

# Integrating Entrepreneurial skills in Technical and Vocational Education as a strategic approach for improving youth employment in Ghana: A study of Kumasi metropolis

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**Abstract:** *Entrepreneurship education integration in TVET has been identified as the key to solving the unemployment among the youth in any nation. In this regard, the study was conducted to assess the integration of entrepreneurial skills in vocational education as a strategic approach for achieving youth employment in Ghana using Kumasi Metropolis. The descriptive survey method was employed in this study. A total of 50 respondents consisting teaching and non-teaching staff was sampled randomly and purposively from five vocational institutions identified in the Kumasi Metropolis. Questionnaire was the main data collection instrument used. Simple statistical analytical tools like frequencies, percentages and means were used to analyse the collected data using SPSS version 20. The study revealed that there were several practices that actually promote the entrepreneurial skill acquisition of students in the vocational training institutes. Among these practices were the provision of independent and critical thinking skills and competency based training of students based on practical activities.*

**Keywords:** entrepreneurial skills, Technical and Vocational Education, Youth Unemployment, Job Creation, Employment Opportunities, Ghana

## 1. INTRODUCTION

Supporting entrepreneurship in vocational education and training is increasingly important for government as this seeks to improve pathways to the labour market for the youth thereby eradicating the unemployment challenges that is currently disturbing the youth. Entrepreneurship can offer opportunities for the youth to create jobs for themselves and for others [1]. The vocational education and training system has an important role in supporting the agenda by providing entrepreneurship training and business start-up support [2].

Entrepreneurship training has grown out of its initial basis in the conventional understanding of entrepreneurship as venture creation. It has traditionally been delivered by business departments and schools through courses on subjects such as small business management, business planning and technology management [3]. However, over the years, the concept of entrepreneurship has evolved from a subject matter focused on business creation into a broader concept that refers to an individual's ability to turn ideas into action and is commonly considered to be key competence in the modern labour market. Thus entrepreneurship has grown to cover more than setting up and running a business. It encourages creative thinking and promotes a strong sense of self-worth, initiative and a tolerance to failure. It not only gives people the means to cope with an increasingly complex and uncertain world, but also gives them the mindset and capabilities to thrive upon it [4].

The only way to empower the youth is to provide them with adequate and qualitative education in order to make them job creators and eradicate poverty [5]. Many countries of the world including Ghana have considered Technical

Vocational Education and Training (TVET) as relevant in equipping young people with technical skills that would enable them engage in productive lively hoods. However, the United Nations Education Scientific and Cultural Organisation (UNESCO) section for Technical and Vocational Education and Training (TVET) in 2006 observed that TVET programmes have not led to increased employment as anticipated, despite the obvious need for technical and vocational services. This might be due to lack of employment opportunities for technically trained manpower. Another reason advanced by [6] on the lack of increased employment by TVET is the impact of globalization which demands concrete response in the best direction and practice. These responses include among others strengthening the social fabric, restructuring the local economy and training human resources to meet the demands of the global world. In this regard, the purpose of this research was to integrate the entrepreneurial skills in technical and vocational education as a strategic approach for improving youth employment in the Kumasi metropolis of Ghana.

## 2. MATERIALS AND METHODS

### 2.1 The Research Design

Research design is a framework or blueprint used for conducting a research project. It specifies the details of the procedures necessary for obtaining the information needed to promote and integrate entrepreneurship in Vocational and Technical Education [7]. The study touched on various

variables of entrepreneurship education about the existing processes and policies in support of entrepreneurial education in the vocational education sector. The descriptive survey method was employed for the collection of quantitative data which made possible gathering of large-scale data upon which a basis for interpretation and generalisations were drawn. The study was a cross-sectional one, taking into cognisance the fact that the research

## 2.2 Sources of Data

Data was collected primarily from the sample of vocational and technical education institutions in the Kumasi Metropolis. The primary data was collected by means of self-administered questionnaires. Extensive literature was read on the topic to gain an insight into the overview of entrepreneurship education and technical/vocational education. This served as a secondary source of data for the researcher in order to know the right questions to ask and from whom to ask.

## 2.3 Study Area

The Kumasi Metropolis is one of the 30 administrative districts in the Ashanti Region. The city of Kumasi was founded in the 1680s by the first Asante King Osei Tutu I to serve as the capital of the Asante Kingdom. Given its strategic location and political dominance, Kumasi developed into a commercial centre with all major trade routes in Ghana converging in the city. With time, the city began to expand, and it is currently rated second only to Accra (the national capital) in terms of land area, population size, social life and economic activity.

