# Higher Education and Labour Market Situation in Ghana:

## A Case Study of the Relationship between University Education, Labour Market and Government Policies


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## Executive Summary

There is increased recognition by national governments and international organizations of the crucial role university-enterprises partnerships can play in addressing the high rates of unemployment among those who have attained higher education in most African countries. In the current context of pressure on higher educational institutions for more relevance to economic and social needs, collaborating with enterprises is one of the ways through which universities can support regional and national economies.

In general, little is known about the relationship between universities and enterprises in Africa in terms of collaborating to reduce unemployment, especially among the highly educated youth. So far, researchers who conduct empirical studies of university-industry linkages have mainly focused their attention on technologically developed countries. Because these linkages usually involve sophisticated research and innovation, universities in developing countries, particularly in Africa, are thought to lack the ability to engage more actively with firms. The large number of young people entering the labour market every year, coupled with the lack of employment opportunities, and the low quality of education and training without a proper link to the labour market have also been highlighted in existing literature as the underlying causes of the problems.

To understand the relationship between university education and labour market outcomes among skilled unemployed youth in Ghana and also to explore the link between academic education and the prospects it offers for university graduates in the job market, the study combined three (3) methods for collecting data: desk reviews, expert interviews and mass surveys. The desk research was used to tease out factual information from independent documented sources on education, labour market and skilled youth unemployment in Ghana and other West African countries.

A total of 20 experts on youth, labour market and the higher educational sector in Ghana were interviewed using a semi-structured interview guide (see annex 1). These experts were purposively sampled based on information about their professional and educational backgrounds as well as their expertise on the higher educational sector and labour market issues affecting skilled graduates.

A sample of 225 undergraduate students and 200 graduates of both public and private universities were surveyed using two structured questionnaires. The sample was purposively selected from final year undergraduate students, and across the faculties of the universities. In the case of the graduates, the sample was purposively selected through the snowball technique. A conscious effort was made to obtain diversity in terms of disciplines, gender, income and family backgrounds.

Standard qualitative data analysis techniques were employed to organize, code, and analyze the data (Miles and Huberman, 1994). For the mass surveys, the answers provided by the respondents were analysed using the Statistical Package for Social Sciences (SPSS) version 21.

## Main Findings

- Various factors influence decisions of students to choose particular universities to attend in Ghana. Prominent among the factors identified by both students and graduates include: the nature of courses offered at the universities, the reputation of the university or academic department in respect of the programmes they wanted to pursue, and the practice oriented study programme of the subjects being offered.

- Family members were identified as the key people sponsoring their education at the university, while few people actually reported financing their own education. Private and other scholarships featured less prominently.

- Awareness of the availability of financial aid services was more pronounced among students, especially those in public universities than their graduate counterparts. This notwithstanding, knowledge of the process of accessing these scholarship or financial support programmes was largely limited to the universities' financial aid offices, websites and application processes.

- Less than half of employed graduates reached by the study found employment within the first two years of graduation from the university, while some waited for between two and four years before securing employment. The mandatory National Service Scheme provided an entry into first employment by many employed graduates, while some found employment by applying to vacant positions advertised by private companies or government agencies.

- Majority of the employed graduates were employed by private institutions or enterprises particularly in the banking, finance, insurance, education, health, and non-profit organizations compared to public institutions or state-owned enterprises. Most of these enterprises/organizations were formal in nature which confirms the assertion that high educational attainment reduces informality.

- Over half of the graduates who were contacted by the study were unemployed although some had left school for over five (5) years. Unemployment among male graduates was almost equal to those of their female counterparts. High proportions of unemployment were observed among graduates of arts and general science courses compared to medical science/nursing and administration.

- Majority of unemployed graduates attributed their situation to non-availability of jobs in the country. Freeze on public sector employment and poor economic management were mentioned by most graduates as causes of low supply of jobs. These were corroborated by respondents from employers/industrial associations, labour unions and universities.

- Competitiveness of job seekers is determined by both demand and supply side variables. For graduates seeking employment, their strength lie in the skills possessed, previous employment experience, personal attributes, among others. For the students, however, grades earned at the university, reputation of academic institution and or course of study may influence employers' decision to hire or not to hire them.

- When graduates do not find their expected job, they are compelled to accept available jobs, regardless of whether it suits their career objectives or not. Almost a fifth of employed graduates indicated that they had to accept jobs hardly linked to their course of study. A similar proportion of students mentioned that they will be willing to accept jobs which guarantee higher income even if those jobs are not in line with their course of study.

- Teaching quality of lecturers, academic advice offered and contact with fellow students were the most highly rated indicators of the quality of university education experienced by students. In the case of the graduates, the quality of teaching, opportunity for out of class contacts with teaching staff, contact with fellow students and structure of the degree programme were the highly rated indicators.

- Compared to students in public universities, more students in private universities strongly agreed that the university education will enable them to get permanent employment as well as improve their social status in their communities. However, compared to their private counterparts, more students in public universities strongly agreed that their university education would enable them learn and acquire employable skills, acquire basic skills for self-employment, and improve on their quality of life.

- Majority of students said their university programmes were adequately designed to equip and empower them to find employment after school. Compared to their private school counterparts, more students in public universities did not agree that their education was adequately designed to equip and empower them to find employment after school. Similarly, more students in public universities did not agree that their education was adequately designed to enable them set up their own businesses.

- Overall, an overwhelming majority of students and graduates who were contacted were very satisfied with their university programmes. Indeed, more students and graduates in the public universities were satisfied with their education compared to their private counterparts.

## Recommendations

A strong and structured collaboration among education, government and industry in a broader national framework aligned to the development goals of the country is urgently needed. In view of this, the following recommendations are made to government, academia and industry:

**Government:**

- There is a need to establish a national policy on industry-academia relationship, and government, as the major stakeholder, should champion this course. The National Development Planning Commission (NDPC) must recognize this, and with the tacit collaboration of industry and other stakeholders, flesh out a blueprint which would address these lapses, and put the nation on the path to resolving the yawning gap of skills training and job placement. This should include special incentives for enterprises to encourage stronger collaboration with educational/training institutions, particularly in the area of industrial placement. The incentives can be in the form of tax breaks for enterprises to support education/training as per their needs.

- To strengthen links between education and demands of enterprises, the National Council for Tertiary Education (NCTE) should consider establishing a unit to liaise between academia and enterprises to strengthen the partnership between them.

- Government should also address the governance of higher educational institutions. If industry linkages are to happen, universities need to have the autonomy and transparency to be able to pursue their own partners. These cannot be mandated or directed by ministries or government agencies. The appropriate role for government agencies is to set up and enforce favourable policy frameworks that would enable research and development partnerships to flourish. Universities that are proactive and successful in developing industrial ties should be rewarded for their efforts. Demonstration projects can be sponsored, where strong proposals for university-industry partnerships addressing local innovation needs are sponsored on a merit basis, and their results widely communicated. Such projects might contribute to instilling the view among relevant stakeholders that partnership with universities is feasible, possible, and potentially rewarding.

**Universities**

- Universities should take advantage of their position as public institutions to exercise the role of public spaces for open-ended debate on local, economic, social, and technological challenges. Universities may organize and host events bringing together academics and industrial representatives, along with other relevant stakeholders. Informal social interactions can also be helpful in sparking dialogue and working relationships. Purposefully using university facilities for events and social engagements can facilitate such interactions.

