

CHALLENGES IN THE IMPLEMENTATION OF VOCATIONAL AND TECHNICAL EDUCATION POLICIES IN SENIOR SECONDARY SCHOOLS IN THE SEKONDI/TAKORADI METROPOLIS IN GHANA

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Abstract

Educational institutions all over the world are duty bound to make their products useful to the society. This makes vocational and technical education (VOTEC) a major contributor in this process. The nature of VOTEC and its supposedly close links to the world of work makes it the system of education that gives its graduates the necessary skills to make them useful in their community. However, VOTEC is facing challenges to prepare students with the right skills to fit into the world of work

The study sought to find out the challenges in the implementation of vocational and technical education policies in senior secondary schools in the Sekondi/Takoradi metropolis. In collecting data for the study, the descriptive survey technique was used. Questionnaire formed the principal instrument for the collection of data. A sample size of 702 subjects made up of 660 students and 42 teachers from four Senior Secondary Schools were used for the study.

The study revealed inadequacy and non-availability of educational and human resources. These included teachers, funding, tools and equipment. It also revealed negative perception teachers and students in senior secondary schools had about VOTEC in Sekondi/Takoradi that made its implementation difficult.

Suggestions have been made towards the improvement in the implementation of VOTEC. These include training of more VOTEC teachers, providing additional funding and equipment to improve skill acquisition. It is expected that the government and other stakeholders would make sure that VOTEC serves its purpose of providing the manpower needs of the country.

Keywords: Vocational, Technical, Training.

1 INTRODUCTION

All over the world, education is accepted as the process by which individuals acquire knowledge, skills and attitudes, which enable them to develop their faculties in full (Nishimura & Orodho [15]). It is universally accepted that one of the benefits of good education is to enable individuals contribute to the development and improvement in the quality of life for themselves, their communities and their nation as a whole.

In view of this, schools everywhere are being asked to prepare young people for the jobs of tomorrow and vocational and technical education (VOTEC) has an important role to play in this process. Educational system should be functionally tailored to produce workers that are suitable (in terms of Knowledge and skills) for a given productive economy (Blaug [4]). The multidisciplinary nature of Vocational and technical education (VOTEC) and its supposedly close links to the world of work make it one of the educational sectors that contributes most to the training of skilled labour and gives students the knowledge required to ply a trade. For many, it is a passport to employment and the possibility of social advancement. Vocational and technical education (VOTEC) is therefore considered essential because a country cannot achieve economic development without a skilled, productive labour force that can meet the changing requirements of its environment.

VOTEC is not a recent concern in Ghana. The need to establish educational facilities to train students with skills was recognized during the pre-independence period, in the early 1950s. The document entitled 'Fundamental principles of education policy' (MOE, [11]) recommended the provision of Trade Schools with technical and literary education that will fit students to become skilled craftsmen and useful citizens. The outcome of this new philosophy of education, however meagre, was evident from the number of technical and related institutions that had been established by 1951. By this date, there

were 23 technical and related institutions with a total enrolment of 3,330 students, or about one per cent of the total population of students in the country's second-cycle institutions.

Starting with a model mainly containing technical secondary education, other types of training modules gradually appeared. The 1987 educational reform came with its vocationalisation as a key component. The vocationalization of general education curriculum strategy used in Ghana is the type that students read core subjects in addition to elective subjects which are mainly vocational and technical (Akyeampong [1]).

The review of VOTEC in Ghana showed that there was an increasing policy attention for VOTEC. To ensure that the content of the courses provided by institutions matches industrial and commercial requirements and that it is in line with the changing nature of demand on the job market, the Ghana Education Service recommended that industrial and commercial interests must be adequately represented on the governing boards and programme advisory committees of schools (UNEVOC, [17]).

However, VOTEC is facing a challenge to prepare students with the right skills to meet labour market demands. Matching skills, knowledge and attitudes to the needs of employment is increasingly challenging in the current context of globalisation and rapid technological change. Technologies keep on changing almost on a daily basis making it difficult for educational institutions to acquire all the necessary machines and equipment required for the training of their students. This is buttressed by Finch and Crunkilton [6] who acknowledge that it is difficult for individuals and institutions to get all the highly specialized equipment needed to operate quality programs in schools.

A critical issue for VOTEC planners and managers is how to fund the policy to train students for future jobs. This dilemma is aggravated in Ghana due to the permanence of adverse economic conditions. In Ghana, funding of secondary education is done by factoring the entire secondary schools budget in the budget of the districts they belong without consideration to the financial demands of individual subjects. According to (MOE, [12]), only 13% of Ghana Education Service budget is allocated to senior secondary schools. Another issue that confronts VOTEC is the training of teachers to fill the vacancies that existed in the secondary schools. Akyeampong [1] questioned whether the education system is capable of producing enough teachers to meet the demand at stake. He also went further to state whether or not vocational and technical teachers had the requisite teaching qualifications to handle the subjects competently.