Kumasi Metropolis boasts of a vibrant educational system with educational facilities being invested into by both public and the private sector ranging from pre-school up to the university level. There are more than 30 technical and vocational schools in the Ashanti Region where Kumasi metropolis is located. The Metropolis itself has a concentration of about 15 of these technical schools. Notable among them are the Kumasi Technical Institute, Kumasi Vocational Training Institute, Mancells Vocational Training Institute, Ahmadiyya Muslims Girls Vocational Training Institute and Opoku Ware Girls Training School among others.

## 2.4 Target Population

Population according to [10] Burns and Grove (1997) is the entire aggregation of respondents that meet the designated set of criteria for a particular study. The target population in this study was all vocational and technical schools in the Kumasi Metropolis. Kumasi as a metropolis boasts of about fifteen (15) technical and vocational institutions. The population considered for the study consisted of students and staff of identified vocational training institutions. Stakeholders from the Technical Educations Unit and National Vocational Training Institute also made up part of the population for this study

## 2.5 Sample and Sampling Technique

In the selection of the institutions, the purposive and random sampling techniques were employed to ensure representativeness. The purposive and random sampling was used to make a fair selection of teaching and non-teaching staff from five (5) vocational/technical institutions identified in the Kumasi Metropolis. The institutions selected for the study are; Ahmadiyya Muslim Girls Vocational Training, Catholic Technical Institute, Kumasi Technical Institute, Kumasi Vocational Training Institute and Ramseyer Vocational Technical Institute all in the Kumasi Metropolis. A total of 50 respondents were selected for the study consisting of 40 teaching staff and 10 non-teaching/administrative staff from the various institutions. In the selection of respondents, eight (8) teachers were randomly selected from each of the five institutions whilst two (2) non-teaching staff or administrators were equally sampled randomly from each school. The raffle method of random sampling was used where respondents were made to pick pieces of folded papers which were labelled 'Yes' and 'No' from a container. The members who picked 'Yes' were used as the sample for the study. The use of random sampling ensured that each member had a fair chance of being selected to participate in the study.

## 2.6 Instruments for Data Collection

The instrument used for collecting the data for the study was questionnaire. [11] Hendricks (2009) describes a questionnaire as a set of carefully designed questions given in exactly the same form to a group of people in order to collect data about some topic(s) in which the researcher is interested. To measure the subtle issues of entrepreneurial education integration in vocational/technical education calls for a cautious selection of appropriate data collection instruments. The researcher conscientiously opted to use questionnaire for data collection. To questionnaire consisted mainly of close ended items, both multiple choice and Likert scale types.

## 2.7 Data Collection Procedure

The institutions selected were visited and the participants were briefed on the purpose of the study and its educational implications after permission was sought and granted by the Heads of the establishments involved. The respondents were allowed some time to raise questions about the areas they were finding difficult to understand. After the discussion, copies of the questionnaires were distributed to them to respond to at their own convenience. On the whole, about two weeks were spent for the collection of the data. All the respondents completed the questionnaires for collection.

## 2.8 Validity and Reliability of Instruments

Validity and reliability in research is the degree of stability exhibited when measurement is repeated under identical conditions [10]. Research validity refers to the researcher's objectivity in actually measuring what was supposed to be measured and not something else. Reliability means

responses to the questionnaire were consistent [12]. The following steps were taken in order to ensure the validity of the data. The questionnaire was based on information obtained from literature review. This was to ensure that it was from a representation of elements from the topic under discussion [13].

Again, an initial draft of the questionnaire was tested informally using staff of other institutions outside the study area in the Ashanti Region. Based on their feedback, few items were revised to improve better comprehension, content validity, wording format and question flow. This pilot exercise was carried out in accordance with what [11] described as getting the bugs out of the instrument so that respondents in the main study will experience no difficulties in completing them. This was also to enable the researchers carry out a preliminary analysis to see whether the wording and format of questions will present any difficulties when the main data is analysed.

### 2.9 Data Analysis Procedure

Data analysis is the process of evaluating data using analytical and logical reasoning to examine each component of the data provided [10]. Information gathered during data collection may lack uniformity and some information given may need reconstruction. After collecting the data, they were first edited. During editing, relevant and appropriate errors were found and modified. The edited questionnaires were then organized and coded. Coding involves assigning

numbers or symbols to each response category in order to translate the raw data into a form that could be counted, tabulated or fed directly into a computer [14]. Descriptive statistics such as frequencies and percentages were used in the analysis of the data. The organized and coded data was then fed into the Statistical Package for Social Sciences (SPSS Software) for analysis and interpretation. The analysis and discussions are presented under Chapter Four of this study.