- Universities need to build and strengthen their research and educational infrastructures. Firms need greater research and development capacity and incentives to invest in partnerships with universities. Greater awareness across the sectors of their needs and capabilities is also needed. Fundamentally, governments need to establish predictable funding mechanisms for university research, business R&D, and specifically for partnerships involving the two sectors. Uncertainty as to the availability of resources in relatively short time horizons mitigate against productive university-industry engagements.

- There is the need to revamp the educational curricula that would update the capacity of lecturers to meet the current skills demands such as applied science, technology and engineering. Education should provide analytical and reasoning skills as well as skills in numeracy to equip students for the world of work. The review should be evidence-based and done in collaboration with industry.

**Enterprises/Employers**

- There is the need for enterprises and universities to collaborate periodically to provide stakeholders with data and statistics on job opportunities, required skills and skills available through regular skill gap survey to guide education/training and policy.

- Enterprises must contribute significantly to funding research and development in institutions, and establish distinguished chairs in their fields in the various institutions.

- Enterprises should be prepared to invest in a top-up skill training to suit their needs since all over the world, employers offer on-the-job training to fresh school leavers to make them adapt to the requirements of a particular job.

- Enterprises should also work with higher educational institutions to improve their research and training capacity. This can be done in multiple ways. For example, businesses may provide internship positions for students, and make their staff available for guest lectures, bringing their expertise to universities. More sustained forms of engagement can also be pursued. Individual firms, or even business associations, may work together with higher educational institutions to establish educational standards to inform the curriculum and educational experience of students in relevant fields. Such initiatives might contribute to addressing the perceived irrelevance of university education to the business sector.

- Finally, following the example of their peers internationally, enterprises can also be a supportive partner in the creation, support, and staffing of research laboratories through gifts, donations, and research funding. Through these kinds of practices, industry can be a stronger partner in the process of strengthening the academic quality and relevance of African universities.

# 1. Background

The high and increasing unemployment rates particularly among the youth presents a number of economic and development challenges, both at the macro and micro levels. In response to this ever-increasing awareness, employment creation has grown in prominence on national and global development agendas. In Africa in particular, which has the youngest population in the world, issues of youth employment and unemployment have recently become key concerns (Gough et al., 2013). Correspondingly, there has been a burgeoning amount of literature and research that investigates its nature, causes and consequences, as well as the plethora of approaches adopted to address the issue of youth unemployment and underemployment. A review of existing literature indicates that the underlying problems are the large number of young people entering the labour markets every year, the lack of employment opportunities, and the low quality of education and training without a proper link to the labour market.

In recent times, there is observed high rates of unemployment among those with higher educational attainment in most African countries as compared the general trend in most countries where unemployment rates for the better educated and those from wealthy households are low in comparison with unemployment rates for the low skilled (ILO, 2013). On average, unemployment among those with secondary education or above is three times higher than among those with no educational attainment, and unemployment is twice as high among youth from households in the fifth (or highest) income quintile as compared to those in the first income quintile (World Bank, 2009a).

Like many other Sub-Saharan African countries, varied reasons are given for the high unemployment among graduates of tertiary education. Strong among these are slow expansion of the labour market and the perceived mis-match between academic curriculum and labour market demands. This research examined the relationship between tertiary education, the labour market and skilled unemployment in Ghana. It explored the link between academia and education and the prospects it offered for university graduates in the job market.

## 1.1. Purpose of the Study

The study aimed at providing an overview of the current situation of labour market outcomes to education that includes difficulties and constraints for youth, skilled unemployment and the structural factors affecting the job placement of graduate students.

It further investigates the relationship between academia and the labour market, analyzing possible responses, as academic curricula reforms, possible private-public partnership, labour market possible changing (e.g. need of attracting foreigner investments or workforce, of promoting and sponsoring social enterprises or deficient employment areas).

## 1.2 Research Design and Methods

The study on education, labour market and skilled youth unemployment in Ghana combined three (3) methods for collecting data: desk reviews, expert interviews and mass surveys.

***Desk Research***

The desk research was used to tease out factual information from independent documented sources. The sources included, but not limited to statistical abstracts, research reports, the constitution, proclamations, policy documents, documents on education, labour market and skilled youth unemployment in Ghana and other West African contexts in journals, newspapers, magazines, periodicals and other relevant sources.

***Expert Interviews***

Informants from higher educational institutions, industry, and government were targeted. The key criterion for selection was their direct knowledge of university-labour market partnerships in Africa. For the expert interviews, a total of 20 experts on youth, labour market and the higher education sector in Ghana were interviewed using a semi-structured interview guide. These experts were purposively sampled based on information about their professional and educational backgrounds and expertise on the higher education sector and labour market issues affecting skilled graduates. Out of the experts, about half were drawn from private and public universities and other educational institutions. Specifically, they were drawn from the University of Ghana (UG), the National Council for Tertiary Education, the University of Professional Studies Accra (UPSA), among others. Key people in industry particularly the Chamber of Commerce and Industry (CCI), the Association of Ghana Industries (AGI) and the Ghana Employers Association (GEA) were also interviewed. Development partners and donor agencies involved in international cooperation on education were added to the sample because of the important role they play in university-industry partnerships in Africa. Key officials at the tertiary educational sector as well as trade unions were also interviewed. Following grounded theory methods, the project gathered in-depth qualitative data from these key informants in order to obtain detailed accounts of their experiences. As usual in this methodological approach, the focus was on obtaining maximum insight from uniquely positioned individuals who could clarify the phenomenon under investigation.

The recruitment of some informants posed a number of challenges. It took longer to recruit participants from industry and government partly because their contact information were publicly unavailable. Busy schedules also made it time-consuming to schedule interviews. Once recruited, informants were given the option to participate in either a telephone interview or face-to-face interview. The interviews were then recorded, transcribed and structured into themes for analysis.

***Mass survey***

As part of the study, a mass survey was undertaken focusing on university students and graduates of public and private universities over the past 5 years. A structured interview guide was developed to track their occupational aspirations. This guide examined the content of and

influences on their aspirations. It also examined the academic and life choices that they derived from these aspirations. A sample of 225 undergraduate students and 200 graduates of public and private universities were surveyed. The population from which the sample was chosen was Ghanaian undergraduates pursuing 4-year degree programmes in the faculties of Social Studies and Arts, and the Sciences in both public and private universities as shown in Table 1. Final year undergraduate students were purposively selected across the faculties of the universities. In the case of the graduates, the sample was purposively selected through the snowball technique. A conscious effort was made to obtain diversity in terms of disciplines, genders, income and family backgrounds.

**Table 1 : List of Sampled University Students and Graduates**

| # | Institutions | Undergraduates –Final Year Students | Employed and Unemployed Graduates |
|---|---|---|---|
| 1 | University of Ghana | 50 | 50 |
| 2 | Kwame Nkrumah University of Science and Technology | 50 | 50 |
| 3 | University of Development Studies | 50 | 50 |
| 4 | Central University | 50 | 25 |
| 5 | Ashesi University | 25 | 25 |
| | Total | 225 | 200 |

The mass survey questionnaire had about 30 question items tracking issues on the demographic characteristics of the respondents, the retrospective assessment of educational institutions, current career prospects and future education and career choice assessments.

***Recruitment and Training of Field workers***

Data was collected in December 2015 and January 2016. Researchers recruited five (5) Field Research Assistants (FRAs) mainly from the locations where the survey sites were located. Recruiting fieldworkers from these survey sites ensured that people were deployed to areas that they were familiar with in terms of the geographical setting and local dialect to make data collection easier. Each FRA was expected to complete a total of 100 interviews in ten (10) days.

