

Quality Education for Qualified Workers

Conference Report

Conference held June 11-12, 2013, at Chances Hotel, Ho



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1. Executive Summary

Skilled workers are a precondition for sustainable economic growth and a future industrialization of the country. Any country has barely progressed without technical and vocational skilled workers. Countries such as Germany have very low youth unemployment¹ because about 70 per cent of their youth go through Vocational education.

For any country to industrialise, it must first have an appropriate technical and vocational training programme in place to be able to feed industries with skilled labour. Thus creating a sustainable workforce with skills tailored to the needs of industry.

Vocational training in Ghana faces lots of challenges with equipping young students or trainees for the world of work. In theory, the curricula of the training centers in Ghana should focus on 30 percent theoretical and 70 percent practical training for a specific profession. In reality, the schools have no other choice than to do it the other way around due to limited resources (competent teachers and equipment). On the streets, the informal workers (almost 90%) are going through a minimum of education at the workplace, learning from someone who also learnt his/her profession “by doing”.

However, the country needs to industrialize to sustain the economic growth in future which is balanced and focused on value-added products. In order to achieve this shift or transformation, the workers need to have certain skills to produce high quality products which can lead to a good reputation of Ghanaian products nationally, regionally and internationally.

It was therefore at this backdrop that the Friedrich-Ebert-Stiftung in conjunction with giz, the German Chamber of Commerce and other stakeholders organized a two-day conference on the theme “**Quality Education for Qualified Workers**”. The conference which was held at Ho (Volta Region-Ghana) brought together civil society organizations, educationist, parliamentarians, government, ministries and agencies whose mandate bothers TVET in Ghana.

The following are some of the general observations and conclusions made at the end of the conference:

1. Public education needs to be embarked upon to create a positive image for TVET in Ghana
2. Government must create a deputy ministerial position exclusively for TVET (preferable at Ministry for Education)
3. Rebranding and resource allocation of Technical Institutions
4. Module Technical Institutions should be built to enhance the image of TVET
5. Industry should be much involved in the training of students to ensure that graduates become relevant to industry.
6. The study of grammar courses are important to TVET and should be incorporated to TVET programmes
7. Technical institutions should develop innovative way to solving the problems of their immediate communities to help generate fund for their institutions (sale of products produced by students; contracts with companies)
8. Successful TVET graduates should be awarded annually

¹ Youth Unemployment Rate in Germany 7.9%, Spain 55%, France 26.5%, UK 20.6% (youth defined people between 15 and 24)

9. A TVET week should be marked annually to showcase products and services of TVET
10. New technology should be introduced to TVET training.
11. Labs should be properly resourced so that student have practical experience on their programmes
12. There should be 30 percent theory and 70 percent practical work in TVET programmes.
13. The competency based training programmes should be adopted and used for the all TVET programmes.
14. Better education for teachers and further on-the-job-training.

2. Background and Methodology

Ghana's educational system has undergone several reforms over the years - from the colonial and immediate pre-independence system of elementary, secondary/technical vocational, post secondary and higher educational system.

Several attempts were made by our colonial masters to ensure that education is focused on the socio-economic development of the country. For instance, vision (2020) (1995 to 2013) placed emphasis on science and technology, with the aim also of making education more relevant to the socio-economic realities and national aspirations. The GSGDA (2010-2013) targeted infrastructure and promotion of linkages with industry. This plans catalogue piecemeal approach Ghana has used in dealing with its human resource needs for national development and has resulted in the marginalisation of tertiary education in the absence of a long-term human development strategy, mismatch between educational outputs and labour market and the continuing struggle to make tertiary education relevant and responsive to the demands of the economy.

Though Ghana has shown much concern for Vocational and Technical Education through its laws, little has been done to strengthen the sector. There are still no linkages between the Training institutions and Industry. Thus creating a gap between what is taught and what the industry needs are.

The conference which lasted for two days featured three main presentations. There were open discussions and group presentations by participants. The first presentation was on the topic, "challenges and status quo of tertiary education in Ghana". The second presentation which was in two parts focused on "vocational and technical training in the formal and Informal Sector- Challenges and Solutions". The third presentation was on "Ideas for Vocational Training in Ghana.

