

Formal versus Informal Skills Training in Ghana

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Abstract:- The study examines formal and informal skills training in Ghana. The study was conducted using a descriptive study approach. The study was conducted among teachers and students from three related departments; The Departments are Diesel and Heavy-Duty Mechanics, Motor Vehicle Mechanics and Electrical Installation of the Kumasi Technical Institute and apprentices and their master craftsmen of selected Informal Apprenticeship Training Centres (IATC), in Suame Magazine. A total of 24 tutors and 15 craftsmen were selected through purposive sampling. In the case of the students' and apprentices, a total of 50 students as well as 50 apprentices were drawn through the disproportionate stratified random sampling technique. More so, 38 graduates from the formal sector, who offered one of the three programme captured as well as 32 of their counterparts from the informal sector were also included in this study. The study adopted the use of questionnaire and interview approach to capture data from respondents. Findings from the study revealed that both graduates of the formal and informal apprenticeship maiming agreed that their programme motivated them to learn skills related to their jobs. The greatest difference between the two programmes was their satisfaction with their 'hands-on' experience during the period of their training. This study therefore recommends future study to be done on the direct involvement of industry in the selection of skill training methods, to improve skill training in Ghana.

Keywords:- *Apprenticeship, Technical Vocational Education, Master craftsmen, Training, formal and informal.*

I. INTRODUCTION

Education takes place inside and outside the normal school system. Formal Education like school education is a core responsibility of the government. In Ghana, skills development strategies often overlook the informal sector despite the fact that in developing countries, income-generating activities in the informal sector often far exceed those of the formal sector. The Education for All (EFA) Global Monitoring Report (UNESCO, 2012) on youth skills development states that traditional apprenticeships are an important way of acquiring transferable and job-specific skills. In Ghana informal education is important but it is often ignored in academic discussions. It takes place every day in families, enterprises, and communities and in the mass media.

Sonnenberg (2012) posits that in most African countries, the majority of young people do not have access to formal Technical/Vocational Education because they are school dropouts and are not allowed to take up a formal Technical/Vocational Education. The situation is not different in Ghana. Indeed, about two thirds of the youth have no access to further formalized education at post basic level. A total of 76.8 thousand individuals are enrolled in formal technical and vocational education in Ghana. On the other hand, although there are no official statistics, it is estimated that more than 400,000 apprentices are currently enrolled in informal training, even though the number might have been decreasing in recent years (UNESCO, 2020).

The importance of the so-called "informal enterprise-based training" has been long neglected, blamed and ignored by training institutions, universities and government. However, technical/vocational training is regarded as an avenue to enable the young generation to help themselves in the fight against poverty. This situation calls for review of operational features of technical/vocational institutes in view of the need of the times and the requirements of the current pace of development. Technical/vocational training is something between school and professional life. This means that technical/vocational training as a link between school and labour market has continuously to adapt to a changing society and economy (Budu-Smith, 2003).

Skill and entrepreneurial gaps are very evident in the labour market of Ghana given the constraints of school enrolment, quality and relevance. UNESCO (2012), is of the view that youth apprenticeship in the labour market ensures educative work experiences, increase earning and educational attainment, and make school more meaningful. At the same time, for the past decade employers have been criticizing the work readiness of those they hire, complaining that many graduates of high schools, community colleges, and even four-year colleges do not possess the basic educational skills needed to learn on the job (Nsiah-Gyabaah, 2009). Every level of the educational system, including technical institutes, has been called upon to be more practical; more connected with the market for labour; and more in touch with the practical applications of research, technology, and basic academic disciplines (Grubb, 1996a). The inability of past trainees from the technical/vocational institutes to secure wage employment or be in self-employment and the inadequate linkage between the content of training and the world of work has called for the study of the topic "Comparing Informal Apprenticeship Training Centres and Technical/Vocational Institutes".

A casual observer of technical/vocational institutions in Ghana will observe that these institutions lack facilities and resources for effective technical/vocational training. Sometimes, they look more like an exhibition or a dusty museum. However, the opposite is the case when one visits the informal apprenticeship training centres. The growing mismatch between the products of Technical / Vocational Institutes and the skills needed for working life is the main focus of the study. It is against this that the study seeks to investigate the causes of the mismatch between Technical/Vocational Institutes and the Informal Technical/Vocational Apprenticeship Training Centres in Ghana.