Researchers ensured that fieldworkers were at least in tertiary institutions (or have completed tertiary education) with experience in data collection and fieldwork. Besides recruiting well-qualified fieldworkers, researchers also conducted a centralized fieldworker training to ensure that recruited fieldworkers understood the objective of the survey, and were familiar with the survey questionnaire and protocols including the field sampling methodology.

**Data Analysis**

Standard qualitative data analysis techniques were employed to organize, code, and analyze the data (Miles and Huberman, 1994). The first step entailed the open coding of interview data, generating a list of initial categories. The second step involved axial coding, where those categories were merged into fewer groups, forming a coding paradigm. These new categories

reflect themes involving the key factors and issues involved in university-industry linkages. Finally, the selective coding approach was used to integrate the categories, interpret data and present the research findings.

For the mass surveys, the answers provided by the respondents were analysed using the Statistical Package for Social Sciences (SPSS) version 21.

## 2. Overview of the Ghanaian Educational Sector

In this section, we have provided an overview of the Ghanaian educational system summarized from documents of Ghana's Ministry of Education, UNESCO's International Institute for Education Planning (IIEP) and Institute for Higher Education document on Ghana and country education profiles by NUFFIC[1], British Council, etc. We have also highlighted various reform initiatives in Ghana's educational sector. A detailed review of higher education in Ghana and financing of higher education is also presented.

### 2.1. Educational Sector Reforms in Ghana

Historically, beginning with the post-independence government of Dr. Kwame Nkrumah, educational reforms have included expanding access to physical infrastructure and facilities, increasing enrolment for girls and minority groups, and improving the quality of teaching and instructional materials. Through educational development plans, educational review committees, constitutional provisions, and educational reform laws (Acts), governments have sought to achieve these twin objectives. The most important legislation, policy documents and reports in the field of education in Ghana are:

- Education Act, 1961
- Dzobo Report, 1973
- New Structure and Content of Education, 1974
- Education Commission Report on Basic and Secondary Education, 1987/88
- Education Reform Programme, 1987/88
- University Relationalization Committee Report, 1988
- Free Compulsory Universal Basic Education (FCUBE) Programme, 1996 (originating from the Constitution of 1992)
- Ghana Education Trust Fund – GET Fund Act 2000
- National Education Reforms-2007

Among the series of educational reform initiatives as highlighted above, it was the 1987 educational reforms, initiated and implemented by the Provisional National Defense Council (PNDC) government, that presented the most important and (certainly) the basis on which subsequent reforms have been initiated and implemented[2]. The 1987 reform aimed at restructuring the educational system of full cycle basic and secondary education by reducing public schooling by 5 years (from 17 years to 12 years), and also sought to gradually take education away from traditional centers of power such as the religious and Faith-based Organisations (FBOs) into the modern state system through decentralization.[3]

Essentially, educational reforms in Ghana that have focused on improving access (quantity), especially at the basic level and also toward addressing gender inequality, have included the implementation of Free, Compulsory, Universal Basic Education (FCUBE) programme. The inclusion of free and compulsory basic education in the 1992 Constitution reinforced strongly

[1] Netherlands Organisation for International Cooperation in Education
[2] (World Bank, 2010; Casely-Hayford, 2009 and RECOUP, 2010; Casely-Hayford, 2011; Inkoom, 2012),
[3] (STAR, 2011)

than before the principles of free primary education set out in 1951 'Accelerated Development Education Plan', and the free and compulsory education clauses in the 1961 Education Act. The 1992 Constitution further provided citizens of Ghana with the legal right to free and compulsory education.

## 2.2. Pre-tertiary Education

### *2.2.1. Preschool Education*

Preschool education, consisting of nursery schools (between the ages of 3 and 4) and kindergarten (between the ages of 4 and 6), aims at promoting mental and physical health of children, and has now been made compulsory in Ghana. According to the Ghana Education Service, there were over 15,000 nursery schools in Ghana in 2013/14, at which a total of more than 1,645,550 children were enrolled[4] (UNESCO, 2014).

There are day care centres for 2-3 year olds and crèches that cater for children less than 2 years of age. Programmes are run by the Department of Social Welfare, the Ghana Education Service, private proprietors and NGOs. Currently the Department of Social Welfare is responsible for registration and maintenance of standards in all crèches and day care centres for children aged 0-2 years.[5]

### *2.2.2. Primary Education*

In Ghana, children are obliged to attend school from the age of 6. This is also the age at which they start primary education. Primary education lasts for 6 years and consists of a 3-year lower primary phase and a 3-year upper primary phase. During primary education, the curriculum places an emphasis on reading and writing, arithmetic and the development of problem-solving abilities. The medium of instruction at all levels of education is English, except the first few years of primary school where the main Ghanaian language of the region is used. No certificate is awarded upon completion. There were over 21,000 public primary schools in Ghana in 2013/14, at which a total of more than 4,117,152 children were enrolled[6]. This notwithstanding, more than 10% of primary aged children still remain out of school contrary to the Universal Primary Education (UPE) goal of 100% by 2015[7]. Primary education is followed by three years of Junior High School (JHS).

### *2.2.3. Junior High School*

Education at the junior secondary phase in Ghana lasts for 3-years, and concludes the compulsory school-age years. Children are then usually 15-years old. At the end of the junior phase, pupils sit for examinations to obtain the Basic Education Certificate. There were over 12,436 Junior High Schools in Ghana in 2012/13, with 8,818 being public schools in 2012/13[8], at which a total of more than 1,473,921 children were enrolled[9]. The Junior High School component in Ghana experiences challenges in respect of gender participation and access. For

[4] UNESCO, 2014
[5] (UNESCO, 2006)
[6] (UNESCO, 2014)
[7] (UNESCO, 2014)
[8] MoE, 2013
[9] (UNESCO, 2014)

Junior High School students who do not proceed to Senior High School (SHS) (i.e. 60% [Ghana MOESS, 2008]), a variety of apprenticeship, training programmes and various forms of adult education are offered by private colleges or colleges run by various ministries or government agencies. Some of the students are also directly absorbed into the workforce, especially in agriculture.

### *2.2.4. Senior High School*

The senior secondary phase in Ghana lasts for 3 years. The Senior High School has four parallel education streams (i.e. general education, vocational education, technical education and agricultural education) with compulsory (core) subjects in the first two years (i.e. mathematics, computer studies, general science, social studies and English)[10]. Students completing the senior secondary education write the West African Senior Secondary School Certificate (WASSCE) examination, which has since 2007 replaced the Senior Secondary School Certificate (SSSCE).The WASSCE exam is equivalent to the UK matriculation standard requiring a combination of passes at GCE O-Level or equivalent and at least two subjects at GCE A-Level or equivalent. These examinations are held by the West African Examinations Council (WAEC), Ghana National Office. There were over 828 Senior High Schools in Ghana in 2012, with 535 being public schools[11], at which a total of more than 750,706 children were enrolled[12]. Most Senior High School graduates directly enter employment, especially if they followed the more vocational and less theoretical forms of secondary education.

### *2.2.5. Technical and Vocational Education*

In Ghana, formal secondary vocational education is offered at technical and vocational training institutes. Historically, technical and vocational education in Ghana takes place in two distinct environments: formal education environments and informal training environments[13]. The formal, Technical and Vocational Education and Training (TVET) sub-system, consists of institutions that follow written curricula, provide classroom and workshop-based instructions as well as offer study programmes in various technical and vocational fields for pupils who want to become carpenters, electricians or tailors. These programmes usually conclude after 2 or 3 years with traditional examinations that lead to various diplomas or certificates. The Council for Technical and Vocational Education and Training coordinates and oversees all aspects of TVET in the country. This includes formulation of policy on skills development[14]. There was a steady increase in both public and private enrolments in Technical and Vocational Education and Training for three consecutive years between 2008/09 and 2010/11[15]. Whilst TVET in Ghana is often associated with the outcomes of formal public TVET, in fact this sector only accounts for less than 10% of technical and vocational skills acquired[16].