Over thirty-five (35) participants from government institutions, ministries, civil society, parliament and international agencies took part in the conference. Participants were allowed time to make inputs to all presentations. Participants were also allowed to choose their own working groups. The groups discussed selected topics under the guide of a moderator. The groups were allowed to do presentation and other conference participants were allowed to ask questions and make inputs into the presentations.

3. Opening Session

Daniela Kuzu, Resident Director, FES

In her opening address the Resident Director of FES encouraged participants to engage in an open and honest discussion. She urged participants not to shield the truth when contributing to the discussion since the results of the conference will go a long way to improving TVET in Ghana.

She also sounded the clarion call for Ghana to take education seriously, and was surprised that Ghana was not channeling much of the oil revenue to education. As regards the area of technology transfer, she remarked that there were a lot of new technology pouring unto our shores and we must train our people to take full advantage of it. She also stressed on the fact that we must make education more relevant to industry and shift our attention to quality and not quantity.

She made an observation that there is no linkage between industry and educational institution. She wished the participants the best in the deliberations and thanked *giz* and the *German Chamber of Commerce* for agreeing to be part of the conference.

Hon. Reship Pelpuo (Minister for Private Sector Development).

The Hon. Minister remarked that without quality technical education, the economic fortunes of any country could not be sustained. He said that Africa is poor due to lack of quality education available to the population. He said that all the developed countries are where they are today due to the education level of the citizenry.

Education according to him should not only be the concern of the government but also the community and the individual families within the community. The more a family is educated the higher their chances to be more successful. He said that there is more foreign direct investment into Ghana alongside the transfer of technology and so the population needs to be educated to take full advantage of these opportunities.

On the issue of unemployment he mentioned that, companies are looking for graduates to employ whiles graduates are also looking for jobs, and this problem is because the graduates do not possess employable skills which meet the industry needs.

4. Challenges and Status Quo of Tertiary Education in Ghana²

Key notes from presentation

Tertiary education in Ghana is defined as the education offered after secondary level at a university, polytechnic, specialized institutions, Open University and any other institutions to provide training that lead to the award of diploma and degree qualifications. Since 1992 to date the tertiary environment in the country has drastically expanded and has a total number of 138 accredited tertiary institutions in Ghana (see appendix A).

² Based on a presentation by Mrs. Esther Theresa Apaw Agbola, Dean of Ho Polytechnic

In theory, the curricula of the training centres in Ghana should focus on 30 percent theoretical and 70 percent practical training for a specific profession. Only about 3% of children enrolled into primary schools finally gained admission into public tertiary institutions compared to 30-40% for the corresponding age group in some developed countries. The gross enrolment ratio for tertiary education in Ghana is about 10%. The overall budget for education is 30% of the state budget so the expectations are that these investments must turn into a new knowledge generation.

The following challenges were identified with the current Tertiary Education in Ghana:

- The issue of “academic drift in tertiary education” is a serious challenge. For instance a situation where Polytechnics want to run same programmes like the universities. This is a major threat to Polytechnic education and defeats the main objectives of establishing the Polytechnics.
- Polytechnics are not well resourced and equipped to make them attractive to fulfil their requisite mandates to train middle level manpower, especially in the technologically based activities to enable them fill the competency gap in technology in Ghana’s economy.
- There are little lower technical institutions in Ghana (less than 30), there cannot be enough source of polytechnic students with the required technical background. Thus the high number of students in the polytechnics enrolled in the business and humanities programme compare to the sciences over the past decades.
- Academic staff in the tertiary institutions conducts little or no research as well as the introduction of academic programmes without reference to the regulatory procedures.
- New programmes developed by institutions that applies for approval comes with a strong voice about confirmed need but most of the newly developed academic programmes designed do not fit into national development plan.
- The applied sciences and engineering programmes with practical backgrounds are facing serious problems in terms of laboratory equipment to conduct their practical training and research in the various tertiary institutions in the country.
- The 38 colleges of Education that were created by the old teacher training colleges are under-enrolled.
- In the universities the (STR) ratio is as follows: 12 students per teacher in medicine, 18 students per teacher in engineering, and 27 in humanities. In the polytechnics 25 for humanities. (see appendix B)
- Tertiary educations in recent times have experienced very large increases in enrolment without adequate expansion of physical and academic infrastructure.
- Most public universities on their own make the choice of courses of which prospective students should offer rather than making the students pursue courses of their own interest.
- Employers always complained about relative incompetence of our graduates and their inability to perform on the job.