II. LITERATURE REVIEW

A. History Of Technical/Vocational Education In Ghana

➤ *Technical/Vocational Education before and immediately after Independence*

It must be noted that even years before the arrival of Europeans into the Gold Coast, now Ghana, our forefathers were engaged in indigenous system of education. This system for the purpose of this study shall be referred to as the 'Traditional Education system.' It involved the transmission of vocational and technical skills such as farming, carving, hunting, weaving, pottery, smiting etc. through observation, imitation and direct instruction from master craftsmen (Annoh, 1995). This system continued until the Dutch arrived in 1940. The Dutch made every possible effort to include technical skills to the training of the local people they recruited as soldiers. According to Mac William and Kwamena Poh (1978), apart from enlisting them (local people) as soldiers, they trained them as masons, carpenters or bricklayers." Industrial establishments were opened in Christiansburg Castle which provided courses for joiners, carpenters, blacksmiths, locksmiths, shoemakers and bookbinders. These not only became self-supporting, but by that steady output of craft men caused a general improvement in the standard of living particularly in building industry (Mac William & Kwamena Poh, 1978).

As far back as 1857, the Basil Missionaries opened an industrial school in the Christiansburg to promote technical training in teaching technical skills such as handicrafts in their schools. The trade schools they opened at Abokobi, Aburi and Akropong taught skills such as joinery, shoemaking, carpentry, bookbinding, and ironworks (Annoh, 1995). Besides the Basil Missionaries who promoted industrial training, a little mention is made of the Wesleyan Missionaries who taught a few skills in their schools in the course of schools and chapel building. The Bremen and the Catholic Missionaries also contributed to promoting technical instruction. The Bremen placed much emphasis on the teaching of building construction and the Catholic established a book binding centre at Saltpond, a printing and carpentry centre at Cape Coast and a woodwork centre at Elmina. In addition to these Missionaries, the British government through its appointed Governors in the early part of the twentieth century made efforts to promote the teaching of technical skills. In 1908, an education Committee was set up by Governor Roger to consider matters in connection with education in the Gold Coast. The

committee's recommendation resulted in the opening of the Accra Government Technical School in the Gold coast (Guggisberg, 1925).

There was a great expansion in Technical Education at a lower level by the opening of government trade schools in 1922 at Asante Mampong, Kibi, Asuansi and Yendi. Just before independence, Technical Education was neglected due to lack of money for equipment. Besides these, there were fewer opportunities for making use of technical skills than there is today. Technical / Vocational Skills was revived in our schools when skilled labour was required to man the industrial economy that had linked the nation to the world at large.

➤ *Technical/Vocational Education from 1951*

The Accelerated Development Plan for Education (Gold Coast, 1951) which was implemented in January 1952, aimed to expand education in all sub-sectors with a clear emphasis, however, on the expansion of primary and middle schools (Foster, 1965a). However, a report in 1948 from the Watson commission questioned the wisdom of expanding primary education too quickly (Gold Coast, 1948). It argued for a "soundly balanced system of education" (Gold Coast 1948a) and not one that was unbalanced in favour of one particular sub-sector. Vocational guidance schemes were introduced to tackle the problem of unemployment in the early 1960s (Foster, 1965a). However, contrary to popular thought that this vocational guidance could create jobs, the essential functions of this guidance was not to create new jobs parse, but to effect the development of better techniques for selecting graduates for entry into "the existing structure" (Foster, 1965)

With respect to Technical/Vocational skills training during the Nkrumah regime, it is undoubtedly true that apprenticeship training was going on and had been for long on going before Nkrumah. Acquah, (1958) noted that uneducated boys were absorbed in work as apprentices to fitters, shoemakers, carpenters, blacksmiths and other self-employed persons. (Acquah, 1978).

With the expansion of the primary education system under Nkrumah's Accelerated Development Plan of 1951 and the unemployed school-leaver problem that became more apparent from the late 1950s, and into the 1960s, it is certain that it was no longer "uneducated boys" who were going into apprenticeship training, but the graduates of the primary schools who could not find employment. Foster, (1965b) noted that by the mid-1960s.