[10] Ghana MOESS, 2007
[11] MoE, 2013
[12] (UNESCO, 2014)
[13] (Duodu, 2006)
[14] (MoE, 2014)
[15] UNESCO, 2014
[16] Darvas and Palmer, 2012; MoE, 2014)

Informal TVET covers the traditional apprenticeship system, on-the-job training and all skills-training activities that do not lead to formal certification[17]. Some of Ghana's TVET comes from education, of which some are regulated by other government agencies; some are privately provided and the majority comes from on the job training in informal apprenticeships. Darvas and Palmer (2012) noted that the informal apprenticeship system is the largest provider of skills training, training in excess of 440,000 youth at any one time; there are about 4 informal apprentices for every trainee in formal public and private training centers combined. Apprenticeships are by far most common for those who have completed Junior Secondary School, but not more. Generally, basic skills like literacy and numeracy rates are higher for those self-employed who completed an apprenticeship than for those who did not (World Bank 2009). Apprenticeships are much less common for the minority who had secondary levels of education or more, and who are likely to pursue more theoretical and academic subjects (World Bank, 2016). "Traditional" apprenticeships are not well regulated; often, they are managed informally by firms and youth through family networks. Apprentices usually do not receive official certificates after completing their apprenticeship limiting the signaling power of training certificates for potential employers (World Bank, 2016). The National Apprenticeship Programme (NAP) is currently providing training in garments, cosmetology, auto-mechanics and electronics. It attempts to support informal apprenticeship training in Ghana, a relatively small-scale program serving about 1% of the 440,000 youth in informal apprenticeship[18]. The programme is designed as an alternative training route for JHS graduates who were not placed in SHS. Apprentices are to be assessed at the proficiency grade two levels after the one year training[19].

## 2.3. Tertiary Education

### 2.3.2 Overview of Tertiary Education

The tertiary education sector in Ghana is run by both public and private institutions. There are ten public universities located in 7 out of the 10 regions in Ghana[20], ten polytechnics in all ten regions, and three professional institutions. These institutions are all operating under the oversight role of the National Council for Tertiary Education (NCTE). There are other professional institutions operating under various ministries and departments. For example, , the Ghana Institute of Management and Public Administration (GIMPA) is one of the specialized institutions operating under the Office of the President and is affiliated to NCTE. A total of 55 private tertiary educational institutions have been accredited by the National Accreditation Board (NAB)[21]. Table 2 details the numbers of tertiary institutions in Ghana.

**Table 2 : Number of Public and Private Tertiary Institutions in Ghana, 2015**

| Institution | 2015 |
|---|---|
| Public Universities/University Colleges | 10 |

[17] (Nuffic, 2011)
[18] (MoE, 2013)
[19] (UNESCO, 2014)
[20] There are no public universities in the Eastern region, Upper East and Upper West regions. Campuses of the University of Development Studies can be found in the Upper West and Upper East regions.
[21] (Bailey, Cloete &Pillay 2012)

| | |
|---|---|
| **Public Specialized/Professional Colleges** | 9 |
| **Chartered Private Tertiary Institutions** | 3 |
| **Private Tertiary Institutions** | 55 |
| **Polytechnics** | 10 |
| **Public Colleges of Education** | 38 |
| **Private Colleges of Education** | 3 |
| **Public Nursing Training Colleges** | 10 |
| **Private Nursing Training Colleges** | 5 |
| **Public Colleges of Agriculture** | 3 |
| **Total** | **146** |

Source: NCTE, 2015

Enrolment in tertiary education is expanding rapidly in public universities and polytechnics. Out of these institutions, a total of 283,469 students enrolled in tertiary education institutions showing an increase of 6.5% compared to the previous academic year's figure of 266,123 (NCTE, 2014). In addition, about 55,361 students were enrolled in private universities[22]. Student enrolment in the Polytechnics rose from 47,294 in 2011/2012 to 53,249 in 2012/2013 representing an increase of 12.6%[23]. The proportion of students enrolled in science and technical programmes has increased in both public universities and polytechnics, now standing at 39.1% in these institutions combined[24]. Out of the 283,469 students enrolled in the tertiary institutions in Ghana, 91,118 students (32%) were studying Science/Applied Science/Technology programmes and 191,669 students 68%) were pursuing Arts/Business/Social Science programmes with 616 students in the public universities whose course description were unspecified[25]. Of the public institutions, female enrolment (the proportion of students who are female) is highest in the Colleges of Education at 42%. In 2011/12, the proportion of female students fell slightly in the public universities and polytechnics[26]. Despite the expansion in tertiary education, it has been estimated that only about 10% of the age cohort from Junior Secondary Schools gain admission to tertiary education institutions[27].

**Table 3 : Enrolment in Tertiary Education, by Years**

| | 2010/11 | 2011/12 | 2012/2013 |
|---|---|---|---|
| **Public Institutions** | **185,268** | **202,063** | **221595** |
| **Public Universities** | 115,452 | 109,278 | 128,118 |
| **Polytechnics** | 43,113 | 47,294 | 53,249 |
| **Colleges of Education (Public)** | 26,703 | 27,580 | 27,906 |
| **Specialized/Professional Institutions*** | | 14,951 | 7,715 |
| **Other*** | | 2,960 | 4607 |
| **Private Institutions** | **32,275** | **59,899** | **61874** |
| **Enrolment in Private Universities*** | 32,275 | 56,581 | 55,361 |

[22] (NCTE, 2014)
[23] (NCTE, 2014)
[24] (MoE, 2013)
[25] (NCTE, 2014)
[26] MoE, 2013)
[27] (Effah et al. 2009; Bailey, Cloete &Pillay 2012)

| | | | |
|---|---|---|---|
| **Other*** | | 3,318 | 6,513 |
| **Total Tertiary Enrolment** | 217,543 | 261,962 | 283,469 |

(MoE, 2013; NCTE, 2014)

The public universities have the highest proportion of full time teaching staff with PhD level qualifications, at 38%. In the polytechnics and private institutions offering degree programmes, more than 60% of full time teaching staffs have Masters. In the Colleges of Education, the largest portions of staffs have Bachelor's degrees (49%) followed by Masters (35%[28]).

Universities are entitled to confer their own degrees. University colleges are private institutions affiliated to recognized degree-awarding universities which confer their degrees upon graduates of the university colleges. Polytechnics primarily provide higher professional education programmes, while tutorial colleges prepare students for the examinations held by recognized professional organizations. All higher educational institutions and their programmes are accredited by the National Accreditation Board[29].

#### 2.3.2.1. Teacher Training Colleges

Teachers at primary level complete a three-year pre-service Diploma in Basic Education (Basic Education Programme A) at a Teacher Training College (TTC), while Junior Secondary School teachers do the same at a TTC or a university. In-service training for both primary and secondary school teachers is provided. There are also degree programmes available for Senior High School teachers (i.e. subject specialists) and tutors for Teacher Training Colleges. In 2014, there were approximately 38 public and three private TTCs located across the ten regions of Ghana, with a total enrolment of 27,906 trainees (NCTE, 2014).