- In terms of quality training of students the current statistics shows that both the private and public universities are focused more on training at diploma and undergraduate levels with few post graduate and research output.

To help students to acquired hands on skills in the relevant fields, there is the need for them to engage in practical training in the industry or a requisite professional set up as part of academic training. Tertiary educations need to be transformed in Ghana thus the traditional colleges and universities remain relevant and lead in knowledge production for national development. Ghana as a nation can do better than the current status quo. Ghana’s economy and development could experience substantive growth if the necessary steps are taken to solve the systematic problems plaguing our educational system.

5. Meeting the Demands of Industry to Foster Economic Growth³

Key notes from open discussion:

- Industry is the broad spectrum of opportunities available for economic growth
- The demand of industry is skills, competence, capacity, specialised areas, multiple skills, ability to perform, formal education.
- A good percentage of revenue from the oil and gas industry should be dedicated to education to make them more attractive both to industry and society.
- Both private and public vocational institutions should be supported by government
- Industry wants government support to attract it to create training opportunities for students.

6. Vocational and Technical Training in the formal and informal sector – Challenges and Solutions

6.1. FORMAL SECTOR⁴

Key notes from presentation

The formal TVET sector in Ghana comprises of two main providers

- (a) The Ghana Education Service
- (b) The National Vocational Training Institute

TVET operates as one of the ten Divisions of the GES and has the mandate to provide Pre – Tertiary Technical and Vocational Education and Training, carry out assessment, and provide certification. It also offers direct supervision over all the forty five (45) Technical Institutes under the GES.

³ Moderated by Seth Asamoah, Coordinator for Assessment and Certificate, COTVET

⁴ Presented by Mr. Ezeh, Ghana Education Service

Challenges

Weak supervision, monitoring and oversight responsibilities of the Private Providers were major challenges that were identified at the directorate level. Also the difficulty in coming out with relevant statistics to assist in planning, irregular sensitization strategies, lack of in Service training, no tracer studies and weak linkages with Industry were also observed as challenges at this level.

Within the school it is observed that poor quality students, uninspiring teaching methodologies and poorly equipped workshops were some challenges that the institutions face in training TVET students. There were also issues on non availability of training consumables, large class sizes, no science laboratories, poor supervision at all levels and uncomfortable levies that swell up school fees.

The following were also some challenges that were identified at the school level:

- Teachers without adequate hands – on skills
- Poor approach to entrepreneurial skills training
- Uncompetitive management capabilities
- Weak linkages with industry
- Unsuitable membership of Boards
- No encouragement from Government on school based projects
- Poor and neglected infrastructure in some cases
- Obsolete equipment/machinery
- Inadequate funding
- Poor societal perception
- Inadequate industries for work place learning

Solutions

Creation of a Directorate of TVET within the Ministry of Education or a Deputy Minister will help focus more attention to the sector. The following were some suggested solutions:

- Total implementation of Government white paper on the proposals made by the Anamuah Mensah Committee
- Increasing funding of TVET to enable the many schedules for quality training to be rolled out
- Retraining and orientation of Institutional Managers to enhance effective supervision
- Funding for training consumables must not be delayed any longer; the same applied to service grants
- Training providers must be helped to understand trends in the 21st century
- Equipping workshops with relevant machinery

- New approach to recruitment and training of TVET Teachers
- Higher relevant TVET qualification for leaders in the sector
- Well coordinated sensitization programmes
- Consideration of the reward system vis-à-vis the TVET qualification
- Descent infrastructure necessary for Technical Institutions
- Special incentives for females in the male dominated trade areas
- Restructuring of Entrepreneurial skills training
- Effective monitoring of training providers and many others

Ongoing Interventions

The following are some interventions and on-going programme aimed at improving on TVET in Ghana:

- An Austrian facility to upgrade five Technical Institutions.
- A South Korean project to upgrade training facilities at Accra Technical Training Centre
- An AfrDB project to upgrade ten Technical Institutions (TIs) and two Polytechnics
- An Israeli facility to upgrade 19 TIs under GES and 11 TVET centres under the Ministry of Youth and Sports
- There is a legal regime now for TVET
- Various training frameworks are now in place
- Looking for funding for a proposed TVET week celebration to promote the study of technical programs and to showcase the successes of technical education in Ghana

However, participants have identified lack of communication and coordination within state institutions.