Government policy towards this type of informal technical/vocational training was neglectful. Nkrumah viewed any part of the economy that was not geared up towards industrialization, not concerned with this national, state-led, economy as peripheral. However, in 1972, the Dzobo Educational Reform Committee of the National Redemption Council (NRC) produced their report entitled the Report of the Education Advisory Committee on the proposed New Structure and Content of Education for

Ghana (GoG, 1972) The Committee noted that the graduates of the current middle and secondary school system: have been found to lack the proper attitude and skills necessary to equip them to work with their hands, and to be willing to take up the type of practical work that is available in our society at that time. As a result, there was a high rate of unemployment and under-employment among middle and secondary school leavers (GoG, 1972)

Hence, the Dzobo Educational reform Committee suggested the introduction of a Junior Comprehensive Secondary (later called Junior Secondary School, - JSS: now Junior High School- JHS) which was hoped to "predispose the pupils to working with their hands as well as their minds" (GoG, 1972). New pre-vocational/technical subjects were recommended, including: Woodwork, Masonry, Metal work, Pottery, Automobile Practice, Craft (Basket Weaving), Home Science, Tailoring, Dressmaking and Catering. (GoG, 1972).

In 1986, the Evans Anfor Committee revisited the Junior Secondary School (JSS) concept to replace the existing Middle Schools initially mooted by the 1972 Dzobo Educational Reforms Committee. The 1987 reforms led to comprehensive curriculum reform. "Whereas the Middle School was a grammar school, in the JSS, pre-technical and pre-vocational education became universally part of the curriculum. (Donge, 2002). According to the Ghana Poverty Reduction Strategy (GPRS), it expects the role of non-government providers in Post Basic Education and Training (PBET) provision to increase: Education of the youth will be linked with the labour market through expansion of Technical and Vocational Education and Training (TVET), special skill acquisition programs and tertiary education, particularly through a greater role of private providers, (GoG, 2003). Presently, other private individuals and non-governmental organizations (NGOs) have also been playing complimentary roles in helping to provide skills training to the Ghanaian citizenry especially those in the informal sector (Agbenyo, 2010)

➤ *The Crisis of Technical/Vocational Training in Ghana*

Yangben and Seniwoliba (2014) posit that technical/vocational training in Ghana suffers from the same training crisis' that is seen in other developing countries, that limits the impact of TVET on the poor. Formal TVET in Ghana suffers from a lack of investment, and hence lack of equipment, textbooks, and training materials (UNDP/SSER, 2001). Grierson (1997) highlights a crisis of cost, relevance, and equity for formal technical/ vocational training. According to Grierson, there is a crisis of cost since "technical/vocational training is inherently expensive" (Grierson 1997). Technical/vocational training is quite expensive. Infrastructure, equipment, personnel, and overhead costs are relatively high. Over the last years, these costs rose by high dropout rates, low post-training placement, and under-utilized training facilities in many of the training institutions.

There is a crisis of relevance, since "there is a growing mismatch between the training offered by technical/vocational training programs and the skills needed for dynamic competitive markets". If we analyze the types of trades that technical/vocational institutions in Ghana are offering, we find that nearly all partners concentrate on few skills like masonry, carpentry, metalwork or tailoring. Sometimes the labour market for those professions is completely saturated. The problem of relevance for the technical/vocational institute is that in comparison with the millions of young men and women yearly entering the labour market in Ghana, only an infinitely small part has access to a formal technical/vocational training. It is clear that the majority of the youth in Ghana are not trained in formal technical/vocational institutions, but rather "on the job". Reasons for a lack of TVET relevance may include incorrect assumptions about the labour market or an inadequate needs assessment, lack of links between training providers and business, out-dated curricula and equipment, inability or unwillingness of training providers to adapt to change, and the delivery of training for the wrong reasons (Yangben & Seniwoliba, 2014). There is a crisis of equity, since "technical/vocational training programs are often difficult to access and use, especially for those in greatest need of self-employment skills" (Grierson 1997). Issues of cost and equity are obviously linked. Grierson (1997) talks of a 'crisis in equity' where youths are not presented with suitable opportunities to further obtain technical/vocational education and training.