#### 2.3.2.2. Higher Professional Education

Higher education programmes with a professional focus are primarily provided in Ghana by polytechnics and specialized colleges. Originally, polytechnics were not higher education institutions but were vocational training institutes. Following an educational reform in 1993 (the Polytechnic Law NDC Law 321; Ghana MOESS, 2008), polytechnics also started to provide higher education. In contrast to universities, polytechnics prepare students for practice-oriented middle-level professions. Polytechnics offer nominal 3-year Higher National Diploma (HND) programmes in the specializations of applied sciences, technology and business administration. These programmes are highly vocational. The HND is a centrally certified qualification conferred by the National Board for Professional and Technician Examinations (NABPTEX)[30]. The NABPTEX is a legally appointed examining body that is also responsible for creating the HND curriculum. In principle, students who hold an HND can enroll in the third year of bachelor's degree programmes at universities, provided that the HND was obtained in a relevant specialization. In some disciplines and polytechnics, holders of the HND can continue their study for approximately two years to obtain the Bachelor of Technology (B.Tech) degree.

[28] MoE, 2014
[29] NUFFIC, 2015
[30] NUFFIC 2015

In Ghana, the B.Tech degree is the highest obtainable professional qualification with a strong practical component[31].

#### 2.3.2.3. Public and Private Specialized Colleges

Public and private specialized colleges operate at post-Senior High School level and offer professional courses ranging from three months to three years. Admission requires the Senior High School Leaving Certificate or equivalent and/or work experience. The courses include substantial practical work which usually leads to the award of a certificate from the college and/or the relevant government ministry running the college.

#### 2.3.2.4. University Education

University education in Ghana consists of three cycles, namely bachelor's degree programmes, master's degree programmes and PhD programmes as well as sub-degree professional educational courses (certificates and diplomas) through their affiliation with local tertiary level professional educational institutions.

## 2.4. Governance and Administration of Education Sector in Ghana

Political responsibility for education lies with the Ministry of Education of Ghana. The ministry is in charge of a number of agencies, including the Ghana Education Service (GES), the Ghana Library Board (GLB), the Bureau of Ghana Languages (BGL), the Ghana Book Development Council (GBDC), the National Commission for UNESCO, the National Service Secretariat and the National Council for Tertiary Education and National Accreditation Board – both responsible for higher education.

### *2.4.1. Pre-tertiary Governance and Policy*

The Ghana Education Service is responsible for implementing policy in respect of primary and secondary (general and vocational) education, as formulated by the Ministry of Education. The Ghana Education Service also includes the Curriculum Research and Development Division, a body that is responsible for developing, implementing and assessing the national curriculum with respect to pre-university education. The Ghana Education Service is represented by ten regional offices and 138 district offices. These offices are responsible for local implementation of the national educational policy. They also govern schools and are in charge of supervision, budgeting and compiling data and analyses for each district[32].

The West African Examinations Council, a consortium of five Anglophone West African Countries (Ghana, Liberia, Nigeria, Sierra Leone and the Gambia) is responsible for developing, administering, and grading school-leaving examinations at the secondary level.

Technical and secondary vocational education is coordinated by the Council for Technical and Vocational Education and Training (COTVET). COTVET is responsible for all technical and

[31] NUFFIC 2011
[32] (Nuffic, 2014)

vocational education and training matters. Prior to 2006, the National Board for Professional and Technician Examinations (NABPTEX) was responsible for formulating and administering examinations, certification and standards for skills and syllabus competencies for non-university institutions.

### *3. 2.4.2. Higher Education Governance and Policy*

Three regulatory bodies; the National Council for Tertiary Education (NCTE), the National Board for Professional and Technician Examinations (NABPTEX), and the National Accreditation Board were established as part of the reforms in the early 1990s.

- The National Council for Tertiary Education is responsible for all public higher educational institutions of university and non-university status (i.e. policy, funding allocation and administration). The universities are autonomous, and are being governed by academic boards or university councils through their vice-chancellors. The law establishing National Council for Tertiary Education, Act 454 of 1993, empowers the Council to advise the minister responsible for education on the development of institutions of tertiary education. The Act also assigns the following functions to the Council[33]:
    - To enquire into the financial needs of the institutions of tertiary education, and advice the minister accordingly;
    - To make recommendations to the minister on the annual national education budgets;
    - To advise on block allocations of funds towards running costs; and grants for capital expenditure of each institution of tertiary education, indicating as well how the allocations are to be disbursed;
    - To recommend national standards and norms on staff, costs, accommodation and time utilization, for approval of the minister and to monitor the implementation of any approved national standards and norms by the institutions;
    - To advise governing councils on appropriate measures for generating additional funds for their tertiary education institutions;
    - To advise the minister generally on rates of remuneration and other conditions of service of staff of the institutions;
    - To publish information on tertiary education in Ghana; and
    - To perform any other functions provided in the Act and such other functions relating to tertiary education as are incidental to the functions specified in the Act.

- The National Accreditation Board is responsible for accreditation and quality assurance in higher education in Ghana. It was setup by the government in 1993; and since then, its responsibilities have included the accreditation of all public and private higher educational institutions and their curricula. In addition, it publishes an annual list of accredited institutions and advises the minister of education on the status of higher

[33] Effah et al. 2009; Bailey, Cloete & Pillay, 2012

education institutions. The National Accreditation Board accredits both public and private (tertiary) institutions with regard to the content and standards of their programmes. The board determines, in consultation with the relevant institution, the programme and requirements for the proper operation of that institution and the maintenance of acceptable levels of academic or professional standards. Determination of the equivalence of diplomas, certificates and other qualifications awarded by institutions in Ghana or elsewhere is also conducted by this organ.

- The National Board for Professional and Technician Examinations is responsible for formulating and administering; examination, evaluation, assessment and certification for professional bodies; non-university tertiary institutions and private tertiary educational institutions within Ghana.

The structure and functioning of these three regulatory bodies pose some challenges (ibid). One relates to the tendency for some members nominated by particular constituencies to act as though they are delegates of their constituencies leading to polarization and the taking of strong positions on issues affecting their constituencies. There is also the issue of the extent of autonomy to be given or ministerial control to be exercised over a regulatory body that would not constitute undue interference. In Ghana, the predecessor of the National Council for Tertiary Education and the National Council for Higher Education was abolished twice, in 1966 and 1982, following changes in government. The view was that the National Council for Higher Education had been reduced to a mere conduit for routing requests from the universities and implementing policies of the universities rather than those of government. Questions about the status of the advice given by the regulatory bodies, conflicts between councils of the tertiary institutions, and the regulatory bodies also arise. It is evident therefore that regulatory bodies should operate in such a way that they are able to win the confidence of government, institutions and the general public they serve[34].

## 2.5. Financing Tertiary Education

A major policy shift in social investment in Africa in the immediate post-independence was the implementation of cost-sharing in the provision of education services. Cost sharing is generally thought of as the introduction of, or especially sharp increases in, tuition fees to cover part of the costs of instruction or of user charges to cover more of the costs of lodging, food, and other expenses of student's living that may have hitherto been born substantially by governments (taxpayers) or institutions[35].The principal causes for or rationales behind this shift are four. The first is the argument about financial sustainability. The strongest argument in favor of cost sharing is the simple fact that the costs of higher education (and education in general) are rising faster than available public resources. The combined impact of population growth, increased access to basic education, growth of the middle class, and the need for substantial quality improvements simply makes cost sharing unavoidable.

[34] (Bailey, Cloete &Pillay, 2012)
[35] (Johnstone, 1986, 2002)

The second underlying reason for the introduction of cost sharing is the increase in higher education student output. Proponents argue that higher education enrollment is constrained primarily by the limited supply of places, rather than by limited demand. Reliance solely on public subsidies severely limits the number of places that can be provided. Under the right conditions, individuals are willing and able to pay for higher education, and cost recovery will increase both the resources available for higher education and increased enrollments.