6.2. INFORMAL SECTOR⁵

Key note from presentation

In Ghana, about 300.000 youth receive skills training in the informal sector per year and about 70.000 students are trained in public and private technical and vocational schools. The average duration for the training is 3 years, but may vary (by sector and individual). Before training there is usually a verbal or written agreement between Master and apprentice/parents.

There is a fee payment by the apprentice ranging between GHS 50 to GHS 700 and an average of about GHS 200 for the period. There are no formal entry requirements and

⁵ Presented by Dr. Jeanette Burmester, Ghana Skills Development Initiative (GIZ)

certification and testing is by the Master or Madam but in many sectors also by trade associations.

The following are identified as strength of the informal sector:

- Self-regulated and self-financing system
- Open to vulnerable groups and drop-outs
- Demand oriented and practical training
- Low cost and possibility to earn little money
- Strengthens informal sector competitiveness ('cheap labour)
- Acquisition of entrepreneurial skills

Partners and Interventions

- Advise COTVET in the field of TVET policy development with regard to the informal sector
- Support COTVET in the development / revision of CBT standards for the informal sector and in the development of curricula and teaching materials
- Strengthen Trade Association's capacity to coordinate the apprenticeships in their sectors, including: documentation, monitoring and certification of apprenticeship
- Skills upgrading of MCP according to standards
- Supporting vocational schools organising and delivering short courses for apprentices based on CBT standards including, school management training and teacher training.

Ghana Skills Development Initiative's approach to strengthen and modernize the apprenticeship system

Improving the quality of the traditional apprenticeship system in the informal sector by linking MCPs and apprentices with the formal TVET system in selected pilot sectors and regions

Challenges with this approach were identified as the danger of *over* formalizing or overwhelming the informal sector (especially by the attempt of a National certification according to NQF). And also ownership and coordination by TAs were crucial for success, not all TAs have the necessary structures and resources for this mandate.

The handling of illiteracy, limited capacity of schools to organize and handle or offer additional training courses, teachers not experienced in delivering training to informal sector and teachers and Masters bridging the technological gap were major concern to this approach.

The following are core challenges observed in the sector:

- No standardization

- No nationally recognized certification
- No minimum criteria for MCP
- Quality of training varies strongly
- Difficulties of coping with technological change
- Danger of exploitation of apprentices

7. Ideas for Vocational Training in Ghana⁶

The characteristic feature of the system in Germany is that the provision of knowledge and practical skills is linked to the acquisition of the required job experience. This ensures that training proceeds under the same conditions that the trainee will encounter when practising his chosen occupation. On the job, a trainee will be able to learn how to handle the constantly changing demands of the job. In addition he knows how to appreciate the variety of social relationships that exist in the work life.

Also, learning by doing will give a sense of achievement and provide a special source of motivation for the trainee. It promotes independence and a sense of responsibility, which are prerequisites for the quality in a developed industrial country. By tackling concrete tasks under true working conditions, the trainees can give evidence of the knowledge and skills they have acquired and experience the success of their efforts.

All the stakeholders like companies, politicians and the trade unions are convinced of the system. This is because there is a direct link between training capacity and the demand for skilled labour. Therefore the negative consequences of misdirected planning are avoided. All players are important parts of the system. We call this co-determination in a consensual way.