III. METHODOLOGY

This study was conducted using a descriptive study approach. The population for the study is made up of teachers and students from three related departments; The Departments are Diesel and Heavy-Duty Mechanics, Motor Vehicle Mechanics and Electrical Installation of the Kumasi Technical Institute and apprentices and their master craftsmen of selected Informal Apprenticeship Training Centres (IATC), in Suame Magazine. A total of 24 tutors from three related academic departments of Kumasi Technical Institute and 15 craftsmen from the IATC were selected through purposive sampling. This sampling method was considered appropriate because of the need to ensure that the relatively underrepresented trades in the formal and informal strata are fairly included in the study. In the case of the students' and apprentices, a total of 50 students from the three departments as well as 50 apprentices from the IATC were drawn through the disproportionate stratified random sampling technique. The reason for employing this sampling method was to ensure that the few female students and apprentices in the actual sample were included in the study. More so, 38 graduates from the formal sector, who offered one of the three programme captured as well as 32 of their counterparts from the informal sector were also included in this study. Open and close ended questionnaire was the main instrument for the study. However, in the case of illiterate apprentices and master craftsmen, the researcher used interview method to capture their responses.

IV. RESULTS AND DISCUSSION

The results of the survey indicated the effectiveness of the related instruction of each programme as indicated by the apprentices, students, master craftsmen, tutors and graduates of the two programmes. In the following

➤ Demographics of Students' and Apprentices

Table 1:- Sex Distribution and Area of Related Training of Students and Apprentices

Area of study (Courses)	Students in formal institutions		Apprentices in the informal sector	
	Male (n = 47)	Female (n = 3)	Male (n = 49)	Female (n = 1)
Diesel and heavy-duty machine	20 (40%)	0 (0%)	20 (40%)	0 (0%)
Motor vehicle mechanics	14 (28%)	1 (2%)	15 (30%)	0 (0%)
Electrical installation	13 (26%)	2 (4%)	14 (28%)	1 (2%)
Total	47 (94%)	3 (6%)	49 (98%)	1 (2%)

Table 1 discusses sex distribution and area of related training of trainees. Majority of trainees from both formal and informal training programmes are males. Diesel and Heavy-Duty Mechanics do not have any female student or apprentice. Electrical installation has 13 (26%) males and 2 (4%) females in the formal training institute. While in the informal training centres, 14 (28%) males were studying electrical installation with only 1(2%) female apprentices. It can be concluded that enrolment in some types of technical/vocational courses is often strongly gender biased. Many skills taught are culturally identified with one gender only.

investigative statements, details feelings and outcomes derived from the individual programmes is presented. Areas of concern included, curriculum and training methods, safety, duration of programme, graduates' satisfaction with their training programme and industrial success of graduates.

➤ Educational Qualification of Students and Apprentices

Table 2 below discusses educational qualification for formal and informal apprentices. For students acquiring skills through formal technical/vocational institutions, 80% (40) had Basic Education Certificate as against 72% (36) of those acquiring skills through informal apprenticeship. While 20% of the formal trainees had Senior Secondary School Certificate, 28% (14) of the informal apprentices had no academic qualification at all. This has implications for independent learning. All students of the formal system have the ability to learn new skills through reading and studying of books but as much as 28% of the informal apprentices can only depend on what they have observed or what they have been taught.

Table 2:- Educational Qualification of Students and Apprentices

Highest Educational Qualification	Formal students		Informal Apprentices	
	Frequency	Percentage (%)	Frequency	Percentage
BECE	40	80	36	72
WASSCE/SSCE	10	20	0	0
No qualification	0	0	14	28
Total	50	100	50	100

➤ Demographics of Tutors and Master Craftsmen

Table 3 below presents sex distribution of tutors and master craftsman. From the table, it is clear that all the tutors and master craftsmen who took part in the study were males.

As stated by Johnson and Adams (2004), many skills taught are gender biased. For example, domestic science and secretarial skills with females and industrial arts skills with males.

Table 3:- Sex Distribution of Tutors and Master Craftsmen

Sex	Tutors		Master Craftsmen	
	Male (n = 24)	Female (n = 0)	Male (n = 15)	Female (n = 0)
Diesel and heavy-duty mechanics	10 (41.6%)	0 (0%)	5 (33.3%)	0 (0%)
Motor vehicle mechanics	7 (29.2%)	0 (0%)	5 (33.3%)	0 (0%)
Electrical installation	7 (29.2%)	0 (0%)	5 (33.3%)	0 (0%)
Total	24 (100%)	0 (0%)	15 (100%)	0 (0%)

➤ *Educational Qualification of Tutors and Master Craftsmen*

Table 4 discusses educational qualification of tutors and master craftsmen. 75% of tutors from the formal technical institute hold fast degree in their related area of operation. 16.7% (4) hold Higher National Diploma with the remaining 8.3% (2) have General Certificate of Education, Ordinary and Advanced Levels. It is clear from the statistics that the formal sector has more qualified instructors than in the non-formal sector.

