involves students acting out certain characteristics to portray personality or events they have learnt or about to learn. It allows students to practice learned behavior in new situations, act out–life situation and experience new perspectives. According to Amos (2010) role play consist of assuming specific attitude, learning and behaviors where one person acts out another’s position in a given situation. This can help improve students to understand and cope with others. It represents a conversational situation that focuses on dialogue between persons. It helps students to learn how to counsel others by helping them to see situation from a different point of view. It is a simulation of a life or work situation which is relevant to the person involved and fits into instructional objectives (Sarfo, 2007).

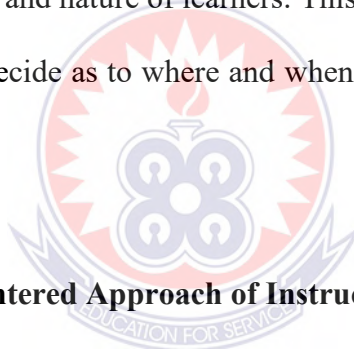
Field trip

Field trip is an excursion outside the classroom to provide realistic experience to learner. It is a form of teaching method, where students are allowed to experience a well-planned and guided tour about what they have learnt or about to learn. This makes students to bring to life ideas that have been discussed and analyzed in class. The role of the teacher in this method is to brief students on the location, time and purpose of the trip. Students are allowed to answer some questions about the trip,

participate and share ideas. It helps learners to encounter phenomenon that cannot be brought into classroom (Sarfo, 2007).

When do teachers use Learner-Centered teaching?

According to other author's learner-centered approach of instruction reduces the teacher's role to the role of an important and passive spectator, therefore for its effectiveness; the teaching strategies places full demand on the skills and resourcefulness of the teacher. In order for a teacher to veer towards a student-centered classroom, he or she must become aware of the diverse backgrounds of his or her learners (Sparrow et al., 2000). It also depends on the interest of the teacher, the type of learning outcome and nature of learners. This indicates that, the teacher should be versatile in order to decide as to where and when it is more appropriate to use this approach.



Benefits of Learner-Centered Approach of Instruction

Learner-Centered approach of instruction offer benefits to both teacher and learners. Learner-centered approach of teaching helps give students the chances to explore their inner potential and to arouse their interest to be more initiative, creative and resourceful for better achievements as according to (Mcloughlin & Luca, 20020). Teacher through the Learner-Centered Approach is able to acknowledge strength of students; address learning difficulties of individual students and it also help teachers to plan instructional objectives. Cooperative learning, role play, discovery method helps to encourage student retention, promote students learning and academic achievement. These methods also facilitate deep understanding of students; have a high level of student's involvement and encourage student to interest. Cooperative

learning also develops skills in oral communication, social skills and promotes positive race relation. (Sarfo 2007; Owusu Banahene 2008) Learning centered teaching also enhances students' satisfaction with their learning experience.

Males and females' needs and interests will be catered for. Lecture method therefore is not the best method to teach Vocational subjects. If there is a well planned demonstration lesson, the students will have the chance to observe and also practice what is being taught. The researcher feels that, through practical activities, the interest of students in vocational subjects will be developed.

2.6 Summary

The level of industrial development of country may be measured by the extent of utilization of its product factors, land, labor, capital and entrepreneur and the combination of economic indicators which are not easily understood by ordinary citizens. The training of the people in entrepreneurial and productive skills at levels of production chain will constitute one of the important corner stone for individual development and attachment of higher standard of living-molding our manpower needs at the middle level is the major task facing vocational advancement and general economic growth and the development of the country.

The purpose vocational education at non degree level is to provide young man and woman with skills in order to enable them to fulfill the country's manpower needs including self-employment up to the middle level in the field of industry, business and agriculture.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter deals with the methodology adopted by the researcher for the study which was focused on the topic “A critical study on the impact of the new vocational educational system in Ghana” with specific reference to National Vocational Training Institute-Biriwa and Assin Fosu. The data was gathered through the survey approach with vivid description of the research and how the groups were represented and the mode of selection of the representatives. It again examines the instruments employed thus; research design, description of population, data collection instrument, data collection procedure, and how they were administered including the final data analysis.

3.2 Design Intervention

The research design refers to the plan and structure of the investigation used to obtain evidence to answer research questions. The design describes the procedures for conducting the study including when, from, whom and under what conditions the data were obtained. The purpose of a research design is to provide the most valid, accurate answers possible to research questions. Due to the constraints under which the researcher is to work, case study design is the appropriate choice. According to Agyedu et al (1999) “it is the method the researcher explores as a single entity or phenomenon bounded by time and activity (a programme, event, process, institutions or social group) and collects detailed information by using a variety of data collection procedures during a sustained period of time. ”A case study is a decision making process. The researcher is placed in a certain position and he is required to make a set

of decisions. The researcher is expected to identify the problems. He is also expected to reason for the available data. There is no rush in case study.

Case study is concerned with the interaction of factors and events which involve the collection of data and presentation of a report of the case. Case studies are seen as a response for a return to close natural observation". The rationale for the selection of case study is the fact that the time within which the researcher is to present the work as a partial fulfillment of conferment of award is limited.

The strengths of case study in the context of this study are as follows:

- It allows the researcher to be concrete on a specific instance of situation and to identify the various interactive process of work.
- It can precede a survey and be used as a means of identifying key issues which merit further investigation.
- It enables the researcher to identify the problems and understand the situation.
- It enables the researcher to diagnose the problem areas.
- It also helps the researcher to generate the alternative solutions to the problem.
- It again helps the researcher to produce outcomes. It helps to predict what would happen if particular alternative solution was put in place to solve the problem.
- In addition, it helps the researcher to evaluate alternatives put in place to solve the problem.
- It also helps the researcher to make his/her own recommendations about the study.

Weaknesses of the case study are as follows:

- It is difficult to crosscheck information and so there is always the danger of distortion, critics of the case study approach and draws attention to this and other problems.
- They point the fact that generalization is not usually possible and question the value of the study of single events (Bell, 1993)

The limitations of case study are as follows:

- The researcher does not have the choice to solve the identified problems outright.
- The solution to the problem as well as the cause cannot be generalized. It is limited to only vocational departments where the study took place.

3.3 Description of Population

The term population refers to the complete set of individuals.

The population for the study comprised under listed.

- Respondents outside the institutions were twenty – four (24)
- In all eighty (80) present trainees (students) from various department of the National Vocational Training Institutes of Biriwa and Assin Fosu.
- Eighteen (18) past trainees working in the centres
- Some of the departmental Heads and Instructors were sixteen (16) and
- Two (2) centre managers

In all, one hundred and forty (140) respondents were sampled.

3.4 Sampling Size

Selection of a sample for the study must be done in a way that will not make the researcher cover other irrelevant information to disrupt the results. Random sampling was used for the vocational skills (dressmaking), home economic (catering) Electricals, Carpentry and Joinery departments, past trainees working in the centre and the respondents outside the institutions because random sampling is a method that gives the population equal chance of being selected, it is an unbiased sampling.

Purposeful sampling method was used for the selection of the Heads of department/Instructors and managers of the centres. The purposeful sampling was also used because they were the only population that could answer questions that were expected to respond to as managers. They are the only people who could tell if grants are provided by the government for the entire department or not. Purposeful sampling is “selecting information- rich respondents for the purpose of getting accurate information.

In other words these samples were chosen because they were likely to be knowledgeable and informative about the phenomenon of research investigation. Respondents who form part of the sampling size cover some of the departments in the centre- National Vocational Training Institute of Biriwa and Assin Fosu

They are:

Respondents outside the institutions	24
Vocational Skills (Dressmaking) Department	20
Home Economics (Catering) Department	20
Electricals Department	20

Carpentry and Joinery Department	20
Past trainees of the centre working	18
Departmental Heads/Instructors	16
Centre Managers	<u>2</u>
Total	140

3.5 Data Collection Instrument

The instruments used in the research work together information were: questionnaires, interviews and documents analysis. Four sets of questionnaires were prepared by the researcher. Both open-ended and close-ended questionnaires were used to which the respondents were expected to provide the right answers which are best known to them. One set of questionnaires was for the centre managers. (Refer to Appendix “A” for sample). The second set of questionnaires was for the Heads of departments/Instructors. (Refer to appendix “B” for sample). The third set of questionnaires was for the past trainees of the centre working. (Refer to Appendix “C” for sample). The fourth set of questionnaires was for the three (3) students offering dressmaking at Biriwa and Assin Fosu vocational training institutes students of Biriwa and Assin Fosu N. V. T. I.