VET in Germany lasts from 2 to 3.5 years. It takes place 3 to 4 days in a week on the job in the companies and 1-2 days in a week in vocational schools

Further key elements of German VET are:

- Public private partnerships (PPP)
- Without contract between company and trainee there can't be training and a company is not forced to hire trainees
- Companies are directly involved in the training if it comes to the
 - Input description and curricula development
 - Outcome description and type of examination
 - On the job training
- 1.4 million trainees in the dual system in 2011
- 350 training occupation

⁶ Presented by Patrick Martens, AHK, German Chamber of Commerce to Ghana

- Legally regulated on ordinance level with national and not regional – validity

Following are the advantages of German VET Dual Training for companies:

- Gives them a strong influence on content and organization of the training
- Promises a return on investment already during the second half of the training period as trainees are integrated in the work process from the beginning becoming more and more productive
- Secures the skilled labour the companies need
- Reduces costs of recruiting a settling-in
- Increases motivation and loyalty of employee to the company
- Improvement of their competitiveness
- Is a way to show and prove corporate social responsibility

The following advantages of German VET Dual Training for the young people or trainees:

- The training is directly employment market related, so it gives them best prospects on the labour market even if they don't want to keep on working in the company that trained them – “employability”.
- Still there is a high probability to be further employed by the training company.
- The qualification is certified – by the training company, by vocational school and by Chamber of Commerce (Certificate acknowledged nation-wide)
- Social skills are included. They learn to behave, to communicate, to solve, to support, to work in teams successfully.
- They gain social acceptance and standing with what they have achieved.
- Trainees get paid by the companies.

Advantages for the state:

- Lowers the costs for vocational training as the companies pay a higher share of the cost of training.
- It brings about a better match of VET and labour market or companies needs lowers rate of (youth) unemployment (in Germany in May 2012: 7.9 %)
- Improves – on the long run - standards of qualification levels, labour output quality and added value of an economy
- Strengthens competitiveness of an economy and raises turnover, profit, taxes etc.
- Causes at the end of the day less social tension

8. How can the Image of Vocational and Technical Education be enhanced?

The image of Vocational training in Ghana is chipped away. An education at a university is seen as much better than vocational training even if vocational training is necessary for certain jobs on the job market.

Currently, TVET is not enjoying a positive image among students, employers, parents, and the public at large. According to a study recently conducted by COTVET and the City and Guilds Centre for Skills Development, TVET is plagued by a variety of negative perceptions, which have been entrenched over the years.

As we say in communication, perception is truth. These are some of the negative perceptions of TVET:

- TVET is for school “drop outs”
- TVET does not pay well
- There are limited employment opportunities in TVET
- TVET graduates are not well prepared for the job market
- TVET is the preserve of people from the lower rank of the socio-economic ladder

The truth is that, there is no easy way of erasing perceptions that have been built over years.

However, there could be certain approaches that must be used together:

- The employment of a strategic communications campaign
- A sustained and collective effort from all stakeholders to resolve the many systemic problems hampering quality TVET delivery in the country.
- Improve TVET financing (collaboration between Training Institutions, Industry, and Government)
- Encourage professionals to enter the classrooms
- Ensure that training is demand driven
- Make TVET a national priority
- Clear qualifications framework
- Strong Apprenticeship system for both the formal and informal sectors
- Re-brand TVET
- Strengthen Guidance and Counseling in schools
- Organize skills competitions
- Use role models
- Career fairs
- Advertising campaigns

9. Instruments and necessary Changes to better Vocational and Technical Education Training in Ghana

It was suggested that for the betterment of TVET in Ghana a directorate should be created within the Ministry of Education solely to deal with TVET issues. Agencies such as COTVET should be empowered and properly funded to enable them carry out their mandate. The appointment of heads of these agencies should be devoid of any political interference and should be based on knowledge and skills.

For effective training and support system, the functions of ITAC should be effectively implemented and a division for Research, Monitoring and Evaluation should be established. Research findings of this division should be made available to both public and private institutions. All aspect of the COTVET legal mandates should be implemented especially the ones that bother on examinations and certification. The management of the Skills Development fund should be in accordance with the mandate.