### 2.10 Ethical Considerations

A major ethical concern for researchers in their line of duty is that which requires them to strike a balance between the demands placed on them as professional scientists in pursuit of truth and their participants' rights and values potentially threatened by the research [15]. To make this study conform to ethical principles and practices, the rights to self-determination, anonymity, confidentiality and informed consent were observed [16]. The respondents were informed of their rights to voluntarily participate or decline. They were also informed about the purpose of the study and were assured of not reporting any aspect of the information they provided in a way that will identify them. They were also assured that there were no potential risks involved in the research process.

## 3 RESULTS AND DISCUSSION

Table 1 Vocational training practice that promote entrepreneurial skills among students

Variables	SA		A		D		SD		Mean ( $\bar{x}$ )	Total
	f	%	f	%	f	%	f	%		
Emphasis on practical work rather than grades in technical education enhances youth empowerment needed for entrepreneurship.	14	28%	24	48%	7	14%	5	10%	2.06	50 100%
Competency based training in technical and vocational education enhances workers' productivity.	28	56%	16	32%	6	12%	0	0%	1.56	50 100%
Balanced combination of theory and practice in Voc/Tech education helps students to develop creativity and innovation skills	10	20%	30	60%	6	12%	4	8%	2.08	50 100%
Vocational education empowers students to be employers of labour rather than employees.	5	10%	8	16%	24	48%	13	26%	2.90	50 100%
Acquisition of real world experiences through field trips exposes students to knowledge and skills for job creation	17	34%	22	44%	9	18%	2	4%	1.92	50 100%
Promotion of independent and critical thinking skills of students enhances output effectiveness and efficiency in business	28	56%	20	40%	2	4%	0	0%	1.48	50 100%

Key: SA = Strongly Agree, A = Agree, D = Disagree, SD = Strongly Disagree.

Source: Author's field survey, 2016

Table 1 presents the vocational and technical education practices that promote entrepreneurial skills among students.

From the data presented in the table, an overwhelming majority of 48(96%) respondents agreed that the promotion

of independent and critical thinking skills of students in vocational and technical education enhances the effectiveness and efficiency in business settings. This item received a mean value of 1.48, which indicates that respondents rated it higher than the other factors. The next vocational training practice that promotes entrepreneurial skills of students as rated by respondents was competency based training in technical and vocational education. To this statement, 28(56%) of respondents strongly agreed whilst 16(32%) agreed, yielding a mean value of 1.56. In ascending order of mean values which indicate decreasing acceptance, with means of 1.92, 2.06 and 2.08, respondents accepted that vocational education practices like the acquisition of real world experiences through field trips, emphasis on practical work rather than grades and balanced combination of theory and practice were some of the vocational training practices that promote the acquisition of entrepreneurial skills among students. On the other hand, respondents generally disagreed that vocational education empowers students to be employers of labour rather than being employees since this item received a mean rating of 2.9 which is above the accepted mean value of 2.5. This indicates that respondents were of the opinion that vocational education does not empower students to be employers of labour.

The foregoing discussion indicates that respondents accepted that several of the practices at the vocational and technical training institutions promote entrepreneurial skills among students but disagreed that vocational education empowers students to be employers of labour rather than employees. [17] supports this by indicating that good practice indicators

for entrepreneurship in vocational education are necessary for ensuring the success of entrepreneurship integration in vocational education. [18] also cited practices like the provision of funding, setting up of entrepreneurship development centres and adequate provision of practical work to promote the study of entrepreneurship among vocational and technical education institutions.

The Technical and Vocational Education and Training (TVET) curriculum is planned in such a way that it promotes the acquisition of skills and competencies that enables one to set up a small business after graduation. This section of the study attempts to bring out the relationship or impact of such competencies or skills acquired on the entrepreneurial skills acquired by students. In doing so, the researcher collected information through a 4-point Likert scale questionnaire items. The scaling values for the items as presented in Table 1 is given as, 1 = Strongly Agree (SA), 2 = Agree (A), 3 = Disagree (D) and 4 = Strongly Disagree (SD). For the purposes of analysis the researcher condensed the strongly agree and agree categories to mean Agree and the Strongly Disagree and Disagree categories to mean Disagree. Based on the four-point Likert scale used, a computed mid-point mean value of 2.5 and below ( $\bar{x} \leq 2.5$ ) signifies general agreement with the statement whilst a mean score of 2.6 and above ( $\bar{x} \geq 2.6$ ) indicates that respondents generally disagreed with the statement. According to [16] the use of a 4-point scale category implies a midpoint mean value of 2.5 while a 5-point scale and 7-point scale category has midpoint values of 3 and 4 respectively.