In addition to the questionnaires, semi-structured interview guides were designed to be administered for the centre managers, the Heads of department/Instructors, the past and the present trainees in the institutions. The interview guide contained both open and close-ended questions. The close ended questions were to allow the respondents to provide specific answers to some of the questions. The open-ended questions on

the other hand, allowed the respondents the freedom to respond elaborately to questions as shown in Appendices A,B,C and D.

The researcher also adopted the use of non-participatory observation as an instrument for collection of data. The researcher observed the students both at classroom and workshop, during dressmaking practical lessons.

In addition, the researcher also analysed documents on dressmaker's performance at the office of the Head of department in charge of vocational skills.

3.6 Pre-Intervention Data Collection Procedure

Prior to the collection of data, the subjects were interacted with and informed about it. The vocational skills department, other Heads of Department/Instructors and the centre managers were supplied with the questionnaires which they completed after classes on the 21st January, 2016. The items on the questionnaires were fully explained to them before each started to fill it. The questionnaires were collected immediately they finished answering them.

The researcher supplied the students sampled with the questionnaires on the 28th January, 2016. The researcher put the students into one assembly hall and explained the items on the questionnaires into details for them.

The researcher assured them that any information given will be treated with utmost confidentiality. After the assurance, the students completed the items and handed them over to the researcher. They were supervised by the researcher and so they could not communicate among themselves throughout the exercise.

After the administration of the questionnaires, the researcher used one to two weeks to conduct the interviews to clarify certain issues which were pertinent to the study. All of the respondents were given prior information and convenient time was scheduled. A semi structured interview guide was designed to help the researcher in the process. The researcher decided to interview students selected from various departments in one assembly hall. They were interviewed on issues bothering on teachers who taught them B.D.T Home Economics at the basic level, their method of presentation, their attitude towards them, students' perception of the subject, the impact of the vocational educational system in Ghana and their performance as far as sewing is concerned.

The next person to be interviewed was the Head of the Vocational Skills (dressmaking) Department who also doubles as the vocational skills instructor. Her questions were based on the practical aspect of the subject, the perception people have about the subject as far as the study on the impact of the new vocational educational system is concerned. Also an issue of supervision was considered.

The researcher also touched on inter-personal relationship between her and a study on the impact of the new vocational educational system in Ghana. The researcher noted down all the significant points as the interview went on.

The researcher went ahead to interview the centre managers concerning the academic performance of the students. The interview was basically on the enrolment of students into the vocational department. Questions regarding the organization of open days were asked.

Methods of analysis of data

The researcher carefully studied the data, frequency counts were then made and the values converted into percentages. Statistical table was used to record and display the data collected. The population and the sample units were stated classifiably on the table for analysis.

Table 1: The Table Shows the Return Rate of the Various Population

Population/group	Number Administered	Number Returned	Percentage %
Centre managers	2	2	100
Heads of Department and Instructors	16	16	100
Past trainees workers	18	18	100
Students Trainees from various Departments	80	78	97.5
Respondents outside the institutions	24	22	91.7
Total	140	136	97.1

Validity and Reliability

In establishing validity of instruments and results, triangulation methods of data collection was employed, that is the use of questionnaires, interviews and documentary analysis.

3.7 Pre-Intervention Data Analysis

After analyzing the data collected, the exact problems which do not contribute to the study on the impact of the new vocational educational system in Ghana were highlighted in the ensuing discussion.

There is lack of motivation for male students in vocational skills (dress-making). The researcher observed that because the students have not come across a lot of male teachers handling vocational skills in (dress-making) from National Vocational Training Institute (NVTI) centres, they are not motivated to take the subject seriously. Also during demonstration lesson, while the female students are enthusiastic in participating in the lesson, the male students were always lackadaisical in class. There is also inadequate demonstration lesson. The researcher observed that until the students reach the final year, they do not produce complete artifacts. This is making the instructors not to have enough time for demonstration and for that matter less practical work.

In addition, the researcher also realized that the wrong impression that people have about the sewing/vocational skills (dressmaking) is that, the subject is for those who are of low average knowledge and also being female subject is a contributing factor to the study on the impact of vocational educational system in Ghana.

The researcher identified the inability of instructors to invite resource persons who are most especially into vocational educational courses and also of high learned to talk to students as well as embarking on educational trip to renown male fashion designers is also a contributing factor to the study on the impact of the new vocational educational system in Ghana.

CHAPTER FOUR

PRESENTATION OF FINDINGS

4.1 Introduction

This chapter is devoted to the analysis of the data collected from the questionnaires as reflected on the research questions proposed and administered at the National Vocational Training Institute-Biriwa and Assin Fosu.

4.2 Profile of Respondents

In all, one hundred and forty (140) respondents were surveyed, in which majority of them were males representing sixty-six percent (66.4%) against 33.6% being females. Out of this number, twenty-four (24) respondents were from outside the institutions and out of that, fourteen (14) of them were females representing sixty percent (60%) against ten (10) males representing forty percent (40%).

Eighty (80) of the respondents were trainees, out of this number, twenty (20) of them were offering carpentry and Joinery, out of this group, nineteen (19) of them were males representing ninety percent (90%) as against one (1) female representing ten percent (10%). Another group of twenty (20) percent trainees offering Electricals were all males representing hundred percent (100%). Again, another group of twenty (20) among the number, offered Vocational Skills (dressmaking), out of this, fifteen (15) of them were females representing seventy-five percent (75%) against five (5) males representing twenty-five percent (25%). The remaining twenty (20) percent trainees offered Home Economics (catering), out of this number, eighteen (18) of them were females representing eighty percent (80%) as against two (2) males representing twenty percent (20%).

There were eighteen (18) past trainees working in various departments, out of this number, eleven (11) of them were females representing sixty percent (60%) against the remaining seven (7) representing forty percent (40%) being males. Out of the eighteen (18) past trainees, four (4) of them were working in Electricals department representing twenty-two percent (22%), another four (4) of them were also working in Home Economics (Catering) department representing twenty-two percent (22%), against six (6) of them representing thirty-four percent (34%) working in Vocational Skills (dressmaking) department, and the last four (4) of them also representing twenty-two percent (22%) were also working in Carpentry and Joinery department respectively.

On the side of the Heads of Department/Instructors, they were sixteen (16), out of this number, four (4) of them were females representing thirty percent (30%), out of the four (4), two (2) of them were heads of department representing fifteen percent (15%), while the other two (2) of them were female instructors representing fifteen percent (15%). The remaining twelve (12) were males representing seventy percent (70%). Out of this number, two (2) of them were heads of department representing ten percent (10%) while other ten (10) were instructors from various department representing sixty percent (60%) respectively.

On the side of the centre managers, they were only two (2) from both institutions who were males representing hundred percent (100%). Concerning the age groups of the respondents the centre managers were fifty one years and above (51 and above). On the side of the Heads of Department/Instructors, their age groups were thirty to forty-five years (30-45). Past trainees were also twenty-one to twenty-five years (21-25)

and Present trainees' age groups were seventeen to twenty-one years (17-21). The age groups of the respondents outside the institution were also twenty-five to forty years (25 – 40).

In all, there were one hundred and forty (140) respondents of which eighty (80) of them were present trainees from various departments, eighteen (18) of them were also past trainees, sixteen (16) of them were also Heads of Department/Instructors as well and two (2) of them being the centre managers of the two institutions respectively. Finally twenty-four (24) of the respondents were outside the two institutions.

4.2 The Findings and Results are Presented

1. To examine extent to which Vocational Education has been geared towards the development of the nation.
2. To diagnose the vocational and learning problems facing national vocational training institute.
3. To examine government alone being responsible of financing, maintaining and running vocational education.
4. To find out if there are adequate classrooms, workshops facilities and logistics provided by the government are enough and appropriate for vocational students, to find out how students are given financial assistance when they enter into entrepreneurship, and lastly.
5. To examine the sectors of the economy that have absorbed vocational graduates.

The results really cut across a wide spectrum of background. Results were presented corresponding to the research questions preceded by the presentation of respondents. From the analysis of the research, results have been presented in Tables and Figures.