Despite all the issues discussed above the 1987 educational reform however meagre brought progress in the delivery of VOTEC programmes in senior secondary schools in Ghana but VOTEC still remains a challenging educational policy in Ghana.

1.1 Statement of the problem

Any sound educational system of a country seeks to serve the needs of the individual and society. Education should preserve and transmit society's culture and train manpower for the nation. However, in order to combat the economic and social problems created by the dysfunctional nature of the former system of education left with us by our colonial masters, changes were made to make education more meaningful and relevant to the needs of Ghanaians.

An educational reform was launched in 1987 and it laid emphasis on vocational and technical education. The primary objective of vocational and technical education is to train students to acquire skills to cater for both the public and private sectors. Boeh-Ocasay [5] asserted that if the economy of Ghana is to grow, then vocational and technical education must be seriously looked at. Vocational and technical education is considered essential because a country cannot achieve economic and social development without a skilled, productive labour force that can meet the changing requirements of its environment.

However, in the course of implementing vocational and technical programmes in senior secondary schools in the Sekondi/Takoradi metropolis, it failed to achieve quality targets and exposed the education sector to public criticism. The research would therefore delve into the challenges that affected the implementation of vocational and technical programmes in senior secondary schools in the Sekondi/Takoradi metropolis.

1.1.1 Purpose of the study

The study would examine the non-availability of qualified teachers in the vocational and technical education sector in the senior secondary schools and inadequate teaching and learning materials which often lead to poor skill acquisition by senior secondary school graduates who pursue VOTEC programmes in the Sekondi/Takoradi metropolis. Additionally, the research would also investigate the funds provided by the government. Finally, the negative perception teachers and students have towards vocational and technical education would also be studied.

1.1.2 Objectives of the study

This study would help provide appropriate information about the relevance of vocationalization to society and the challenges one faces in its implementation in senior secondary schools in the Sekondi / Takoradi metropolis.

1.1.3 Research Questions

The research attempts to find out answers to the following questions:

1. Are there enough qualified teachers to teach vocational and technical courses in senior secondary schools in the Sekondi/Takoradi metropolis?
2. How adequate is the provision of funds by I government for practical skills acquisition by senior secondary school students pursuing vocational and technical programmes in the Sekondi/Takoradi metropolis?
3. Do the senior secondary schools in the Sekondi/Takoradi metropolis running vocational and technical programmes have the recommended tools and equipment to pursue the various programmes?
4. What is the perception of teachers and students in senior secondary schools towards technical and vocational education?

1.1.4 Significance of the study

The expected results of the study might help stakeholders in the education sector to be aware of the factors that hinder the implementation of VOTEC programmes in senior secondary schools in the Sekondi/Takoradi metropolis and measures that need to be taken.

2. METHODOLOGY

The descriptive sample survey was used as the research design for the study. The population for the study was made up of 2200 students pursuing vocational and technical courses and 140 teachers teaching the courses in these four schools namely; Ghana secondary/technical school, Bompe secondary/technical, Fijai secondary school and Archbishop Porter girls' school.

The simple random sampling technique was used in selecting 30% of the respondents from each of the four schools to arrive at a sample size of 702. The names of students and teachers of each of the four schools were printed on pieces of paper and folded. The papers were put into a box and shuffled. Volunteer student was asked to pick the papers from the box at random. The names of the students and teachers which appeared in the first 30% of the folded papers of each of the schools were added to the sample for the study. The 660 students and 42 teachers were given the questionnaires to fill.

The questionnaire for the study was made up of fourteen (14) items and comprised four sections A – D. Section “A” required response on staffing. Section B required response on funding. Section C required response on tools and equipment while Section D sought response on perception about VOTEC education. It was a four-point likert scale type and consisted the following: Strongly Agree (S/A), Agree (A), Disagree (D/A), and Strongly disagree (S/D). It required a participant to respond appropriately by ticking [√] against the response that best reflects the extent to which he/she agreed or disagreed with each of the statements.

Frequencies and percentages were used to analyse the data generated by the questionnaire. Based on the four point likert scale employed in the questionnaire “strongly agree” and “agree” were added together as agree while “disagree” and “strongly disagree” were merged together as disagree.

3. RESULTS AND DISCUSSION

Responses to various questions on the availability of teachers for the VOTEC programmes, provision of funds by the government for practical skills acquisition, availability of tools and equipment for training and the perception of teachers and students in senior secondary schools in the metropolis towards vocational and technical education are reported in Tables 1,2, 3 and 4 respectively.