Table 2 Linkage between industry and Voc/Tech institutions

Variables	SA		A		D		SD		Mean ( $\bar{x}$ )	Total
	f	%	f	%	f	%	f	%		
Provisions for industrial attachment are available for vocational and technical students	27	54%	13	26%	6	12%	4	8%	1.74	50 100%
There are internship opportunities for vocational education students in industrial establishments	5	10%	15	30%	20	40%	10	20%	2.70	50 100%
Industry provides on-the-job training for students of vocational and technical institutions	12	24%	21	42%	10	20%	7	14%	2.24	50 100%
There is collaboration for vocational and technical students to be posted into industry for national service	16	32%	17	34%	12	24%	5	10%	2.12	50 100%
Bilateral collaborations exist with companies for field trips and excursions.	2	4%	10	20%	22	44%	16	32%	3.04	50 100%
The school invites company personnel as resource persons for seminars and workshops in vocational and technical schools	7	14%	17	34%	14	28%	12	24%	2.62	50 100%
Exchange programme arrangements for students to experience real world industrial settings.	3	6%	11	22%	21	42%	15	30%	2.96	50 100%

Key: SA = Strongly Agree, A = Agree, D = Disagree, SD = Strongly Disagree.

Table 2 shows the responses on the available or existing linkages between industry and vocational/technical training institutions in the study area. From the table, it is seen that 27(54%) respondents strongly agreed to the statement that there are provisions for industrial attachments for vocational and technical education students whilst 13(26%) agreed. This accounts for a combined percentage of 80% respondents out of the total 50(100%) with only 12% and 8% respectively disagreeing and strongly disagreeing. Using the combined percentages for the 'agree' and 'disagree' categories, 80% agreed whilst 20% disagreed yielding a mean value of 1.74. Looking at the frequency and percentage values coupled with the mean value, it is evident that respondents strongly accept the fact that there exist opportunities for students of vocational and technical education institutions to attach themselves to the various industries relevant to their fields of study.

On the issue of providing mandatory internship programmes for students, where students would be required to spend at least a full academic term in industry to learn about the way such industries operate, only a combined percentage of 40% of respondents (which is 10% 'strongly agreed' and 30%) 'agreed' whilst a combined percentage of 60% disagreed. This statement yielded a mean value of 2.70 which was above the accepted mean value of 2.50, indicating that respondents did not agree that students underwent well organised internship programmes supervised and facilitated by the vocational training institutions they attend.

The third item in Table 2, providing on-the-job training for students of vocational and technical institutions received a mean rating of 2.24 which is within the acceptable mean value range. A closer look at the table shows that a combined 66% of respondents agreed whilst 34% were in disagreement with the statement. This is indicative of the fact that respondents hold the view that when students of vocational and technical institutions are given opportunities to work in industry, they are given on-the-job training to make them fully functional in their work environments.

From the table, it is also seen that respondents agreed to the statement that there is collaboration for vocational and technical students to be posted into industry for their national service after completion of their programme of study. Looking at the percentage and mean values, this item received a mean value of 2.12 which is within the acceptable mean range and a combined agreement percentage of 66% as against 34% for disagreement.

With mean values of 3.04, 2.62 and 2.96, respondents were of the view that the statements; bilateral collaborations exist between technical/vocational institutions and companies for field trips and excursions, schools invite company personnel as resource persons for seminars and workshops, and exchange programme arrangements for students to experience real world industrial settings were not true. In this light, it presupposes that respondents expressed opinion that there were no bilateral collaborations between

companies and technical/vocational schools and that schools did not invite company personnel as resource persons for workshops and seminars at school and that there were non-existent exchange programmes between industry and the technical/vocational schools. This is corroborated by research evidence, [19] who states that the development of community support interventions for skill development will serve as a means to reduce poverty in local communities and transform the lives of the individual graduates.

According to [20], one approach to enhancing entrepreneurial skill acquisition among students and create an 'enterprise culture' among the youth of any country is to establish vital linkages between industry and the vocational/technical training institutions. This would go a long way to develop an 'enterprise-aware' student generation who see the relevance of what they learn in the classroom in the real world. Again, students will be willing to put into practice what they learnt in the classroom with the foreknowledge that the existing industries were grown from small enterprises like theirs. In this regard, the researcher sought to find out the avenues or linkages that existed between industry and the vocational training institutions in the study area. The data obtained is presented in Table 2.

#### 4 CONCLUSION

The researchers were prompted to investigate into this study because it was observed that for some time now, students coming out from technical and vocational institutes do not get jobs, and are often laughed at by their friends and are given low respect in society. This study was conducted in a bid to enlighten readers and promote Technical and Vocational education through the integrating entrepreneurship education. From the study, it can be concluded that there are several practices that actually promote the entrepreneurial skill acquisition of students in the vocational training institutes. Among these practices are the provision of independent and critical thinking skills and competency based training of students based on practical activities.

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