However, with the Master craftsmen, 13.3% (2) hold Higher National Diploma, 20%(31) also hold General Certificate of Education, Ordinary and Advanced levels, 53.4%(8) hold Senior Secondary School Certificate with 13.3% (2) in the categories of Basic Education Certificate and below. In spite of the calibre of tutors in the formal technical/vocational institutes one could saytutors with the required qualifications are many in the job market. However, they are hard to recruit and retain in the formal institutions.

Table 4:- Educational Qualification of Tutors and Master Craftsmen

Academic Qualification	Tutors (Formal Skills Training)		Master Craftsmen (Informal Skill Training)	
	Frequency	Percentage (%)	Frequency	Percentage (%)
First Degree	18	75		
Diploma in Education				
Higher National Diploma	4	16.7	2	13.3
GCE 'O/A' Level	2	8.3	3	20.0
SSCE/WASSCE			8	53.4
BECE and Below			2	13.3
Total	24	100	15	100

➤ *Tutors and Master Craftsmen Satisfaction on Safety Aspect of their Training*

It clearly shows that almost both tutors of formal training institutes and master craftsmen from the informal

training centres were of the view that their learners are taken through workshop safety and safety associated with specific skills or operations. In both cases, over 90% agreed that workshop safety forms part of the training curriculum.

Table 5:- Tutors and Master Craftsmen Satisfaction on Safety Aspect of their Training

	Tutors		Master Craftsmen	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Strongly Agree	19	79.2	12	80.0
Agree	3	12.6	2	13.3
Disagree	1	4.1	0	0.0
Strongly Disagree	1	4.1	1	6.7
Total	24	100	15	100

➤ *Perception of Tutors and Master Craftsmen on Adequate Time Allotted for Each Activity in Class/Shop.*

As seen from table 6 below, 91.7% of the students from the formal skills training institutions disagreed to the assertion that they had adequate time for workshop activities as against 100% (15) of the informal group who claim they have ample time to teach their trainees. This assertion of the informal crafts masters is questionable against the background that they only work when they have customers and any casual observer will agree that for most of the time they are idle.

Meanwhile, whether students of the formal sector are engaged in the workshop or not they might nevertheless be learning the theory or even practice through books. Besides, it is not easy to accept that the system with so much flexibility in work schedule can claim to have ample time for the preparation of apprenticeship as against formal system with well-organized timetable systematic approach to transfer of knowledge.

Table 6:- Perception of Tutors and Master Craftsmen on Adequate Time Allotted for Each Activity in Class/Shop.

	Formal Skill Training		Informal Skill Training	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Strongly Agree	0	0	15	80.0
Agree	2	8.6	0	0.0
Disagree	16	66.7	0	0.0
Strongly Disagree	6	25.0	0	0.0
Total	24	100	15	100

➤ *Instructors' Perception of Sufficient Preparation and Relevant Curriculum*

Findings from this study indicate that greater percentage, 66.7% of master craftsmen strongly agreed that their curriculum sufficiently prepares their learners for the job market as against 4.2% for formal skill training centres. In all, an average of 83.4% of the formal skill training programme gave a positive answer to this item as against 93.4% from the counterparts of the informal apprenticeship training centres. One tutor pointed out in an interview granted to him that, the content of the examination questions does not reflect on modern transmission system in the motor vehicle technology. However, their syllabus still lay much emphasis on the principles of carburetors which is now been replaced with electronic injection systems. This implies a section of the students of the formal skill training centres is trained in jobs that do not exist in the job market. There is a mismatch between the skill attained and those actually in demand. An observation at the formal technical/vocational institute also revealed that some of the courses are obsolete and with poor quality delivery. A course like Beaten Metalwork has no place in the job market due to the advent of die casting systems in the manufacturing industries.