4.3.1 Examine the extent to which vocational education has been geared towards the national development of the nation.

Table 2

Respondents	high	Percentage %	low	Percentage %	Total respondents
Centre managers	1	50	1	50	2
Heads of department/ Instructors	10	62.5	6	37.5	16
Past trainees	11	61.1	7	38.9	18
Present trainees	47	58.8	23	41.2	80
Respondents outside the institutions	16	66.7	8	33.3	24

Extent to which vocational education is geared towards national development.

In Table 1, it is observed that, one of the Centre managers representing fifty percent (50%) say that, the extent to which vocational education has been geared towards the national development of the nation is high whereas one also representing fifty percent (50%) say is low. Ten (10) out of the sixteen (16) Heads of department/ Instructors say the extent to which vocational education has been geared towards national development of the nation is high whiles six (6) representing thirty seven point five percent (37.5%) say it is low. From the view point of the past trainees, eleven (11) out of eighteen (18) representing sixty one point one percent (61.1%) say that, the extent to which vocational education has been geared towards the national development of the nation is high, on the other hand, seven of them representing thirty eight point

nine percent (38.9%) say it is low. Forty-seven (47) of the present trainees representing fifty eight point eight percent (58.8%) say the extent to which vocational education has been geared towards national development of the nation is high while twenty-three (23) of them representing forty-one point two percent (41.2%) also say is low. Finally, sixteen out of twenty-four respondents from the public representing sixty-six point seven percent (66.7%) say the extent to which vocational education has been geared towards the national development of the nation is high whereas the remaining eight (8) representing thirty three point three percent (33.3%) say is low. From the responses of the participants, the majority of them think that extent to which vocational education has been geared towards the national development of the nation is high.

The significance of the responses

From the researcher's analysis made on the responses given during the interview on the extent to which vocational education has been geared towards national development were that, high level class fashion designers and other manufacturers export their finished goods to foreign countries in the name Ghana while other designers/manufacturers pay taxes as a benefit to the development of the nation. There were other responses indicating that, because government cannot absorb all the trained vocational personnel from the institutions, some of them also establish on their own where by employing other personnel to work with as well as giving training to those untrained which eventually serves as a source of development to the nation. Some of the responses were that, once the trained personnel after school were able to establish on their own from the course study like (Electricals, Carpentry and Joinery, Home Economics (Catering), Vocational Skills (Dressmaking), etc. the personnels,

might have one way or the other served the members of the community in the country which in the end serve as a beneficial to the development of the nation.

4.3.2 Students are given financial assistance when they enter into entrepreneurship.

Table 3: Sources of financial support to vocational education students.

Sources of finance	Number of public people	Percentages %
Relatives	12	50%
Individuals	9	37.5%
N G O's	2	8.4
Bank support	1	4.1
Total	24	100

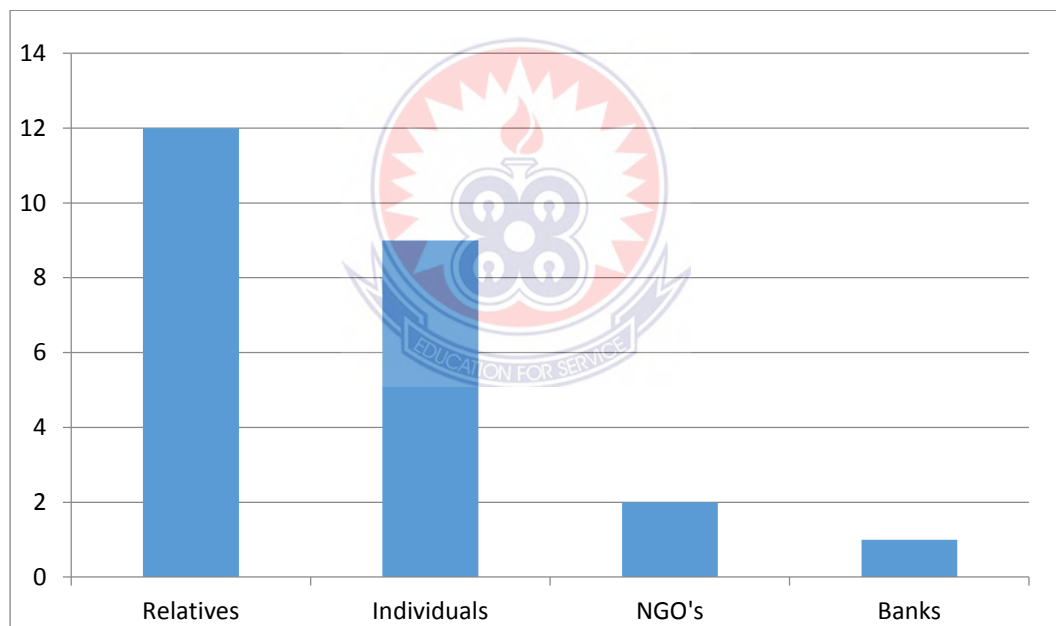


Figure 1: Sources of financial support to Vocational education students

4.3.2 Students are given financial assistance when they enter into entrepreneurship.

In Figure 1, twenty – four (24) respondents were interviewed from the public on how the students are given financial assistance when they enter into entrepreneurship.

Figure 1 gives the following interpretations. Twelve (12) people out of twenty-four (24) representing fifty percent (50%) stated that, relatives support the students to enter into entrepreneurship. Nine (9) of them representing thirty-seven point five percent (37.5%) also said, they entered entrepreneurship through individual effort. Other Two (2) of them representing eight point four percent (8.4%) stated that, they entered entrepreneurship through the help of Non-Governmental Organisations (N. G. O's). The last person representing four point one percent (4.1%) also mentioned the bank supported him to venture into entrepreneurship.

Significance of the responses on financial assistance to students when they enter into entrepreneurship.

From the observation of the responses given by the respondents in Table 2, it is shown that, students are financially assisted by their relatives instead of government supporting them to explore for more innovative ideas as they enter into entrepreneurship.

During the interview one respondent said, the reason why majority of vocational students are assisted by their relatives is that the government cannot afford to absorb them. Another respondent's view was that many of vocational students find jobs outside their field of training to gather some money before they settle to establish on their own or by partnership. Another respondent's submission was that, the Non-Governmental Organisations are not easy to access them to offer you what is needed to establish on your own. They do not always want designers or workers who want assistance from them individually but want them to come together as group in order to be assisted.

The researcher questioned one of the respondents why per their responses there is more gap between the number of people given financial assistance by their relatives than the Non-Governmental Organisation (N G O) and bank support? The respondents said, if you do not have collateral and also do not save with them there is no way you would be granted a loan.

4.3.3 Adequate classrooms, workshops, facilities and the logistics provided by the government are enough and appropriate for students.

Table 4:

Respondents	Good	Satisfactory	Not Satisfactory	Bad	Total
Center managers		2 - (100%)			2
Heads of department/Instructors		9 - (56.3%)	7 - (43.7%)		16
Past trainees		10 - (56.5%)	6 - (32.6%)	2 - (10.9%)	18
Present trainees		55 - (65%)	15 - (20%)	10 - (15%)	80

From Table four (4), there is indication that all the two (2) centre managers representing hundred percent (100%) were satisfied with the facilities and logistics provided by the government.

Nine (9) Heads of Department/Instructors out of sixteen (16) representing fifty-six point three percent (56.3%) were satisfied with the facilities and logistics provided by the government. Seven (7) of them also representing forty-three point seven percent (43.7%) were not satisfied with the facilities and logistics provided by the government. Ten (10) past trainees out of eighteen (18) representing fifty-six point five percent were satisfied with the facilities and logistics provided by the government. Six (6) of them, representing thirty two point six percent (32.6%) were not satisfied with the facilities and logistics provided by the government. The last two

(2) respondents representing ten point nine percent (10.9%) said the facilities were bad.

Out of the eighty (80) present trainees, fifty-five (55) of them representing sixty-five percent (65%) were satisfied with the facilities and logistics provided by the government. Fifteen (15) of them, representing twenty percent (20%) were not satisfied with the facilities and logistics provided by the government while ten (10) of them, representing fifteen percent (15%) said the facilities were bad.