10. Financing better Tertiary Education

Quality tertiary education cannot be assured without proper funding. The following were suggested as ways of funding tertiary education:

- Revenue from the oil and gas industry could be used to fund tertiary education in Ghana.
- There should be a public education to entreat families with higher income (level has to be decided) to pay full fees for their wards so that the available resources left could be used to support poor students (solidarity system)
- There should be tax incentives for organizations that give out sponsorship to students.
- Corporate social responsibilities of companies should be geared towards education.
- There should be an Educational Insurance (Education Fund Act) to help pool resources towards the funding of education.
- Increment to the tax rate of GET Fund from 2.5 percent to 3.0 percent.
- There should be proper utilization of IGF by the various institutions
- Education should be a shared responsibility between government and parents

11. Improving the Linkage between Ghanaian Industries and Students of Vocational and Technical Training Centers

In Ghana majority of industries and companies that can help give practical skills to students are located in or around the capital, Accra. There is no structured linkage between the training institutions and Industries. Government does not give incentives to attract industries to giving opportunities to students for internships. Internship is not graded and so students do not give the needed attention to it.

Training institutions should create a capacity building opportunities for industry practitioners to help build and maintain a mutual beneficial relationship. Again, training institutions should involve industry in curriculum development. Industrial attachment should be graded by all training institutions.

Government on the other hand, should draw a national policy for industrial attachments and industries should be given tax incentives for the training of students.

How to tackle the Vocational and Technical Training

General observations and remarks

- Public education
- Rebranding and resource allocation
- Module technical institutions
- Liaising with industry
- The study of grammar courses are important of TVET
- Technical institutions should develop innovative way to solving the problems of their immediate communities to help generate fund for the institutions
- Successful TVET graduates should be celebrated
- A TVET week should be marked annually
- New technology should be introduced to TVET training.
- Labs should be properly resourced

12. Conclusions

The study and teaching of vocational and technical skill is a fundamental requisite for development and economic stability in any country. The general problem in the case of Ghana includes structural problems, (non-)involvement of industry, financial and low quality of teaching staff and students, unregulated informal sector amongst others. For sustainable development, much focus and attention must be dedicated to this part of our educational sector.

Government and all stakeholders must “walk the talk” to ensure that the country gets maximum returns in this area. For an economy with a large informal sector, it behoove on policy makers to draw up sustainable programme(s) so that the economic benefit of the informal sector is derived.

With the support of the German Chamber of commerce and FES, a working group will soon be formed and tasked to the full implementation of the outcomes of the conference on Quality Education for Qualified People.

Appendix A

Table 1: Type and Number of Accredited Tertiary Education Institutions

Types of Institution	Total Number
Public Universities	9
Public Specialized/Professional colleges	6
Chartered Private Tertiary Institutions	2
private accredited tertiary institutions	58
Polytechnics	10
Public Colleges of Education	38
Private colleges of Education	3
Public Diploma Awarding Nursing Training Colleges	15
Private Diploma-awarding Nursing Training Colleges	4
Total	

Source: National Accreditation Board, 2011

Appendix B

Table 2: Students /Teacher Numbers and Ratio in Broad Disciplines in the Universities 2010/11

Institution	Discipline	Enrolment	No of teachers	Student teacher Ratio	Norm
University of Ghana	Science	5,141	274	19:1	18:1
	Medicine	2,390	135	18:1	12:1
	Engineering	248	37	7:1	18:1
	Humanities	29,478	399	74:1	27:1
University of Science & Technology	Science	8,874	264	34:1	18:1

	Medicine	1,927	99	19:1	12:1
	Engineering	3,961	113	35:1	18:1
	Pharmacy	825	33	25:1	15:1
	Humanities	10,197	166	61:1	27:1
University of Cape-Coast	Science	4,395	193	23:1	18:1
	Medicine	192	19	10:1	12:1
	Education	5,707	86	66:1	23:1
	Humanities	5,823	163	36:1	27:1
University of Education- Wineba	Science	6,102	113	54:1	18:1
	Education	2,042	65	31:1	23:1
	Humanities	6,501	163	40:1	27:1
University of Development Studies	Science	8,354	259	32:1	18:1
	Medicine	1,821	97	19:1	12:1
	Humanities	9,746	97	100:1	27:1
UMAT	Science	138	9	15:1	18:1
	Engineering	1,447	62	23:1	18:1

Source: NCTE 2010/2011 Academic year.