Third factor in the introduction of cost sharing policies in education is the improvement in quality of education service. While public finance may be important, it is insufficient to provide adequate resources for quality education; the only way to increase resources is through increased contribution by higher educational beneficiaries.

Finally, efficiency has been mentioned as one factor for the introduction of cost sharing policies in education sector. Higher education is expensive relative to other educational subsectors. The argument is that, with cost sharing, institutions will become more responsive to clients, and students will be more concerned about receiving value for money. Under a regime of institutional grants from governments, incentives are available for higher educational institutions to focus on bureaucratic and political interests. Moving toward market-oriented provision of higher education is consistent with the global trend of market-based provision of services[36]. It is also argued that fee-paying students are likely to be more conscientious.

### *2.5.1. Fee Payment in Public Tertiary Institutions*

In developing countries like Ghana, while governments provide some resources to finance higher education, there has always been the need for university administrators to find extra resources to supplement what governments provide as there is always a financing gap[37]. There has been a gradual shift from the provision of free higher education consequently to a system of cost sharing where students contribute towards their education. It is unfortunate to note that the introduction of cost sharing seem to have generated inequalities between the rich and the poor, making higher education the preserve of the more affluent segments of society as the poor cannot meet its obligations[38].

Tuitions remain the sole responsibility of the government[39]. However, beginning 1998/99 academic year, students have been made to contribute for the payment of lodging and incidental expenses. In addition, students are also being made to contribute towards the use of academic facilities through payment of what have been termed 'academic facilities user fees'[40].

[36] (Tiongson 2006
[37] (Tonyi, 2012)
[38] (Tonyi, 2012)
[39] (Tonyi, 2012)
[40] (Bailey, Cloete & Pillay, 2012)

### 2.5.2. *Financial Aid in Tertiary Institutions*

To ensure that financial need is not a barrier to equal access to quality education for bright but needy students in Ghana, various student-financial-aid programmes are available at the universities and outside the main universities. At the public universities, which are usually tuition free for most students, the student-financial-aid schemes aim to significantly reduce or eliminate financial barriers that might prohibit or inhibit students' access and financial assistance to students who, without such assistance, may not be able to readily access or meet educational and other expenditure at the university. Financial-aid officials are readily available in the University of Ghana (UG) and the Kwame Nkrumah University of Science and Technology (KNUST). Funding is also available from local and international sources. Some of the forms and types of aid in the UG and KNUST include the Educational Pathways International Scholarship, Fondazione Edu Scholarship, Woodgroup Scholarship and Awards, Timothy Ansah Memorial Foundation Scholarship –TAMF, Vodafone Ghana Scholarship, TEST for Ghana, Total Petroleum Ghana Scholarship-TPGL, and Baker Hughes among others. In the University of Development Studies (UDS) located in the northern sector of Ghana, some of the available financial aid and bursaries include Educational Pathways International Scholarship, TEST for Ghana, among others. The MasterCard Foundation Scholar Programme is a ten year initiative at Ashesi University which offers financial aid (and other benefits) to 200 "brilliant but needy students". Up to 50% cut in tuition is available to students in need who have completed at least one year at need at the Central University College.

**Table 4 : Statistics on Students Who Benefited from Financial Aid in University of Ghana (2005-2011)**

| Academic Year | Number of Applicants | | | Successful Applicants | | |
|---|---|---|---|---|---|---|
| | Male | Female | Total | Male | Female | Total |
| **2005-06** | 171 | 10 | 181 | 113 | 8 | 121 |
| **2006-07** | 218 | 12 | 230 | 117 | 5 | 122 |
| **2007-08** | 505 | 51 | 556 | 293 | 26 | 319 |
| **2008-09** | 335 | 27 | 362 | 154 | 18 | 172 |
| **2009-10** | 176 | 26 | 202 | 114 | 17 | 131 |
| **2010-11** | 174 | 31 | 205 | 111 | 22 | 133 |
| **Total** | **1579** | **157** | **1736** | **902** | **96** | **998** |

Source: UG, 2016

### 2.5.3. *Student Loan Trust Fund*

A new market-oriented Student Loan Trust Fund (SLTF) was established in 2005. This scheme is anchored on the principles of sustainability and scalability. The purpose of the new Student Loan Trust Fund is to provide enhanced support for tertiary education by providing loan facilities to support the maintenance of students[41].

[41] (Bailey, Cloete &Pillay, 2012)

A major innovation of the new loan scheme is the payment of differential amounts based on the programme chosen by the student. For instance, each university student choosing a programme in science received a loan amount of GH¢ 420 per annum, whilst those choosing programmes in the humanities received GH¢ 308 per annum. The Student Loan Trust Fund also provides different loan amounts to students in polytechnics and universities offering similar academic programmes. And, in both universities and polytechnics, science and engineering students receive higher loan amounts than students reading business and humanities. The Fund currently disburses loans to students in 53 tertiary institutions comprising 23 public universities and university-type institutions; 10 public polytechnics, 20 private universities and colleges. Students in private tertiary educational institutions are eligible for loans provided their institutions and programmes have been accredited by the National Accreditation Board[42].

[42] (Bailey, Cloete & Pillay, 2012)

# 3. Overview of the Ghanaian Labour Market

## 3.1. Introduction to the Ghanaian Labour Market

This section discusses the Ghanaian labour market focusing on the characteristic of working population, employment, unemployment, underemployment ratios and the main sectors of the economy. The section further explores challenges confronting actors in the labour market, the youth in particular. It also examines youth-skilled labour and the phenomenon of brain drain in Ghana. The analysis is done based on information from the Ghana Living Standard Survey VI (GLSS6, 2012/2013), National Employment Policies and studies conducted by International Labour Organisation (ILO) and experts.

## 3.2. Characteristic of the Working Population

The Ghanaian labour market is characterized by high level of labour participation and low levels of unemployment. In 2012/2013, a total of 79.6% of the Ghanaian population aged 15 years and above were found economically active. Majority (94.5%) of the economically active persons were employed with only 5.2% found to be unemployed[43]. Although unemployment remained low, there was observed marginal increase from 3.6% in 2005/2006 (GLSS6, 2005/2006).

Unemployment was highest (10.9%) among the youth (15-24 years) and least (2.5%) among elderly persons (65+years). Between 2000 and 2010, most age groups, except the youth, benefited from the slight improvement in the employment-population ratio (ILO, 2015). In terms of location, unemployment was highest among urban dwellers (6.7%) compared to rural dwellers (4%).

By educational attainment, unemployment was highest among persons with secondary education (11.7%) and those with post-secondary education (9.1%). It was, however, lower for persons with post-graduate degrees (2.7%), teacher training, agriculture and nursing training (2.8%) (GSS, 2014). Generally, majority (82.4%) of the employed population in 2012/2013 did not have any education (25.2%), dropped out of basic education (24%) or completed basic education (33.2%). Less than a fifth (17.6%) of the employed population had secondary or higher education. Only 3.6% had tertiary education.