4.3.4 Examine sector of the economy that has absorbed vocational graduates.

Table 5: Sectors of the economy that absorbed vocational graduates

Sectors	Number trainees	Past Degrees	Percentages %
Self-employment	9	180°	50%
Security service	5	100.08°	27.8%
Industry	3	60.12°	16.7%
Partnership	1	19.8°	5.5%
Total	18	360°	100%

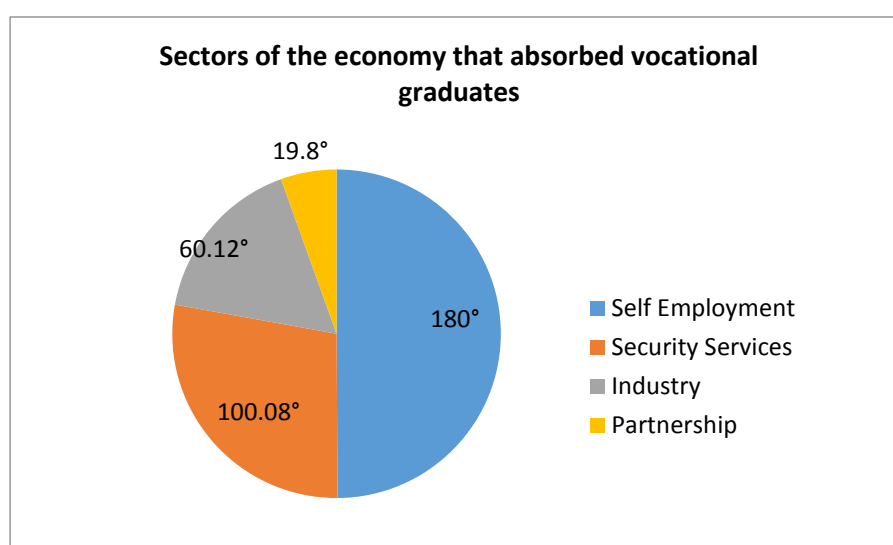


Figure 2: Sectors of the economy that absorbed vocation graduates

Figure 2 is a Pie chart illustrated in degrees of sectors of the economy that absorbed vocational graduates. Nine (9) out of eighteen (18) respondents representing fifty percent (50%) were interviewed on the sector of the economy that has absorbed vocational graduates and have come out to say that they engage in self-employment. Five respondents representing twenty seven point eight percent (27.8%) stated that they were employed into the security services. On the other hand three (3) of the respondents representing sixteen point seven percent (16.7%) stated that they were absorbed into the industrial sector of the economy. One of the respondents representing five point five percent (5.5%) also said he entered into Ghanaian economy through partnership.

Significance of the responses on the sectors of the economy that absorb vocational graduates.

From the responses on the sectors of the economy that absorb vocational graduates, it is clear that there is limited employment opportunities in both public and private sectors of the economy for vocational graduates. Hence the decision of half of the respondents forming fifty (50%) percent to venture into their own businesses. This is further supported by the number of respondents employed by the security services and industries respectively.

4.3.5 Poor funding of vocational education on the part of government has contributed to its decline.

Table 6.

Respondents	Yes	Percentage %	No %
Centre manager	2	100%	-
Heads of department/Instructors	16	100%	-
Past trainees	18	100%	-
Present trainees	80	100%	-
Respondents outside the institutions	24	100%	-
Total	140	100%	-

From Table six (6), respondents have shown that there is really poor funding of vocational education on the part of the government.

Two (2) of the respondents who are centre managers representing one hundred percent (100%) stated that, poor funding of vocational education on the part of government has contributed to its decline.

Sixteen (16) respondents selected from the various Heads of Department/Instructors representing one hundred percent (100%) also said, poor funding of vocational education on the part of government has contributed to its decline. Eighteen (18) respondents past trainees from various departments representing one hundred percent (100%) stated that, poor funding of vocational education on the part of government has contributed to its decline.

Eighty (80) respondents, present trainees from various departments representing one hundred percent (100%) also said, poor funding of vocational education on the part of government has contributed to its decline. Twenty (24) respondents from public representing one hundred percent (100%) also attested to the fact that, poor funding of vocational education on the part of government has contributed to its decline.

4.3.6 Examine government alone being responsible of financing, maintaining and running vocational education.

Table 7.

Respondents	Partially responsible	Responsible	Not responsible	Fully responsible	Total
Centre manager		2- 100%			2
Heads of department/Instructors	4- (25%)			12- (75%)	16
Past trainees	7- (38.9%)			11- (61.1%)	18
Present trainees	10- (12.6%)	22- (27.8%)		48- (59.6%)	80
Respondents outside the institutions	2- (8.34%)	14- (58.3%)		8- (33.36%)	24

In Table seven (7), there are two (2) centre managers representing hundred percent (100%) who stated that, government is responsible of financing, maintaining and running vocational education.

Sixteen (16) Heads of Department/Instructors out of this number, twelve (12) of them, representing seventy-five percent (75%) said government is fully responsible of financing, maintaining and running vocational education. Four (4) of them, representing twenty-five percent (25%) stated that, government is partially responsible of financing, maintaining and running vocational education.

Eighteen (18) past trainees out of this number, eleven (11) of them, representing sixty-one point one percent (61.1%) said government is fully responsible of financing, maintaining and running vocational education. Seven (7) among them representing thirty-eight percent (38.9%) said, government is partially responsible of financing, maintaining and running vocational education.

Eighty (80) present trainees out of this number, (48) representing fifty-nine point nine percent (59.6%) stated that, government is fully responsible of financing, maintaining and running vocational education. Twenty-two (22) of them representing twenty-seven point eight percent (27.8%) also said government is responsible of financing, maintaining and running vocational education. The remaining ten (10) representing twelve point six percent (12.6%) also stated that, government is responsible of financing, maintaining and running vocational education.

Twenty-four (24) respondents outside the institutions, of this number, fourteen (14) of them representing fifty-eight point three percent (58.3%) stated that, government is responsible of financing, maintaining and running vocational education. Ten (10) of them representing thirty-three point three six percent (33.36%) said, government is fully responsible of financing, maintaining and running vocational education. The last two (2) of them representing eight point three four percent (8.34%) also stated that, government is partially responsible of financing, maintaining and running vocational education.

4.3.7 Industrial attachment programme and its benefit to students

Table 8.

Respondents	Yes	No	Total
Centre managers	2- (100%)	0	2
Head of department/Instructors	16- (100%)	0	16
Past trainees	18- (100%)	0	18
Present trainees	80- (100%)	0	80

In Table eight (8), all the respondents interviewed agreed that industrial attachment is good and beneficial to the trainees. This is illustrated in the write up below.

There were two (2) centre managers who responded positively that industrial attachment programme is beneficial to students representing one hundred percent (100%). Sixteen (16) Heads of Department/Instructors also responded positively that, industrial attachment programme is beneficial to students representing one hundred percent (100%). Eighteen (18) past trainees responded positively that, graduates benefit from industrial attachment representing one hundred percent (100%). Eighty (80) present trainees also responded positively that, industrial attachment programme is beneficial to graduate students representing one hundred percent (100%).

4.4 Industrial Attachment

In an exclusive interview with Miss. Alberta Nti Wireko, head of vocational skills (dressmaking) Department of National Vocational Training Institute-Assin Fosu the about trainees and industrial attachment, she stated that the aim of the Vocational Education is to train the students for self-employment and industry.

She said the duration for the Grades II and I is (4) years. The first year deals with intensive classroom and workshop assessment. After the year's intensive classroom and workshop assessment, trainees are exposed to happenings in the industries in terms of practical training or the job training referred to as industrial attachment. Students come back after spending one year at the industry to prepare for Grade II examination during their third year.

The following are the benefits that are derived from industrial attachment as she mentioned.

1. To observe the safety precautions or regulations that exists in the industrial workshop.

2. It helps students to augment already acquired skills for self-employment.
3. To have firsthand information about components and materials used in industry so as to assist him/her to understand how they function practically.
4. To assist them to be able to interact with work teams of different caliber of persons to foster socialisations and human relationship.
5. To understand the importance of technology and its effects on the environment, how technology improves life styles, the adverse effects it brings to man and ways to remedy or solve them.
6. To identify new technologies which have come into the industrial world and find ways of tapping these technologies to improve on their designs.
7. Students have the chance to put their expertise to the door stairs of the undeveloped dressmakers or young designers to exchange ideas on how best to boost of productivity. This is more exhibited in the areas where students have been knowledgeably trained.
8. Industrial attachment enable students to acquaint themselves with the industries in the areas of organization in major sectors, units or department and how these are co-ordinated to bring about effectiveness in supervision, quality control in production safety on workers and other relevant issues, students become well developed in practicalities to some level.
9. It enables students and teachers to improve the teaching and learning situation in terms of content and methods.
10. To share the experience with people already in the engineering or craft trade.