➤ *Instructors' Level of Leadership Training in the Training Programmes*

Findings from this study clearly shows that both training centres lay much emphasis on leadership training. Generally, over 95.8% of tutors and 93.3% of master craftsmen agreed to this component of training. Further questioning on the provision of leadership training revealed the lack of evidence to support the claims of the informal training centres while the syllabus and content areas of leadership training programme of the formal sector supported the claims. Based on evidence and the inability of master craftsmen to list some of the content areas of leadership training leads to the conclusion that there is greater emphasis in leadership training in the formal training institutions than in the informal training centres.

➤ *Instructors' Perception on the Flexibility of Training Programme*

Further, on the issue of flexibility of the training programme, both sectors claim to have flexible programmes. While 79.1% of the formal training centres claim flexibility, the informal system of apprenticeship had 93.3%. Further investigation revealed that the formal training centres have fixed schedules and tutors not allowed to deviate with their students' work schedules. The informal training centres however, allow their apprentices to change their projects to match the skill used on the job. This makes the informal training programme a self-placed one that caters for the changing skills needed by the apprentices on daily basis.

➤ *Tutors and Master Craftsmen's Views on the Acquisition of Cognitive Skills*

Findings from the study also shows an imbalance in the acquisition of cognitive skills at the two training centres. It is evident that the informal training methods do not influence any form of cognitive skills. All the respondents (100%) of the informal sector responded negatively to this item while 87.5% of respondents from the formal training programme admitted the teaching of cognitive skills. This provides graduates of the formal training programme an effective medium for bringing about organizational and productive innovations. The students of the formal training programme stand the chance to solve problems through critical thinking. Hence, students of the formal training centres are better placed to work with least supervision than their counterparts at the informal training centres who only acquire skills through imitating their master craftsmen. The scope of operation is therefore limited when one considers the practices of the informal training programme. The level of operation of the informal apprentices is dependent on the ability of their master craftsmen.

➤ *Views of Tutors and Master Craftsmen on Sufficiency of Training Length of Their Programmes*

Findings from this study provide an evident that more tutors and master craftsmen are of the view that the length of training for their learners is adequate to prepare them for the job market. All (100%) the master craftsmen agreed to this item. 83.3% (20) of tutors from the formal training programme were also in agreement. However, it is an established fact that apprentices of the informal training programme use most of their initial period of training to run errands for their master craftsmen. Sometimes, these apprentices are made to perform duties that are irrelevant to the trade for which they have been recruited. The above analysis renders the responses of the master craftsmen questionable.

➤ *Students'/ Apprentices' Satisfaction with Their Programme Type*

Responses of all students and apprentices with their programme are reported in *table 7*. Both trainees from the two programme types indicated that they are satisfied with their programmes ability to prepare them for the fastest growing job market. All (100%) of the apprentices agree that they are satisfied with 989c of the formal training programme claim to be satisfied with their programme. However, respondents from the formal training programme suggested that there is too much theory and that there should be more 'hands on' projects at school to adequately prepare them for the job market, which indirectly implies that the formal system is not able to adequately prepare their trainees for the job market.

Table 7:- Students'/ Apprentices' Satisfaction with Their Programme Type

	Formal Skill Training		Informal Skill Training	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Satisfactory	49	98.0	50	100
Not Satisfactory	1	2.0	0	0.0
Total	50	100	50	100

➤ *Involvement of Vocational Niche Market in Selecting Instructional Aids*

It is evident from this study that the formal Technical/Vocational institutes do not consider what is needed in the job market before structuring the content of their training. One tutor from the formal technical/vocation instituted pointed out that the content of their examination does not cater for the modern transmission systems in the motor vehicle industry. He said their syllabus still laid much emphasis on the study of carburetors, instead of electronic injection systems. All the 24 tutors who took part in the

study disagreed with the assertion that their training is linked to the niche market.

On the other hand, the master craftsmen surveyed, demonstrated a different view about the statement. Almost all (93.3%) agreed to the statement. Only one (6.7%) disagreed with the statement that they consider skills needed before given them out to the apprentices. In spite of the responses from the master craftsmen, employers still complain about the inability of apprentices from the informal training programme to perform well enough in the use of computers, communication, and teamwork practices.