Although many Ghanaians were employed, underemployment was prevalent. About 4.2 million persons aged 15 years and above were estimated to be time-related underemployment. Underemployment was prevalent among females (2.4 million) than males (1.8 million). Also, majority of the employed in Ghana in 2012/2013 operated in vulnerable activities as own account workers/self-employed (46.4%) or contributing family workers (22.3 %). A little over a fifth (22.5%) was in paid employment in main sectors such as private, public and not-for-profit organizations. More females engaged in vulnerable economic activities than men. For instance, the proportion of female self-employed workers (50.5%) was almost twice as males (26.6%). In contrast, more males (32.5%) were likely to have paid employment compared to females (13.2%). Interestingly, the International Labour Organisation (ILO) using 2000 and 2010 Census

[43] A person is considered as unemployed if he/she was not engaged in any work, had no attachment to a job or business, reported that he/she was available for work and had taken some specific steps to look for work (GSS, 2014)

data observed, higher than average, the number of young women engaged in paid employment in 2010. In 2010, about 13% of young women were employees compared to the average of 11% of women aged 25 to 64. This may suggest that more young women are taking up paid employment.

Information from the GLSS6 (2012/2013) confirms expansion in paid employment by 5% from 17.4% in 2006 and a reduction in own account workers by almost 10% from 56% in 2006. The proportion of contributing family workers also increased marginally from 20% in 2005/2006 to 22% in 2012/2013. Although the expansion in paid employment is significant, it confirms concerns that the formal sector is not expanding enough to be able to absorb fresh entrants into the labour market annually. In 2004, the Institute of Statistical, Social and Economic Research (ISSER, 2005) estimated that the formal sector in Ghana was only able to absorb 2% of new entrants. The remaining (98%) were presumed unemployed or in other categories of vulnerable employment.

## 3.3. Nature of Employment in Ghana

The Ghanaian economy is predominantly informal. The GLSS6 (2012/2013) estimated that the informal sector employed about 88% of the population. Agric-business employed majority (46%) of the population in 2012/2013. Other private-informal-sector activities employed 41.9% of the workforce. Ghana's public sector, which has since the 1980s been shrinking, employs only 5.8%, while the private formal has equally shrank with almost the same share of total employment (5.7%).

**Table 5: Types of Employers by Locality and Sex**

| Sector | Urban | | Rural | | Total | |
|---|---|---|---|---|---|---|
| | Male | Female | Male | Female | Male | Female |
| Public | 12.1 | 6.7 | 3.4 | 1.8 | 7.6 | 5.9 |
| Private formal | 14.2 | 5.8 | 2.7 | 1.1 | 8.2 | 3.4 |
| Private Agric-business | 19.7 | 17.8 | 74.0 | 72.1 | 48 | 44.4 |
| Other Private Informal | 52.8 | 69.3 | 19.6 | 26.8 | 35.5 | 47.8 |
| NGOs & Cooperatives | 0.7 | 0.2 | 0.1 | 0.0 | 0.5 | 0.1 |
| International Organisations /Diplomatic Missions | 0.3 | 0.0 | 0.1 | 0.0 | 0.2 | 0.0 |
| Other | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 |

Source: GLSS6 Labour Force Report, (GSS, 2014)

### 3.4. Current Key Economic Sectors and Labour Involvement

Ghana has over the last decade transformed from agro-based to services-based economy. The services sector has almost doubled its size of contribution to GDP since 2000. It currently contributes over half of total GDP and demonstrates potential for further expansion. The information and communication, financial and insurance subsectors have significantly boosted growth in the sector over the past decade.

**Table 6: Key Sectors of the Ghanaian Economy and Their Contribution to GDP**

| Sectors | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|---|---|---|---|---|
| **Agriculture** | 30.4 | 29.1 | 31.0 | 31.8 | 29.8 | 25.3 | 22.9 | 22.4 | 21.5 |
| **Industry** | 20.8 | 20.7 | 20.4 | 19.0 | 19.1 | 25.6 | 28.0 | 27.8 | 26.6 |
| **Services** | 48.8 | 50.2 | 48.6 | 49.2 | 51.1 | 49.1 | 49.1 | 49.8 | 51.9 |
| **Total** | **100** | **100** | **100** | **100** | **100** | **100** | **100** | **100** | **100** |

Source: Ghana Statistical Services, June 2015 Edition of Revised Annual GDP

It is widely acknowledged that Ghana's economic transformation has not been consistent with development trajectory. The services sector overtook agriculture as the largest contributor to GDP, skipping manufacturing, a situation which has an implication for job creation. Evidence world over suggests that job creation is supported by a burgeoning industry, but Ghana continues to miss opportunities to expand its manufacturing sector. Although agriculture is relegated to third position in terms of its contribution to GDP, it remains the largest sector of employment. In 2012/2013, 44.7% of the employed population worked in the agriculture sector; followed by the services sector (40.9%) and industry (14 %).

Agriculture remains predominantly rural and subsistent in Ghana. In 2012/2013, more rural dwellers (71%) compared to urban dwellers (17 %) operated in the agriculture sector. On the other hand, more urban dwellers (64 %) pursued economic activities in the services sector compared to rural dwellers (19%). There were more males in the agriculture sector (48%) compared to females in 2012/2013. In contrast, more females (47%) were engaged in the services sector compared to males (34%) (GSS, 2014). Yet the agricultural sector has failed to provide opportunities for young people in rural areas. The low growth rates recorded over the past decade coupled with its low income compel young people in rural areas to migrate to urban cities in search of gainful employment in the formal sector. With low skills, many of such migrants end up taking [vulnerable] employment in the informal sector (ILO, 2015).

### 3.5. Current Challenges of the Ghanaian Labour Market

A critical challenge to the Ghanaian labour market is limited, accurate and timely information. Information about labour market dynamics is limited; statistics often provide only a partial view, and national data is cautiously reliable (UNESCO, 2007). Limited data and accuracy is partly the creation of unregistered (informal) activities. The inability of the national statistical organization to accurately document activities in the informal sector affects policy planning and implementation necessary for labour market reforms.

The application of the concept of unemployment as defined by the International Labour Organisation[44] to a highly informal country like Ghana has also compounded the challenges by providing skewed labour market information. For instance, a person is deemed employed if he/she is engaged in any economic activity for pay, profit or family gain for the last seven days preceding the survey. On the other hand, a person is not deemed unemployed even when

[44] A person is considered as currently unemployed if he/she was not engaged in any work, had no attachment to a job or business, reported that he/she was available for work and had taken some specific steps to look for work

he/she did not engage in any economic activity for income, profit or family gain unless he/she took some initiative in finding job within the last seven days preceding the survey. Using these definitions, the Ghana Living Standard Survey has consistently reported low levels of unemployment but high levels of underemployment. These definitions present shortfalls when family relations and institutional support for job hunting in the country is interrogated. Thus, it would be fair to suggest that the low unemployment rate consistently reported by the Ghana Living Standard Survey is the creation of the definition and not reality.

In spite of the rather low unemployment statistics, there is a general consensus about high unemployment and underemployment in Ghana. The 2007 National Employment Policy (NEP) noted a situation of high unemployment and underemployment rates among vulnerable groups such as youth, women and persons with disabilities. The absence of jobs is believed to be the fundamental cause of poverty in Ghana (National Employment Policy, 2014).

The large informal sector is in high deficit of decent work. It is characterized by low income, longer working hours and poor occupational safety, health and environmental conditions as well as lack of social protection mechanisms such as pension, maternity leave pay and sick leave pay, among others. For instance, in 2012/2013, over 70% of the employed in Ghana had neither trade union at their workplaces nor medical care benefits as well as social security entitlements as shown on Table 7.