It is assumed that, this pattern of attachment in vocational courses, is the main way of exposing students to industrial conditions and would inevitably result them in

acquisition of relevant knowledge and experience (World Bank report, 1980). It appeared that the academic staffs of National Vocational Training Institute- Biriwa observed that, industrial attachment is inbuilt mechanisms to enable trainees apply theory to practice and to expose them to the world of work to avoid mis-match as in the case of students on sandwich courses in England (smithers, 1976). On the other hand, employers probably saw a period of industrial attachment as an induction of students into industry rather than an integral component of course (UNDP, 1984).

This study is to help improve the ability of National Vocational Training Institute's (N. V. T. I) students of Assin Fosu and Biriwa on the need to attend industrial attachment in the course of training at the industry and the public services to enable them contribute to the national development in general.

Table 9. Full time courses run at Assin Fosu and Biriwa Institutes.

1 st year at N V T I –Assin Fosu and Biriwa
2 nd year industrial attachment
2 1/2 years Grade II
3 RD year into the industry
4 th year Grade I

Table 9 above shows pattern of full time course at National Vocational Training Institute (N V T I) at Assin Fosu and Biriwa.

4.5 Agencies That Deal With Vocational Training

An interview carried out with the centre manager Mr. Charles Kofi Nti and Ibrahim Moro Salifu an instructor of National Vocational Training Institute (N V T I) at Assin Fosu revealed that there are some very important agencies and stakeholders in the provision and supervision of Vocational Training in the country.

- Technical Examinations Units (T E U)
- The National Co-Ordinating Committee on Technical/Vocational and Training (N A C V E T).
- The Technical/Vocational Education Division of the G E S (T V E D)
- National Vocational Training Institute (N V T I)

The Technical Examination Units was set up by the Ghana Education Service to handle the examination and certification of vocational students in Ghana.

It worked in close collaboration with the city and Guilds institutes of London but has taken over some of the examinations previously conducted by the city and Guilds. City and Guilds (Ghana) is however responsible for some Vocational Examinations which are of specialized nature and are therefore not being handled by the Technical Examination Unit.

The unit has the responsibility to set questions and register both school and private candidates for their examinations. Examinations are also conducted for non-tertiary courses in the polytechnics. These examinations are conducted at the various institutions while centres are created for private candidates.

Examinations by the unit are from May to November according to the unit's time table on a particular course. Certificates are awarded by Technical unit.

Examinations conducted by the unit include:

Intermediate craft certificates

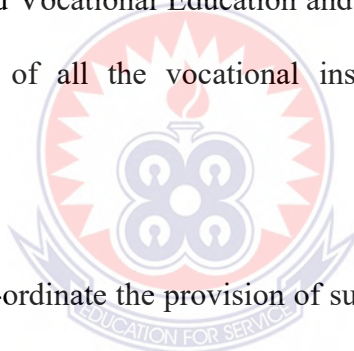
Advance craft certificates

Technician part I, II, III certificates

Technology certificates are also awarded after interviews. The unit expects students to have work experience through industrial attachment, after their Technician I and II examinations before registering them for the Technician III Examination.

4.6 National Co-Ordination Committee on Vocational Education and Training (NACVET)

This is a body established by the ministry of employment and social welfare to coordinate and supervise Vocational Education and Training programmes and courses outside the vocational programmes administered by the Ghana Education Service of the ministry of education. All vocational institutions are expected to register with the (National Institute of Technical and Vocational Education and Training (N A C V E T) and the unit has a compilation of all the vocational institutions registered with it and the programme they pursue.



It enabled the unit to coordinate the provision of supervising their activities and also after the necessary support to vocational institutions. National Institute of Technical and Vocational Education and Training (N A C V E T) works in close collaboration with the ministry of education's Ghana Education Service vocational education division. However both the Ghana Education Service and the National Institute of Technical and Vocational Education and Training (N A C V E T) are under the age of the National Institute of Technical and Vocational Education and Training (N I T V E T).

4.7 Ghana Education Service Technical/Vocational Education Division (T V E D)

This unit of the Ghana Education Service is responsible for the managing and administering of the vocational programme of the Ghana education Service at both the Basic and Second Cycle Institutions, specifically the units is the policy making planning and supervisory body for vocational programmes of the Ghana Education Service at the Junior High Secondary (J. H. S) level, Senior High Secondary Technical (S. H. S T) and the Technical Institutions.

4.8 National Vocational Training Institute (N V T I)

The National Vocational Training Institute was set up by the ministry of employment and social welfare now ministry of man power and employment.

Its purpose has been captured in chapter one.

Certifications awarded by National Vocational Training Institutes (N V T I) includes

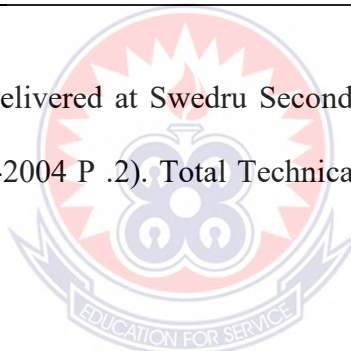
- Grade Two both proficiency and non-proficiency
- Grade one both proficiency and non-proficiency
- National craftsmanship certificate (N C C)

Currently apart from administrative offices and test centres, it is having forty (40) training centres nationwide.

Table 10: The table below shows the distribution of the training centres in Ghana

Region	Number of centre
Greater Accra	4
Western	3
Eastern	3
Central	5
Volta	6
Upper East	3
Upper West	6
Ashanti	4
Brong Ahafo	3
Northern	3
Total	40

According to a speech delivered at Swedru Secondary School by Yankah (2004) in the Ghanaian Times (19-2004 P .2). Total Technical Institutes nationwide is twenty-three (23).



4.9 Students Performance at the Work Places

According to the centre manager Mr. Charles Kofi Nti, the caliber of students admitted for the various programmes perform well. He said, generally students have been performing very well during their final examination. Also they have been conducting follow up exercises on their past trainees to monitor their performance and it was very good.

Testing the Research Questions

This part of chapter four brings to bare the analysed proposals in the result and findings and seeks to come out with really what the resulting issues were at the

National Vocational Training Institutes at Assin Fosu and Biriwa. The two (2) Centre Managers, Heads of Department/Instructors, present and past trainees and some respondents outside the institutions testified that there have been some developments in vocational/technical education. The results of the statistics on the table also justified this, since there were one hundred percent (100%) responses from the centre managers that, there has been development in technical/vocational education over the years. Even though majority of the respondents in table (3) including the centre managers, heads of department/instructors etc. justified that, since there was above fifty percent (50%) responses that, they were satisfied with the classroom, work facilities and logistics provided by the government, some of the respondents were not satisfied that the classrooms, workshops facilities and the logistics provided by the government is adequate. They also expressed fears that, with the increase of the student intake, if quick measures are not taken to expand or build more workshops and classrooms, over population at the workshops will create ineffective practical work.

As it is clear in Figure 1, the sectors of the economy that absorbed the vocational graduates; interviews conducted indicated that greater number of the trainees above fifty percent (50%) which culminated into one hundred and eighty (180°) degrees on the pie chart became self-employed and established their own shops such as sewing centres, catering and hospitality centres, carpentry shops, welding shops. Again another sizable number of graduates find their way into the services and the rest also find themselves into the multi company like Group five company London limited, Bagoso mines, Tema oil Refinery, Anglo Gold and the rest. Further investigations

into the type of condition of employment of the students, showed that about seventy-eight percent (78%) were permanently employed and receive higher income.

This shows from the responses in Table one (1) in which over fifty percent (50%) of the respondents from the Centre Managers, Head of Department/Instructors, past and present trainees and respondents outside the institutions agreed that vocational education has been geared towards the national development.

“Yankah (2004) national development means a condition where people’s standard of living have been improved, where various aspects of life have undergone positive change or improvement leading to general positive impact on the lives of the people” Ghanaian Times (2004-03-19 p.11).

Pie chart one (1) showed sectors of the economy that the trainees were absorbed to support the national development. But those who entered into entrepreneurship had it very difficult to access loan from the financial institutions as indicated in the bar chart. Through interviews, it was realised that industrial attachment was pursued vigorously. Employees probably saw a period of industrial attachment as a component of a course offered in institutions (UNDP, 1984). Students even showed greater interest in the attachment programme more than the classroom activities since most of them earned money from it to boost their interest and for that matter come to realization that they have chosen a better course to make a living out of.

