

Review

The role of stakeholders in building adequate competences in students for the job market

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Competency is the acquisition of appropriate knowledge, attitudes, personality traits and skills to efficiently perform work place roles in industry, commerce, management and administration. Job competency is so important that employers always seek for people with such qualities before they are employed. It is therefore incumbent on educational institutions to train graduates to acquire the needed knowledge and skills to make them fit for the job market. This paper looks at the role of stakeholders in building adequate competences in students for the job market. The paper focuses on four (4) key stakeholders namely; government, industries, academic institutions and teachers to provide the desired knowledge, skills and attitude in students. It outlines the role of these stakeholders in providing the desired competences to students, highlights their challenges and suggests strategies to overcome these challenges. Reference was also made to the training programme of Saskatchewan Institute of Applied Science and Technology, Canada; which if properly adopted could help in building the needed competences in students. The article was concluded with some suggested recommendations.

Key words: Competency based training, stakeholders, practical skills, competency, job market and technology.

INTRODUCTION

Tertiary education plays a key role in economical, social and political development of every nation and therefore proper training of students for national development cannot be compromised (Alam, 2009). According to the World Bank report (2000), higher education suffers inadequacy in quality delivery, resource allocation and budgeting which affect enrolment and training of competences among graduates, employment opportunities and global competitiveness on the job market and these have become a big challenge to developing countries. A document presented by JICA (2001) indicates that when the polytechnics were given the mandate of providing the middle level manpower; policies on staff development, training programs, quality assurance and accreditation issues were not properly developed and these brought about discrepancies between the products of polytechnics and the requirement of the industry. Polytechnic graduates are to

become middle level managers to propel the national development agenda forward. It was therefore not out of place when Netherlands University Foundation for International Cooperation (NUFFIC) – the Netherlands program for the institutional strengthening of post-secondary education and training capacity of the National Pipe Thread (NPT) - supported a project, “Building managerial and leadership capacity in Polytechnics in Ghana (2005 to 2009) to pave the way for quality improvement of Ghanaian polytechnics by providing training for polytechnic management staff.

The introduction and implementation of the Competency Based Training (CBT) by the same NUFFIC was also designed to equip lecturers with adequate skills to train students to acquire the needed competences for the job market. The evidence of inadequacy in polytechnic staff is a fact and that calls for ample training programmes to equip them for the task ahead. Studies have shown that the supposed middle level managers lack the competences to fulfill these relevant roles; no well structured educational and training programs are available to ensure a functional delivery of polytechnic programmes to train students to become competent for

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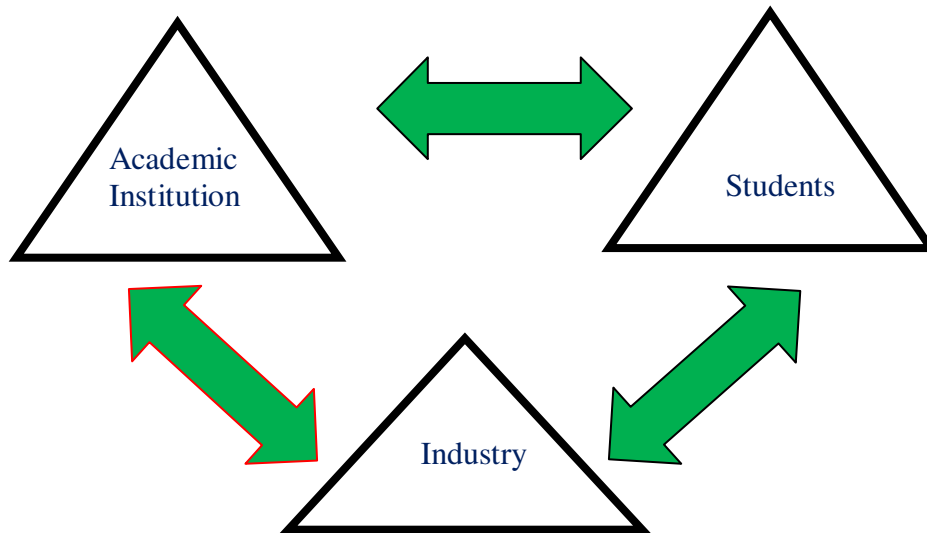


Figure 1. The three-way stream.

the job market (Vrije Universiteit, 2004). Stakeholders such as industry, academic institutions and government agencies therefore have a role to play in ensuring that the right competences are built among polytechnic staff and students (Alam et al., 2010). National Board for Professional and Technical Examination (NABPTEX), National Council for Tertiary Education (NCTE) and National Accreditation Board (NAB) cannot be ignored in this direction. The new educational system seems to have a bearing on this competency acquisition but enough structures have not been put in place to achieve that. The manpower structure of the nation demands a large stock of trained workforce including skilled labour, craftsmen, technicians and other middle level professionals for national development (Nsiah-Gyabaah, 2005).