Table 8:- Involvement of Vocational Niche Market in Selecting Instructional Aids

	Formal Skill Training		Informal Skill Training	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Strongly Agree	0	0.0	5	33.3
Agree	0	0.0	9	60.0
Disagree	21	87.5	1	6.7
Strongly Disagree	3	12.5	0	0.0
Total	24	100	15	100

➤ *Employment Status of Graduates by Programme Type*

This study investigates the employment status of graduate from both sectors based on their programme types. On the issue of full-time employment, graduates of both programmes were employed full-time. However, there were slightly more of the informal graduates (94.8%) who were employed full-time than those from the formal sector (81.2%). A potential reason for the difference is that some of the graduates from the formal sector are unwilling to take up employment in the maintenance shops showing a preference for government desk jobs, consistent with their socio-economic backgrounds.

informal apprenticeship training centres. Similarly, 86.8% of the graduates from the informal training programme reported that their employment is directly related to their training, while graduates from the formal training programme recorded 37.7% for directly related employment. This disparity confirms the fact that formal technical/vocational institutes ensure that skill training is not a dead end. It allows well performing students to proceed into higher education. This exposes trainees to divergent fields of study and propels most of the graduates from the formal sector into variety of occupations.

➤ *Related Employments of Graduates by Programme*

On the issue of how directly related the full-time employment was to the training they received, graduates of the informal apprenticeship were directly employed in training related jobs than their colleagues from the formal sector. 37.5% of the graduates from the formal training institutes are currently employed in firms outside their course of study compared to 7.9% of graduates from the

Graduates of the informal sector are restricted to their areas of operation since their training did not expose them to variety of skills. This confirms a World Bank's report on employers' perception of industry Training Institutes in Karnataka that technical/vocational courses not base on narrow specialization. Technicians should be trained through interacted courses dealing with two or more skills and be capable of managing three or four operations at a time (World Bank, 2002).

➤ *Job Title of Graduates by Programme*

Table 9:- Job Title of Graduates by Programme

Employment status	Formal Training Centre		Informal Training Centre	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Service manager	2	6.25	1	2.6
Shop foreman	0	0.0	8	21.1
Technician	18	56.25	26	68.4
Other related position	12	37.5	3	7.9
Total	32	100	38	100

Table 9 discusses job title of graduates by programme. Concerning graduates’ designation in their jobs, the responses show 6.25% of the formal technical/vocational graduates have moved into supervisory and management positions with an additional 56.3% employed as

technicians. However only 2.6% (1) of the informal apprenticeship graduates had gained employed in management and supervisory positions with as additional 68.4% (26) employed as technicians.

➤ *Graduates' Satisfaction with Their Training Programme*

Table 10:- Graduates’ satisfaction (in percentages) with their training programme

	Statement	Informal Skill Training				Formal Skill Training			
		SD	D	A	SA	SD	D	A	SA
1	The programme motivated me to learn skills related to my job	0.0	6.3	87.5	6.3	5.3	21.1	71.1	2.6
2	I have gained additional confidence in my professional capacity as a result of the training programme	0.0	3.1	50.0	49.9	0.0	5.3	78.9	15.8
3	I feel that the training programme has helped to prepare me for a higher-level position in industry	6.3	9.4	53.1	31.3	2.6	10.5	73.7	13.2
4	The process of setting up learning objectives as the basis for evaluation of the training programme is appropriate	0.0	6.3	81.3	12.5	21.1	42.1	31.6	5.3
5	My instructor was competent in helping me to achieve my learning objectives	0.0	18.8	65.6	15.6	5.3	23.7	65.8	5.3
6	The grading procedure in the training programme was fair	0.0	18.8	75.0	6.3	10.5	31.6	42.1	15.8
7	If I had the opportunity, I would enroll in the training programme again	3.1	12.5	78.1	6.3	31.6	52.6	13.2	2.6
8	The training programme is the best preparation available to prepare someone for a career as a technician	0.0	3.1	68.8	28.1	10.5	15.8	65.8	7.9
9	I would encourage friends/co-workers to enroll in the training programme	0.0	0.0	93.8	6.3	15.8	36.8	47.4	0.0
10	Adequate time was devoted to hands on experience in the training programme to properly prepare me for a career in repair works	0.0	0.0	90.6	9.4	18.4	23.7	52.6	5.3

As seen in table 10 above, on motivation, both graduates of the formal and informal apprenticeship training agreed that their programme motivated them to learn skills related to their jobs. While the informal sector recorded 93.8% in agreement, 73.7% of their counterparts from the formal sector also agreed. These responses are quite different from what the tutors and the master craftsmen perceived. This study established that some aspects of the syllabus for the formal training institutes are obsolete and therefore the response of graduates from the formal training institutes is questionable.