It was realised that, tutors were visiting the various students at the work places. Employers on the other hand did not write comprehensive report. Therefore, there

were no proper host assessment procedures in the various attachment places which in reality did not help the students so much.

Harden (1978) identifies reasons for assessment of students as part of the evaluation process namely:

- To gather information about a wide range of students' characteristics as a feedback for decision.
- To provide information for which teachers cannot obtain ordinarily.
- To inform other teachers to make decision about the students.



CHAPTER FIVE

DISCUSSION OF FINDINGS

5.1 Introduction

This chapter of the research work discusses significant findings identified in the previous chapter. The discussion highlighted the findings of the research work and the inferences made from them in view of findings from related previous studies.

5.2 Characteristics of Respondents

The research work was carried out on seven major research questions namely to examine extent to which vocational education has been geared towards the development of the nation, to examine government alone being responsible of financing, maintaining and running vocational education, to find out if there are adequate classrooms, workshop facilities and the logistics provided by the government are enough and appropriate for vocational students, to find out how students are given financial assistance when they enter into entrepreneurship and also to examine the sectors of the economy that has been absorbing vocational graduates. To examine poor funding of vocational education on the part of government has contributed to its decline, to examine industrial attachment programme and its benefit to students.

One hundred and forty (140) respondents were interviewed in the study, majority of them were sixty-two point one percent (62.1%) males while less than half of them representing thirty-seven point nine percent (37.9%) were females.

Twenty – four (24) Respondents outside the institutions and out of this, fourteen (14) were females representing sixty percent (60%) as against ten (10) males representing forty percent (40%).

Eighty (80) respondents were present trainees and out of that, twenty (20) of them offered Carpentry and Joinery out of this, nineteen (19) were males representing ninety percent (90%) while one (1) female representing ten percent (10%). Another twenty (20) present trainees offering Electricals who were males only representing one hundred percent (100%). The other twenty (20) present trainees offering Vocational Skills (dressmaking) out of this, fifteen percent (15) were females representing seventy-five percent (75%) against five (5) males representing twenty-five percent (25%), the last group of twenty (20) present trainees offering Home Economics (catering) eighteen (18) were females representing eighty percent (80%) as against two (2) males representing twenty percent (20%). Eighteen past trainees out of this, eleven (11) were females representing sixty percent (60%) against seven (7) representing forty percent (40%) being males. Sixteen (16) Heads of Department/Instructors among them, four (4) were females representing thirty percent (30%) against twelve (12) being males representing seventy percent (70%). Two (2) Centre Managers who were males only representing (100%). The age groups of the Centre Managers were fifty-one to fifty-five years (51 – 55).

On the side of the Heads of Department/Instructors, their age groups were thirty to forty-five (30 – 45), the age groups of the past trainees are also twenty-one to twenty-five years (21 – 25) the present trainees age groups were seventeen to twenty-two

years (17 – 22) and the respondents outside the institutions age groups were twenty-five to thirty-five (25 – 35).

5.3 Examine the Extent to which Vocational Education has been Geared towards the National Development of the Nation.

From Table one (1), it can be seen that all the respondents agree to the fact that vocational/technical education is geared towards national development of the nation.

Two (2) respondents from the Centre Managers shown one hundred percent (100%), sixteen (16) respondents selected from the various Heads of Department/Instructors agreed with the fact that vocational education has been geared towards national development of the nation representing one hundred percent (100%), eighteen (18) past trainees selected from the various departments agreed that vocational has been geared towards the national development of the nation representing one hundred percent (100%), eighty (80) present trainees selected from various departments responded affirmatively that vocational education has been geared towards the national development of the nation representing one hundred percent (100%), twenty – four (24) respondents outside the institution agreed that vocational education has been geared towards national development of the nation representing one hundred percent (100%). All the respondents agreed one hundred percent (100%) that vocational education has been geared towards the national development.

5.4 Students are given Financial Assistance when they enter into

Entrepreneurship.

From table two (2), it could be seen that twenty – four (24) respondents were interviewed from outside the institutions on how the students are given financial assistance when they enter into entrepreneurship.

The chart gives the following interpretations. Twelve (12) respondents representing fifty percent (50%) stated that relatives support the students to enter into entrepreneurship. Nine (9) respondents were interviewed representing thirty-seven point five percent (37.5%) said they enter into entrepreneurship through individual effort. Other two (2) respondents also representing eight point four percent (8.4%) said they enter into entrepreneurship through N. G. O's and one (1) person representing four point one percent (4.1%) mentioned bank supported him into entrepreneurship.

5.5 There are Adequate Classroom, Workshops, Facilities and Logistics Provided by the Government are Enough and Appropriate for Students.

From Table three (3), two (2) Centre Managers representing one hundred percent (100%) said they were satisfied with the facilities and logistics provided by the government.

Sixteen (16) Heads of Department/Instructors out of this, nine (9) representing fifty-six point three percent (56.3%) were satisfied with the facilities and logistics provided by the government against seven (7) respondents representing forty-three point seven percent (43.7%) said they were not satisfied with the facilities and logistics provided by the government.

Eighteen (18) past trainees out of this, ten (10) of them were satisfied with facilities and logistics provided by the government representing fifty-six point five percent (56.5%) as against six (6) past trainees representing thirty-two point six percent (32.6%) said they were not satisfied with the facilities and logistics provided by the government. The last two (2) past trainees representing ten point nine percent (10.9%) said those facilities were bad.

Eighty (80) present trainees out of this, fifty-five (55) respondents representing sixty five percent (65%) were satisfied with the facilities and logistics provided by the government. Fifteen (15) present trainees representing twenty percent (20%) were not satisfied with the facilities and logistics provided by the government. Ten (10) present trainees representing fifteen (15%) said those facilities were bad.

5.6 Examine the Sectors of Economy that has Absorbed Vocational Graduates.

From Table four (4), a pie chart is illustrated in degrees on sectors of the economy that absorb vocational graduates.

Twenty-four (24) respondents outside the institutions were interviewed out of this, nine (9) respondents representing fifty percent (50%) stated that, graduates go into self-employment, five (5) respondents representing twenty-seven point eight percent (27.8%) stated that, graduates find their way in the service (military, police, fire service, etc). Three (3) respondents representing sixteen point seven percent (16.7%) said that, the graduates are absorbed into the industry. One (1) respondent representing five point five percent (5.5%) also said, the graduates work in partnership.

5.7 Poor Funding of Vocational Education on the Part of Government has Contributed to its Decline.

From table five (5) respondents indicated that, poor funding of vocational education on the part of government has contributed to its decline.

Two (2) respondents from the Centre Managers representing one hundred percent (100%) stated that, poor funding of vocational education on the part of government has contributed to its decline. Sixteen (16) respondents selected from the various Heads of Department/Instructors representing one hundred percent (100%) also said, poor funding of vocational education on the part of government has contributed to its decline. Eighteen (18) respondents past trainees selected from various departments representing one hundred percent (100%) stated that, poor funding of vocational education on the part of government has contributed to its decline. Eighty (80) respondents being present trainees selected from various departments representing one hundred (100%) said, poor funding of vocational education on the part of government has contributed to its decline. Twenty-four (24) respondents from outside the institutions representing one hundred (100%) also attested to the fact that, poor funding of vocational education on the part of government has contributed to its decline.

5.8 Examine Government alone being Responsible of Financing, Maintaining and Running Vocational Education.

In table six (6), it indicates that two (2) Centre Managers representing one hundred percent (100%) stated that, government is responsible of financing, maintaining and running vocational education. Sixteen (16) Heads of Department/Instructors out of this, twelve (12) representing seventy-five percent (75%) said, government is fully

responsible of financing, maintaining and running vocational education. Four (4) of them representing twenty-five percent (25%) stated that, government is partially responsible of financing, maintaining and running vocational education. Eighteen (18) past trainees and out of this, eleven (11) of them representing sixty-one (61%) said, government is fully responsible of financing, maintaining and running vocational education. Seven of them representing thirty-eight point nine percent (38.9%) said, government is partially responsible of financing, maintaining and running vocational education. Eighty (80) present trainees out of this, forty-eight (48) representing fifty-nine point six percent (59.6%) stated that, is fully responsible of financing, maintaining and running vocational education. Twenty-two (22) of them representing twenty-seven point eight (27.8%) said, government is responsible of financing, maintaining and running vocational education. Ten (10) of them representing twelve point six percent (12.6%) also stated that, government is responsible of financing, maintaining and running vocational education.