The government white paper on educational reforms review committee, 2004; states that polytechnics would be resourced to run B-tech degree programs of which some of the polytechnics have already taken the lead on such directives. Miss Hannah Tetteh, minister for Trade and Industry has also emphasized the need to strengthen industrial attachment programmes in the country's institutions to build the human resource requirement of the country. She pledged her commitment to encourage stakeholders especially the industry to accept students for their attachment.

Why the need for competency building

According to the principle of CBT, competency is the use of knowledge, skills, attitude, and personality traits in an appropriate way to execute a professional task (Grit et al., 2006). Such competency can only be shown when an

opportunity is given to exhibit or perform certain professional tasks. Competency building is very important in every training institution especially technical and vocational institutions. It does not end there but rather a greater task is upon the polytechnics to produce graduates who will be competent for the job market. The need for competency building is very urgent and requires a concerted effort to build these competences among students. The urgent need to build competences among polytechnic graduates stems from the following reasons:

- 1) High unemployment rate;
- 2) Industries worried about graduates unemployable skills;
- 3) Graduates from the polytechnics do not meet the expectation of industries;
- 4) Very low entrepreneurial initiatives on the part of fresh graduates; and
- 5) Lack of access to modern equipment for training.

Unfortunately, the polytechnics alone cannot provide the needed training for students to make them competent and that is why there is the need for other stakeholders to partner the polytechnics most especially industry (Alam et al., 2009) (Magoha, 2003). Building adequate competences among students is a three-way stream which involves industry, academic institution and students. Without proper linkages of these three dimensional streams, it will be very difficult to achieve our quest for industrialization in Ghana (Figure 1). The link that exists within this stream cannot be separate; they are all interdependent. There cannot be academic institution without students and vice versa. Industry cannot also exist without qualified students trained by academic institution to work for them. Without proper linkage of

these three dimensional streams, it will be very difficult to achieve our quest for industrialization in Ghana.

Who are the stakeholders in competency building?

The following are among the many stakeholders who are to contribute to competency building;

1. Teachers (lecturers and instructors in the polytechnics);
- 2) Academic Institutions;
- 3) Industries; and
- 4) Government

Role of lecturers and instructors

Lecturers and instructors have a vital role in training students to be competent. The first point of training students is in the institutions and these establishments are to provide knowledge, skills and the right attitude in the students they train. The Polytechnic Law, PNDCL 321 in 1992 mandates all Polytechnics to provide tertiary education through full time courses in the fields of manufacturing, commerce, science and technology, applied social science, applied arts and such other areas as may be determined by the body responsible for higher education. It also encourages the study of technical education at the tertiary level, as well as provision of opportunities for development, research and publication of research findings.

Research conducted by Japan International Cooperation Agency (JICA, 2008) on technical and vocational education also confirms this mandate of the polytechnics to train and produce higher skilled technicians, managers and engineers. All these efforts are to facilitate Ghana's quest for industrialization, and lecturers and instructors, have no other option than to fulfill these directives (Alam et al., 2009). The polytechnic teachers are also mandated to teach, undertake research and offer community services among others. They are also to train, counsel, serve as role models to these students and promote professional competence, and maintain academic standard and excellence. The question then is; are the polytechnic teachers equipped enough to fulfill such mandates?

Role of the academic institutions

The training institutions have an important role to play by providing the enabling environment for lecturers and students to promote teaching and learning through the provision of the necessary facilities. In addition, management should collaborate with relevant organizations to help provide the competences in students through industrial attachment and lastly to provide the needed

support for staff development and training (Alam et al., 2010). Without proper execution of these roles by the training institutions, it is not likely to achieve the aim of building the required competences among students. Building the right competences among students will only be effective when the process for building the competences are identified and applied.

When little or no attention is given to the identification and application of the essential competences needed at industries and for self employment, then our training is unlikely to build the required competences for the job market. The introduction and implementation of CBT programmes in some of the polytechnics is to provide quality training, meeting the needs of industry and to create job opportunities for CBT graduates. If all stakeholders will play their roles effectively, then we will all be assured that Technical and Vocational Education Training (TVET) will stand the test of time.

Role of industry

According to Heintz and Sáez (2008), industry in a general sense is the production of goods and services in an economy which also refers to a group of enterprises (private businesses or government-operated corporations that produce specific type of goods or services. They are classified as 1) primary, 2) secondary and 3) tertiary industries.