Table 1

Response on Staffing

Statement	S A		A		D A		S.D.A		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Votec teachers are available	180	25.6	187	26.7	160	22.8	175	24.9	702	100
Teachers' are regular in school	149	21.2	181	25.8	189	26.9	183	26.1	702	100
Adequate qualified votec teachers affect the quality of students	201	28.6	233	33.2	136	19.4	132	18.8	702	100
Quality of instruction is satisfactory	151	28.6	165	33.2	189	19.4	197	28.1	702	100

Source: Fieldwork 2005

3.1 Availability of VOTEC teachers

The finding of the study revealed that (52.3%) of the respondents agreed that teachers for vocational and technical education were available. This result is contrary to a comment made by Kerre and Kwende [9] that efforts at providing effective vocational and technical education in Africa including Ghana have not succeeded. This is due mainly to the absence of professionally trained technical and vocational experts, thus limiting the effectiveness of vocational and technical education initiatives in Ghana and other developing countries of Africa. The reason for this result might be the recent increments in the intake of students pursuing programmes in the University of Cape Coast and the University of Education (Winneba).

3.1.1 Teachers' regularity in school

A close examination of the data revealed that (53%) of the respondents disagreed that teachers attended classes regularly. The result of this study is in line with a research conducted by Koomson et al [10]. They found that about 50% of the instructional time, on the average in the schools studied, was mismanaged. This was due to a lot of factors including late starting of schools, teacher's lateness to class and teaching only few subjects on the time table.

3.1.2 Adequate qualified VOTEC teachers affect quality of students

The facts derived from the study indicated that (61.8%) of the total respondents agreed that adequate qualified vocational and technical education (VOTEC) teachers affect the quality of graduates from senior secondary schools who study vocational and technical programmes. Commenting on a similar issue it was stated in the report of the President's committee on the review of education in Ghana,[16] that quality teachers in adequate numbers were necessary for guaranteeing quality education. This made it necessary to ensure that teachers were appropriately trained to enable them acquire the necessary knowledge and skills and impart them effectively.

3.1.3 Quality of instruction is satisfactory

It was realized from the data that (55%) of the total respondents disagreed that quality of instruction given at senior secondary schools in the Sekond/Takoradi metropolis were satisfactory. The results of the study in the Sekondi/Takoradi metropolis confirmed a comment in the education review report [16] that training content in vocational and technical programmes in Ghana was outdated.

Table 2. Response on Funding

Statement	S A		A		D A		S.D.A		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Votec programmes are expensive to run	215	30.6	198	28.2	161	22.9	128	18.3	702	100
Funding is critical to the provision of quality votec education	209	29.8	199	28.3	171	24.4	123	17.5	702	100
Students buy their own materials	236	33.6	202	28.8	151	21.5	113	16.1	702	100
Votec students pay more fees	190	27.1	179	25.5	160	22.8	173	24.6	702	100

Source: Fieldwork 2005

3.1.4 Vocational and technical programme is expensive to run

It was realized from the study that (58.8%) of the respondents agreed that vocational and technical programmes were expensive to run. The finding of this study was emphasized in a similar one by Akyeampong [1] that the difference in total unit costs among different curriculum programs were mainly due to recurrent costs and the total unit costs of the vocational and technical programme which was in this case more than three times the unit cost of the Arts programme.

3.1.5 Funding is critical to the provision of quality VOTEC education

The results gave an indication that (58.1%) of the participants agreed that funding was critical to the provision of vocational and technical education in the metropolis. Morrison [13] commenting on the prospects of “education for self reliance” launched in Tanzania by president Nyerere, raised the question of whether the necessary resources had been acquired by the Tanzanian government. Additionally, Akyeampong [1] said no special funding from the government of Ghana was earmarked for vocational subjects. The implication was that any education programme could achieve the desired aims only when the necessary resources and capabilities had been assembled by the government.

3.1.6 Students buy their own materials

The study revealed that (62.4%) of the respondents agreed that the students provided materials and ingredients for practicals. In an earlier study by Amankrah [2] which is similar to the finding of this research he concluded that most schools lacked learning materials and even where available, teachers often did not make effective use of them.

3.1.7 VOTEC students pay more fees

Majority of the respondents representing (52.6%) pointed out students pursuing vocational and technical education paid more fees than their colleagues in the other disciplines. Hoppers [8] in an earlier statement said compared to academic subjects taught purely by ‘chalk-and-talk’ methods, vocationalised curriculum elements tend to have much higher unit costs (due to facilities, equipment, materials, consumables, less optimal utilization of specialist teachers and smaller classes). Akyeampong [1] also stated that schools often levied the parents of students offering practical subjects.