Twenty-four (24) respondents outside the institutions; out of this number, fourteen (14) representing fifty-eight point three percent (58.3%) said government is responsible of financing, maintaining and running vocational education. Ten (10) of them representing thirty-three point three six percent (33.36%) said, government is responsible of financing, maintaining and running vocational education. The last two (2) of them representing eight point thirty-four percent (8.34%) also stated that, government is partially responsible for financing, maintaining and running vocational education.

5.9 Industrial Attachment Programme and its Benefit to Students

In Table seven (7), the respondents interviewed shown positively how students benefit from the industrial attachment.

Two (2) of the Centre Managers responded positively that, industrial attachment programme is beneficial to students representing one hundred percent (100%). Sixteen (16) Heads of Department/Instructors also responded positively that, industrial attachment programme is beneficial to students representing one hundred percent (100%). Eighteen (18) past trainees representing one hundred percent (100%) responded positively that, graduates benefit from industrial attachment. Eighty (80) present trainees interviewed representing one hundred percent (100%) also responded positively that, industrial attachment programme is more beneficial to graduates students.

From the view point of the interview and analysis made by the researcher, it is emphatically clear that industrial attachment programme is truly enhancing and shaping students' performance on the field especially in practical work.

Findings of the Data Analysed

This stage is to highlight some of the findings from the data analysed.

1. Attitude to learning and teaching of Vocational subjects in National Vocational Training Institute (NVTI) were appreciable.
2. Students performance indicated that they could cope with the programmes
3. Graduate of vocational schools could function properly at the workplaces.
4. Even though majority of the respondents said there was adequate supply of practical teaching materials, some also said they are not enough.

Reflecting on these proposals the following findings were gathered.

- a. It was established that as government tries to provide learning materials, some students also provided their own materials for practical work.
- b. It was also a fact that there were enough machines at all departments of National Vocational Training Institutes at Biriwa and Assin-Fosu.
- c. Also there were enough hand tools for students' practical works however most of the tools need to be properly reconditioned.
- d. Research established the fact that, instructors always prepared and made use of the instructional materials for teaching and learning effectively.
- e. Availability of classrooms, workshops, facilities and logistics, the research findings revealed that there were adequate to accommodate each student.
- f. It also came to light that, the industrial attachment was vigorously pursued and was helping the students a lot in terms of practical work. However proper monitoring of students performance at the work place were not effectively documented by the host organisations.
- g. About the employment, the researcher realised that, about less than fifty (50%) of all the students from National Vocational Training Institute at Biriwa and Assin Fosu were gainfully employed by the industrial sector.
- h. It was a fact that, students were very interested in the various programmes at the institutes. This fact was exhibited through the positive attitude put up by some students during interview on their performance at the work places concerning attachment programme. The researcher became much concerned of the attachment programme because, from the observation of their expression it was realised that, the students have passion for the attachment programme due to the experience and benefit they gain from it.

CHAPTER SIX

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This last chapter summarises the research findings, draws conclusions and makes recommendations based on the findings.

6.2 Summary

The study was conducted in the Mfantseman West District and Assin North Central District of the Central Region to seek the views of the Centre Managers, Heads of Department/Instructors, past and present trainees and respondents outside the institutions.

6.3 Major Findings

It was realised also that, majority of their students were gainfully employed in different sectors of the economy in the country. It came to light that, teaching and learning of the Vocational courses in National Vocational Training Institute were appreciated. The interview of the respondents showed that, some of the past and present trainees enter into entrepreneurship through Bank support, N. G. O's, relatives and sometimes individual effort.

It was observed by the researcher that, some of the respondents including Heads of the Departments/Instructors were satisfied with the facilities and logistics provided by the government while some of the past and present trainees were not in support of the fact that the facilities and logistics provided by the government were satisfactory.

The researcher carried out that, graduates of national vocational training institute find their way through services like (military, police, and fire service) there were three (3) respondents who said they were absorbed into industries. Five (5) of them also said, many of the graduates divert from their various courses of study because, there is no employment in their field of study. On the attachment issue, there were positive responses from the two (2) Centre managers that, industrial attachment programme is beneficial to their students a lot. The students also corroborated the statement of the centre managers.

6.4 Conclusions

Vocational education has always been given placement in the country's educational reforms. This is as a result of its benefits to national development and economic growth. Engineers, technicians and vocational skills (dressmakers), etc. have been produced and they are the ones maintaining both public and private industries, as well as being in supervisory positions in various establishments like Tema Oil Refinery, Volta River Authority, Anglo Gold limited and others.

From the responses on the extent to which vocational education has been geared towards the national development, it is obvious that, vocational education has led to the benefit of national development. As a result of this impact, it is not out of place for government to do more to raise the image by putting in place structures that will support and promote the institutes to the higher level of expectation.

Findings from the study showed that, students most at times providing their own materials for practical work which goes to underscore the fact that vocational programmes require large sum's of money to sustain it running. Facilities like tools

and equipment, machineries, text books, classrooms; workshops, laboratories, etc. need to be considered as far as vocational education students are concern.

Again, to enter into entrepreneurship, the financial institutions and stakeholders should support the graduates in this direction. The policy planners, administrators and implementers of vocational education should handle the programmes in such a manner that would help achieve its objective.

In addition, the remuneration for teachers should be of the level that would motivate them to perform effectively. Finally, vocational education programmes should be seen as the source of vocational manpower needs of Ghana and its achievement can be linked to how efficient and effective the institutes are organized for the development of the nation.



6.5 Recommendations

It is obvious that, research findings made in the above discussion deduced that, vocational education planners seemed to fulfill their objectives for a success. However, there are a lot of lapses in the institutes which needs to be resolved to offer further improvement to enable the management of the National Vocational Training Institute do their possible best to shape the students' lives to the best of their knowledge.

Therefore, the following recommendations are made to cater for the lapses the researcher noticed and if quick steps are not taken, it could go a long way to jeopardize the efficiency of the vocational education.

Cape Coast Metropolitan Assembly (C C M A), Non- Governmental Organisations (N G O's) old Boys and Girls and other benevolent societies should supplement the needs of the institutes with enough classrooms, workshops, facilities , logistics and supply of text books, as well as financial support for the institutes.

1. Both public and private company and Non-Governmental Organisations should support government to run and maintain vocational schools in terms of teaching and learning materials.
2. Vocational graduates should be supported by the state to establish themselves in partnership groups and monitor them to enhance national development.
3. Host institutions of trainees on industrial attachment should be encouraged to keep up to date records on students to enhance their evaluation process.
4. Government should devise schemes or scholarships that will support parents in paying the fees and also increase budgetary allocation to vocational education.
5. The government should recognize the importance of the course in the school curriculum, there should be innovation to include examinable subject such as Science, English, Social Studies and mathematics, so that products from such institutions could be given admission to Polytechnics, Universities, etc.
6. Number of in-service training per year should be increased and constantly update the knowledge and methodological skills of the instructors.
7. Other industries like saw mills and metal works in the metropolis should supply them with their off cut pieces of wood and metal scraps for students' practical work.
8. Government needs to do more by putting in place special fund that will cater for vocational education. Industries should be made to plough back some of the profits to develop vocational technical education.

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APPENDIX A

QUESTIONNAIRE FOR CENTRE MANAGERS

Of late, there have been a lot of criticisms over the relevance of Vocational Education in socio-economic development in Ghana. The researcher wishes to seek information to help develop a critical study on the impact of the new Vocational Educational System in Ghana at Assin Fosu and Biriwa National Vocational Training Institute.

Please you are required to respond to each of the items in this questionnaire by ticking [] the appropriate response or make your comments. Your response will be treated as confidential as possible.

1. Age 30 – 40 years [] 41 – 50 years [] 51 – and above [].

2. Marital status: Single [] Married [].

3. What caliber of students do you admit for the various programmes in your institution?

No qualification []

Street children []

J.H.S background []

S.H.S background []

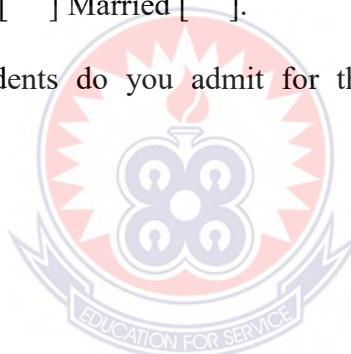
4. What caliber of age group do you admit for the various programmes in your institution?