Primary industry: This uses raw natural resources as major inputs; e.g. agriculture, mining and forestry.

Secondary industry: This type uses producer goods (final product of another industry) to assemble their product; e.g. construction and manufacturing industries.

Tertiary industries: They are those that provide services; e.g. retail stores, hotels, banks, media, hospitals, academic institutions and government institutions.

Industries are the only place for students to learn competences or execute competences learnt at school even though, some of the trainees after graduation could establish their own businesses. According to Nsiah-Gyabaah (2005), the Association of Ghana Industries (AGI) and Ghana Employers Association (GEA) have initiated a pilot project to organize industrial attachment for students in selected polytechnics in Ghana in collaboration with (NCTE), which aims at improving the skills of students. This is indeed a laudable idea and all the polytechnics are likely to benefit from such an initiative.

Already some of the industries have been playing their roles in ensuring that adequate competences are build in students by accepting them for industrial attachment.

Some of them also willingly accept students who are sent for excursions, demonstrations, practical activities, assessment and many more. Sometimes experts are invited from industries to give a talk to students on campus which some of them hardly turn down. However, industries could still play the following roles to help the academic institutions to train relevant, competent and competitive graduates who will fit easily into the world of work:

- 1) Experts from industry to accept more collaboration with the polytechnics to provide the desired training for staff and students;
- 2) Open their doors for polytechnic staff and students to acquire industrial experience;
- 3) Work together with the polytechnics as partners in research, development and dissemination of appropriate technology;
- 4) Assist the polytechnics to assess, review curricula and share information regularly; and
- 5) Provide certain equipment to the polytechnics for training of students.

A research conducted by JICA (2008) indicates that majority of TVET implementing institutions (60%) are of the view that there is lack of link between theory and practice in the current curriculum of TVET programmes and this was attributed to industries' non involvement in the curriculum development process (JICA, 2008). Some of the institutions also believe that there is a weak link between the training institutions and industry.

Role of government

Government has a very important role to play in ensuring the proper implementation of TVET in Ghana. The establishment of the Council for Technical and Vocational Education and Training (COTVET) by ACT of Parliament to coordinate and supervise all aspects of technical and vocational education and training in the country was in the right direction. The Minister of Trade and Industry, Miss Hannah Tetteh, willingness to support technical and vocational educational training through industrial attachment will help facilitate the work of COTVET. As suggested by Alam and Hoque (2010), the following are some of the roles government could play in ensuring that adequate human capacity is built for national development:

- 1) To provide financial supports to the polytechnics for competency building;
- 2) To supply equipment and infrastructure for competency building in technical institutions;
- 3) Provide incentives to encourage industries to train students on attachment;
- 4) To formulate policies to streamline industrial training

for both staff and students; and

- 5) To establish regional training centres to build students' competences for industry.

Need for training

Training and re-training is very important in every academic institution. Training is to give teaching and practice to somebody to bring such a person to a desired standard of behaviour, efficiency or physical condition. Agodzo and Songsore (2005) emphasized the need for training and re-training of all academic staff and such training will continue to be relevant as long as well structured industrial attachment and properly trained technicians to assist academic staff are not well established. A research conducted among 32 teachers in four (4) Polytechnics in Ghana namely: Bolgatanga, Ho, Tamale, and Wa revealed that most of the teachers do not have adequate training to make them competent. The research focused on lecturers from the Departments of Agricultural Engineering in the 4 polytechnics running Competency Based Training.

Interviews were conducted and questionnaires administered to discover the level of training received by these teachers, as they prepare for the CBT programme. The findings are as follows:

- 1) Most of the teachers enter the polytechnics without training in basic education and experience in teaching;
- 2) Newly appointed teachers are not taken through any form of orientation in teaching methodologies;
- 3) Deans, heads of departments and all other appointments are not given any training before assuming office;
- 4) Most teachers do not have any training until they decide to go for further studies which also depends on the availability of funds; and
- 5) Majority of the teachers also do not have adequate knowledge in basic computer, thus they do not use computer to teach.

The findings aforesaid confirm the need for training of academic staff to make them competent to offer essential training for students. Due to the many instructors in the polytechnics, technological advancement, introduction of higher programs (e.g. degree programmes) there is the need for teachers to be trained and re-trained, so as to adequately prepare them for the challenges ahead. NABPTEX has intension to run all the programmes in the polytechnic under the principle of CBT, thus the urgent need for all the stakeholders to ensure that all polytechnic teachers are given regular training.