Both graduates of the formal and informal sectors agreed that the training programmes they went through enabled them to gain additional confidence in their professional abilities. The percentages stand at 96.9 and 94.7 for informal and formal sectors respectively. This assertion

contradicts what has been discussed under table 10, which clearly shows that the trainees of the informal skill training centres lack the required cognitive skills that can facilitate problem solving through critical thinking. This is confirmed by the “try-and error” approach of solving at their workplaces.

The preparedness of graduates from both sectors for a higher-level position in industry can be linked to discussion under table 17 where only 6.3% of graduates from the technical/vocational institute have moved into supervisory position with 2.6% for their counterparts from the Informal training centres. This contradicts the responses of item 3 under discussion that 84.4% of graduates agreed their training programme has helped to prepare them for higher-level positions in industry. In actual sense, the numbers of graduates’ from both sectors who are in management

positions are few and therefore the responses are different from actual. Whereas 93.9% of graduates from the informal sector agreed that the process of setting up learning objectives is appropriate, 36.9% of their counterparts from the formal sector agreed.

Moreover, further questioning into the set objectives of the informal skill training did not give any positive sign of well-formulated objectives. Their ultimate goal is to be able to under any job that is brought to their shops through every possible means. The formal skill training centres have specific behavioural objectives set for each unit of study. The responses obtained are questionable.

Generally, both graduates from the two training centres expressed stronger agreement with their instructors' ability to help them achieve their objectives. Whereas graduates of the informal sector indicated a stronger interest in encouraging their friends to enroll in informal apprenticeship, only 47.4% of their counterparts agreed to encourage their friends to attend formal technical/vocational institutes. This has implications on the fact that some students are trained in jobs that do not exist. Some courses at the formal training centres are obsolete and they create mismatch between the skills attained and those actually in demand at the labour market.

The greatest difference between the two programmes was their satisfaction with their 'hands-on' experience during the period of their training. While on the average, virtually all respondents of the informal apprenticeship programme graduates agreed that hand-on experience was adequate, only 57.9% of the formal sector graduates agreed with the statement. These results directly match with what their tutors and master craftsmen perceived on the adequacies and inadequacies of 'hands-on' training at their training centres. Additionally, these results were confirmed the issue raised by students of the formal training centres that there is too much theory and that more hands-on projects should be fused into their curriculum to prepare them adequately for the fastest growing job market.

V. CONCLUSION

The results of this study were formulated by conducting an independent evaluation of the impact of the programmes studied. It compared formal skill training at the technical/vocational institutes with the informal apprentice training programme. The objective is to investigate into the extent to which informal apprentice training match the formal institutional training strategies provided in modern technical/vocational institutions.

The general, curricular of the two programmes were assessed in relation to demographic variables (curriculum and training methods, safety hands-on projects, graduate satisfaction with the training programme and industrial success of graduates). Each method of curriculum had its own degree of success and/or satisfaction about the programme.

RECOMMENDATIONS

This study recommends that the Council for Technical and Vocational Education Training (COTVET) and the Technical Examination Board should incorporate more hands-on projects in the technical/vocational institutes to complement the theoretical curriculum that is already in place. The hand-on projects would help familiarize the students with job related duties as well as give graduates practical knowledge required for the world of work. Also, the Technical Examination Board should revise the curriculum for the formal technical/vocational institutes to correspond with daily work on the job.

The National Association of Garages must also, liaise with the authorities of Intermediate Technology Transfer Units to mount evening classes for informal apprentices in order to incorporate some level of theory to support the hand-on projects at the maintenance shops. In addition, master craftsmen should change scheduling/curriculum to accommodate the informal apprentices with more time for completing projects at their shops. The system of wasting the early period of the apprenticeship in running errands should be minimized to improve early acquisition of skills.

This study further recommends future studies to have an in-depth study of school mapping to assess the available tools, equipment, and materials in use at the two training centres. This exercise will be of great help to policy makers of skill training in Ghana. Again, a study into the direct involvement of industry in the selection of skill training methods be conducted to improve skill training in Ghana.

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