Age 14- 18 years [] 18- 21 years [] 21- 25 years [] 25- and above []

5. What has been the general performance of your students in the final examination?

6. What is your general view (perception) about the Vocational programme ran in your institution?

Not satisfactory []



Good []

Satisfactory []

Bad []

7. Is government alone responsible of financing, maintaining and running Vocational Education?

Partially responsible []

Fully responsible []

Not responsible []

Responsible []

8. Has the students find job readily after the course?

Yes []

No []

9. Has there been any follow up on your past students at the workplace?

Yes []

No [].

10. What is the mood of financing the work at the various departments?

i. GES grant [].

ii. P.T.A [].

iii. Levy on students [].

iv. Donor agencies (N G O ,S) [].

V. Ministry of manpower and employment [].

11. What is the number of students admitted into the institute yearly?

12. How many are males?

13. How many are females?

14. Do your members of staff (instructors) attend in-service training?

Yes []

No [].

15. If yes, how many times a years?

16. If no why?
17. Do you organize enough workshops? Yes [] No [].
18. Do you have enough tools for training the students? Yes [] No [].
19. Do you have enough materials for practical work? Yes [] No [].
20. Please specify some of the in-service training your teaching staff attended
.....
21. How is the general performance of your teaching staff?



APPENDIX B

QUESTIONNAIRE FOR HEADS OF DEPARTMENTS/INSTRUCTORS

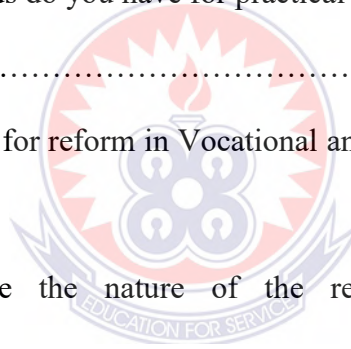
Of late, there have been a lot of criticisms over the relevance of Vocational/technical Education in socio-economic development in Ghana.

The researcher wishes to seek information to help develop a critical study on the impact of the new vocational educational system in Ghana at Assin Fosu and Biriwa National Vocational Training Institute.

Please you are required to respond to each of the items in this questionnaire by ticking [] the appropriate response or make your comments. Your response will be treated as confidential as possible.

1. Do you think your system of Vocational Education is good enough to make Ghana an industrial nation? Yes [] No [].
2. If no what do you think is wrong within the Vocational Education system.
3. Do you agree that students should do more practical work than theoretical? Yes [] No [].
4. Do you believe everybody is potential to offer vocational course? Yes []. No [].
5. Are you allocated with sufficient grant for practical work? Yes [] No [].
6. Ghanaians prefer foreign goods, don't you think this attitude is killing local initiatives. Yes [] No [].
7. How would the local industries be encouraged to improve on the quality of products?
8. Has the nation benefited from the Vocational education? Yes [] No [].
9. Can the products of the school perform when employed? Yes [] No [].

10. In your view what should be done to improve the system?
11. What should be done to improve quality of training in the Vocational schools?
.....
12. Should Vocational teacher be given more in-service training to be abreast with time? Yes [] No [].
13. Would you encourage the use of local materials for practical?
Yes [] No [].
14. Is it necessary to introduce more vocational course in our universities?
Yes [] No [].
15. Do you normally undergo staff development training? Yes [] No [].
16. How many periods do you have for practical activities in a week
.....?
17. Is there any need for reform in Vocational and technical education? Yes []
No [].
18. What should be the nature of the reforms in Vocational schools?
.....
19. Do you encourage your students to do research work? Yes [] No [].
20. If yes, what was the nature of the research?
21. What was the nature of the research?
22. Any suggestion/ Recommendation?



APPENDIX C

QUESTIONNAIRE FOR PAST TRAINEES WHO ARE WORKERS

Currently, there have been a lot of criticisms over the impact of Vocational education toward the development of Ghana.

In an attempt to assess vocational education, the researcher wishes to seek information to help develop a critical study on the impact of the new vocational educational system in Ghana at Assin Fosu and Biriwa National Vocational Training Institute.

Please you are required to respond to each of the items in this questionnaire by ticking [] the appropriate response or make your comments. Your response will be treated as confidential as possible.

1. What type of Vocational course did you pursue?
2. What level did you reach?
3. What kind of challenges do you encounter at your workplace?
4. What position do you hold at your workplace?
5. Do you have prospects to rise up in your work? Yes [] No [].
6. What products do your organizations produce?
7. What are the major materials do you use for productions?
8. State if the materials you work with are imported or locally produced?
.....
9. Do your establishments employ more past students of Vocational institutions?
Yes [] No [].
10. How do you rate their performance? Very good [] good [] Satisfactory
[] Bad [] Very bad [].
11. Do your products compete well with foreign goods? Yes [] No [].

12. Why locally manufactured goods cost more than foreign imported goods?
.....
13. Do you think such a competition is good for our local industries?
Yes [] No [].
14. Please explain.....
15. Do you patronize made in Ghana goods? Yes [] No [].
16. If no why?
17. Do you usually see vocational students on attachment at your workplace? Yes [] No [].
18. How do they perform during the period of attachment? Very Good [] Good [] Satisfactory [] Bad [].
19. Do they benefit from such programme? Yes [] No [].
20. Do your employees give further training to the workers? Yes [] No [].
21. Do think the Vocational Educational students receive enough training in school?
Yes [] No [].
22. If no please give reasons
23. Have we benefited with a notion from Vocational Educational system? Yes [] No [].
24. If yes, how
25. If no why
26. Are you sure the nation development will depend on how effective our Vocational Education is set up? Yes [] No [].
27. Do think all vocational students are gainfully employed? Yes [] No [].

APPENDIX D

QUESTIONNAIRE FOR STUDENTS

Currently, there have been a lot of criticisms over the impact of Vocational Education towards the development of Ghana.

In an attempt to assess Vocational Education as a key to the development of Ghana, the researcher wishes to seek information to help develop a critical study on the impact of the new vocational educational system in Ghana at Assin Fosu and Biriwa National Vocational Training Institute.

Please you are required to respond to each of the items in this questionnaire by ticking [] the appropriate response or make your comments. Your response will be treated as confidential as possible.

1. What course are you offering?
2. What do you plan to do after your course?
3. Have you thought of becoming an entrepreneur establishing your own company? Yes [] No [].
4. Do you think Ghana needs Vocational students to help in development? Yes [] No [].
5. Do you think you are having enough training? Yes [] No [].
6. Are you benefiting from Vocational Education? Yes [] No [].
7. Is Vocational Education for less endowed people or the poor in the society? Yes [] No [].
8. Kindly explain
9. Do you have enough tools for practical work? Yes [] No [].
10. Are the tools supplied by the school or purchased on your own for practical work?

11. How many periods do you have in a week?
12. How many periods are used for practical lessons?
13. Can Ghana develop as Malaysia, Indonesia etc. through Vocational education?
Yes [] No [].
14. Is there enough training programmes for Vocational/technical teachers?
Yes [] No [].
15. Are materials supplied by the school during practical lessons?
Yes [] No [].
16. Do you undertake individual practical work? Yes [] No [].
17. Are you encouraged to do any research work? Yes [] No []
18. How you had any form of industrial attachment before? Yes [] No [].
19. How do you relate it to classroom activity?
20. Is your course marketable? Yes [] No [].
21. How is your course marketable? Yes [] No [].
22. Is your course having any outlet into the university? Yes [] No [].
23. Are there any suggestions/recommendations?

APPENDIX E

INTERVIEW QUESTIONS

Semi-structured interview guide to administered on the Centre Managers, the Heads of Departments/Instructors, the past trainees of the centres working and the current students.

1. How many Vocational institutes do we have in the country?
2. Do we have other units that train vocational and related programmes technicians?
3. What agencies deal with Vocational and technical training?
4. Do students have opportunity to visit industries while at school?
5. How do both sexes perform in the various departments
6. Is the course content enough to prepare students for industry?
7. What is the general performance of the students?
8. What is the difference in the performance of boarders and day students?
9. Are students gainfully employed after schooling?
10. How do students perform at the workplaces?