Benefits

The benefits of training students for the job market are

numerous. Some of the benefits that the institutions and industries stand to gain when students are properly trained are as follows:

Institution: The benefits for institutions are as follows:

- 1) Credit to the institutions as graduates easily secure jobs after completion;
- 2) Strengthened institutional and industrial collaborations;
- 3) Accelerated achievement of technological manpower needs for national development; and
- 4) Improved availability and adequacy of skilled, trained and productive workforce for the nation.

Industry: The benefits for industries are:

- 1) Opportunity to evaluate and recruit potential employees;
- 2) Additional manpower to supplement existing staff;
- 3) Fresh ideas and perspective from enthusiastic students; and
- 4) Fulfillment of social responsibility.

Challenges

The industrial liaison office of Wa Polytechnic which is mandated to scout and secure attachment places for students revealed some challenges industries face in accepting students on industrial attachment. Among the challenges are:

- 1) The organisations lack office spaces, especially the government agencies. They are willing to accept students on attachment but lack office space to accommodate them; thus most of them do not get adequate training during the attachment period.
- 2) Some industries reported that some of the students demand allowances and reveal certain 'secrets', take bribes and do not conduct themselves well. During industrial attachment, students are not to be paid or given allowances, since they are only there to learn even though few organisations as part of their policy offer allowance as a form of motivation to their attachés. Students in other organizations also wanted to be treated same and therefore put undue pressure on their employers. There were evidences about students revealing important secrets, especially those in the accounting section and this prevent most of the finance officers from exposing the students to the rudiments of the work, thus students hardly learn and meet their expectation. There have been series of complains from revenue mobilisation organisations about students who collect bribes and refuse to report defaulters. A bribery incident occurred in Internal Revenue Service, Accra where a student on attachment was arrested and sacked for collecting bribe.
- 3) Some of the managers in certain organizations do not

have the exclusive powers to accept students on attachment unless instructions are received from Accra. Most of the organisations in the region have their head offices in Accra since the region is still young. This limitation therefore delays the process and sometimes discourages students from joining such organisations for their training.

Among the challenges confronting the institutions, some are as follows:

- 1) Lack of adequate equipment for students' training,
- 2) Inadequate funding for practical training and staff development, and
- 3) Insufficient funding for industrial linkages.

Government is also not able to meet the demand of all the academic institutions due to limited funds. Teachers also do not therefore have adequate materials for training the students. All the aforesaid challenges incapacitate industries and the institutions from providing the needed competences in students for the world of work. It is therefore our corporate responsibility to work together to ensure that students have the needed training to make them competent.

Lessons from SIAST

Ghana can learn a lesson from Saskatchewan Institute of Applied Science and Technology (SIAST, 2008) for their successful industrial attachment and cooperation of the institution with industry. A presentation by a staff of SIAST indicated that the institution normally enrolls over 15,000 students in 15 programmes. They have about 1,100 employers and over 2,400 contacts. As a result of their well structured programme with industry, employers conduct interviews every year on campus to select potential students for employment. Almost all their programmes have three work terms (Industrial Attachment) for their three-year programmes for the award of a diploma as shown in Table 1.

CONCLUSION AND RECOMMENDATIONS

We have seen the necessity to involve stakeholders in building competences among students for the job market. The need for teachers, training institutions, industry and the government to collaborate to provide the needed competences, in order to facilitate Ghana's quest for industrialization cannot be overemphasized. Polytechnic teachers should understand the huge task ahead of them to provide the needed middle level man-power for industry, commerce and management. The dignity and popularity of the institutions also depend on the type of graduates they produce and the type of graduates

Table 1. Example of SIAST co-opt programme.

| Architecture, CADD, Computer Eng, Electrical Eng, Electronics Eng, Instrumentation | Sept – Dec | Jan – Apr | May – Aug |
|---|-----------------|-----------------|-----------------|
| Year 1 | Academic Term 1 | Academic Term 2 | Work Term 1 |
| Year 2 | Academic Term 3 | Work Term 2 | Academic Term 4 |
| Year 3 | Work Term 3 | Academic Term 5 | Graduation |

produced will determine our rate of development as a nation. Let all stakeholders therefore help our students to acquire the needed competences for the job market. The following recommendations are suggested:

- 1) Stronger linkages and collaboration with Industry for industrial attachment;
- 2) Extended concessions to organizations who offer industrial training for polytechnic staff and students by the government;
- 3) Industry to assist institutions to assess and review curricula regularly;
- 4) Employers to collaborate with academic institutions as research partners for development;
- 5) The institution and government should provide adequate support for staff training; and
- 6) The training institutions should organize regular stakeholders meeting, to discuss issues relevant to competency development.

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