Table 3. Response on Tools and Equipment

Statement	S A		A		D A		S.D.A		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
There are adequate facilities at workshop	138	19.7	159	22.6	198	28.2	207	29.5	702	100
Most votec subjects rely on theoretical activities	193	27.5	200	28.5	147	20.9	162	23.1	702	100
Instructional supports in schools are adequate	139	19.8	176	25.1	197	28.1	190	27	702	100

Source: Fieldwork 2005

3.1.8 There are adequate facilities at the workshop

The results indicated that (57.7%) of the total respondents disagreed that senior secondary schools in the metropolis had the requisite facilities to train their students. Arguing along the same pattern Akyeampong [1] said there was deficiency of workshops and equipment for the teaching of vocational subjects and a recurring criticism had been that some schools lacked the facilities for practical work.

3.1.9 Most VOTEC subjects rely on theoretical activities

It was deduced from the data that majority of the participants representing (56%) agreed that vocational and technical subjects taught in the metropolis were mainly theoretical. This result consolidated the statement by Mwiria [14] that, in Ghana, the teaching and learning styles in vocational and technical subject's could be described as one-way communication from teacher to student, with heavy reliance on memorization of vocational contents taught as theory.

3.2 Instructional sports in Schools are adequate

The facts derived from the study revealed that more than half of the participants (55.1%) disagreed that instructional supports were adequate. This confirmed the assertion by Grierson [7] that there is a crisis of relevance since there is a growing mismatch between the training offered by vocational training programmes and the skills needed for competitive markets. The reason is that most of the schools lacked the necessary facilities to train their students to fit into the world of work.

Table4. Response on Teachers And Students Perception About Votec

Statement	S A		A		D A		S.D.A		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
There is neglect of Votec	222	31.6	264	37.6	120	17.1	96	13.7	702	100
Votec is for the academically weak	164	23.4	154	21.9	189	26.9	195	27.8	702	100
There is linkage between education and industry	157	22.3	165	23.5	198	28.2	182	26	702	100

Source: Fieldwork 2006

3.2.1 There is neglect of VOTEC

The information deduced from the study indicated that more than half (69.2%) agreed that there was neglect for vocational and technical education in the Sekondi/Takoradi metropolis. This result is in line with Ayim [3] who pointed out that the major problem facing the development of votec in Ghana is among others, the insensitivity of votec planners to curriculum change. Additionally, Kerre and Kwende [9] in their findings said, for Africa to benefit from vocational and technical education, governments and senior policy makers and planners must show a more practical commitment to the importance of vocational and technical education.

3.2.2 VOTEC is for the academically weak

It was realized from the data that (54.7%) of the total respondents did not have the perception that vocational and technical education is for the academically weak students. This finding of the study strengthened an earlier statement by Akyeampong [1] that vocational options are not necessarily 'soft options' because some high achievers opt for a vocational and technical program depending on what it seems is their further education aspiration.

3.2.3 There is linkage between Education and Industry

The results gave an indication that (54.2%) of the students disagreed that there was linkage between the educational institutions and industry in the metropolis. The importance of close relations between institutions and industry was recognized earlier by Ghana Education Service (G.E.S) when it recommended that industrial and commercial interests must be adequately represented on the governing boards and programme advisory committees of schools. This according to G.E.S would ensure that the content of courses provided by institutions matched industrial and commercial requirements and could be in line with the changing nature of demand on the job market (UNEVOC, [17]).

4. CONCLUSION

Teaching of vocational and technical subjects required teachers with special knowledge and pedagogical skills. It could be deduced that teachers were available for vocational and technical subjects in the metropolis but their quality of instruction might have contributed to the poor quality of vocational and technical graduates.

Funding of vocational and technical education was relatively low and this inadequate supply of funds to vocational and technical institutions could affect the quality of the implementation of vocational and technical education provided.

The non-availability of tools and equipment in the senior secondary schools in the Sekondi/Takoradi metropolis could affect the skills acquired by the graduates of senior secondary schools who pursued vocational and technical education. Finally, the neglect of vocational and technical education in the Sekondi/Takoradi metropolis had made the implementation of the VOTEC policies very difficult.

5. RECOMMENDATIONS

In the light of the conclusions drawn from the study, the following recommendations are made for consideration by stakeholders of education in the metropolis.

- Teachers should be given in-service training in vocational and technical education subjects to help up date them.
- The Ghana Education Service should resource its supervision unit to help check teachers who absents themselves from work.
- Vocational and technical education implementation is expensive to run therefore senior secondary schools running such programmes should be given additional funding to enable them furnish the workshops adequately with modern equipment and meet the cost of consumables in order to improve the quality of vocational and technical education delivery.
- Schools should liaise with industries in their communities for practical training.
- The Ghana Education Service should educate the public on the importance of vocational and technical education in the print and electronic media.

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