**Table 7 : Employment Conditions of Employed Persons in Ghana in 2012/2013**

| Employment Condition | Yes (%) | | | No (%) | | |
|---|---|---|---|---|---|---|
| | Male | Female | Average | Male | Female | Average |
| Availability of Trade Union at Workplace | 30.1 | 26.5 | 28.9 | 69.9 | 73.5 | 71.1 |
| Taxes already Deducted from Pay | 30.1 | 22 | 26.1 | 69.9 | 78 | 73.9 |
| Paid Holiday | 40.8 | 37.3 | 39.6 | 59.2 | 62.7 | 60.4 |
| Paid Sick Leave | 38.5 | 18 | 31.6 | 51 | 52.7 | 51.7 |
| Paid Maternity Leave | 5.9 | 9.9 | 7.3 | | | |
| Pension/Retirement Benefit | 31.5 | 26.6 | 29.9 | 68.5 | 73.4 | 70.1 |
| Any Social Security Entitlement | 30.5 | 26.3 | 29.1 | 69.5 | 73.7 | 70.9 |
| Medical Care Entitlement | 21.2 | 16.4 | 19.6 | 78.8 | 83.6 | 80.4 |

Source: GLSS6 Labour Force Report 2012/2013 (GSS, 2014)

The Ghanaian economy has structurally not transformed to cause the development of new productive employment and the efficient utilization of the labour force. Economic growth over the past decade has not translated into job creation. While the economy of Ghana has recorded an average growth of 7.7% (excluding oil) and labour force growth of 5.8% over the past decade, employment creation has lagged behind at 3.1% over the same period (National Employment Policy, 2014). The formal sector (both public and private) has shrunk following the pursuance of Structural Adjustment Programmes (SAPs) and neo-liberal policies. Against high cost of borrowing, unfair competition with foreign companies and products, it is anticipated

that the private formal sector would expand rapidly and engage the teaming job seekers (created by the large-scale retrenchment in the 1980/90s and the new entrants into the labour market) annually, but these have not materialized. These challenges, against high population growth, have created a pool of unemployed persons who have naturally gravitated towards to the informal sector (Ampratwum & Osei-Boateng, 2011).

Even as job seekers bemoan unavailability of jobs, employers, on the other hand, perceive that most job seekers, particularly new entrants, are technically incompetent and unsuited for the world of work. The National Employment Policy (2014) attributed this to the following: (1) limited provision of demand-driven tertiary education, (2) limited provision of skills training for majority of school leavers, (3) inadequate provision of technical, vocational and educational equipment, and (4) inadequate capacity of instructors. The Policy noted that the current educational system eliminates a pool of unskilled labour at the elementary level (Junior High School and Senior High School). This pool of unskilled labour force, together with graduates at tertiary levels, constitutes a pool of unskilled, semi-skilled and unemployable job seekers who flood the labour market.

### *3.5.1. Youth Unemployment*

Unemployment among young people is a worrying global issue, particularly for developing and emerging economies. In Ghana, young people's access to economic and societal resources are limited, and very often, they are more vulnerable than older age groups. As noted earlier, unemployment among young people in 2012/2013 was higher than any other group.

Majority of the unemployed youth has low education and therefore low employable skills to be competitive in the job market. In 2012/2013, over two-thirds (77%) of young people aged 15 to 35 had either no education or up to basic education; 17.6% had secondary, vocational or technical educational attainment, while 5.3% had tertiary education as shown in Table 8. Low skills acquisition by the young people at the basic level is partly attributed to inadequate resourcing of the Junior High School and Senior High School systems. These systems were originally framed to provide basic skills required for young people to function in a modern economy, but lack of adequate resources has limited their ability to teach pupils academic and practical skills in order to equip them for the job market. Also, basic school is completed between ages of 12 and 15, when the children are immature to absorb the skills of craftsmen and industry[45].

**Table 8 Educational Attainment of Persons Aged 15 to 35-years**

| Educational Attainment | Percentage |
|---|---|
| **Never Been to school** | 13.9 |
| **Less than MSLC/BECE** | 29.2 |
| **MSLC/BECE** | 33.9 |
| **Secondary** | 15.8 |

[45]Education Review White Paper http://www.moe.gov.gh/assets/media/docs/EducationReview-WhitePaper.pdf

| | |
|---|---|
| **Vocational/Technical/Commercial** | 1.8 |
| **Teacher Training /Agric/Nursing Certificate** | 1.1 |
| **Post- Secondary Diploma (e.g. HND)** | 2.0 |
| **Bachelor** | 2.0 |
| **Postgraduate** | 0.2 |
| **Total** | **100** |

Source: GLSS 6 Labour Force Report (GSS, 2014)

An emerging phenomenon is the growing unemployment among graduate youth. Ghana's educational system has expanded rapidly in recent years to produce more graduates. Thus, many more Ghanaian youth are now acquiring tertiary educational qualifications and joining the labour market in search of jobs which are in short supply. Most recent graduates studied liberal arts and business management related courses such as humanities, marketing, and human resources among others against science and technological skills required by Ghana's few vibrant sectors such as the new oil industry. The National Employment Policy (2014) acknowledged reasons affecting young people's prospects in finding employment in Ghana's already choked labour market as follows: (i) weak linkage between the educational system and productive sectors of the economy, (ii) mismatch of skills acquired by the youth vis-à-vis what is required by the job market, and (iii) weak support systems for entrepreneurship and small-scale business development for self-employment..

### *3.5.2. Skilled Youth Employment*

In 2012/2013, labourforce participation rate was 73% for persons aged 15-24 and 91.5% for those aged 25-35. Males were more likely to be inactive (17.6%) compared to their female counterparts (16.8%). The proportion of active youth aged 25-35 years in the rural areas (36.5%) was higher than those in urban areas (32.9%). Active young people operated as contributing family workers (33.9%), own account workers (31.9%) and wage/salaried workers (27.4%).

The above indicates that less than a third of the youth in Ghana were engaged in skilled employment in 2012/2013. This is partly explained by the low educational attainments. Asafu-Adjaye (2011) using data from the Ghana Living Standard V (GLSS5) observed that the highest private returns on education in terms of employment were at the tertiary level. This show the limitations youngest people in Ghana have in finding skilled employment as most (94.7%) have educational attainment below tertiary level.

Again, skilled employment in Ghana is largely formal in nature. With low absorptive capacity of the formal sector in Ghana, young people have slimmer chances of finding skilled employment given their limited experience, even when they have tertiary qualification. Thus, it is not surprising that only 32% of the graduate youth in 2006 worked in the formal sector.

Transition between formal and informal work for young people in Ghana seems limited. This is, again, partly because the formal sector is too small to absorb the growing labour force. Thus,

although many young people enter into informal employment as a survival strategy after graduation from school, many get stuck into these economic activities for life.
Studies have established that transition from school into skilled employed is quicker for holders of some academic disciplines than others. According to GSS (2006, Chronicle 10/01/2016), graduates with biological sciences, engineering and ICT qualifications tend to get their first job earlier (three months after national service) than those with social sciences and liberal arts (10 months after national service). This suggests that practical-based subjects tend to be in high demand than theory-based subjects, and enhances ones chances of finding skilled employment. Indeed, graduates [of public funded institutions] with professional qualifications such as nurses/midwives, teachers and doctors in Ghana are guaranteed public sector employment immediately after graduation.

### 3.6. Brain Drain of Graduates/Skilled Workers

The phenomenon of brain drain continues to affect developing countries all world over including Ghana. In Ghana, as other parts of Africa, international migration is largely informal and undocumented, making accurate data on the phenomenon extremely scanty (World Bank 2016). Internal migration is very significant in Ghana, as in many West African countries. Flows of internal migration are estimated to be larger in volume than those of international migration. There are significant flows to other parts of the African continent, in particular North, Central, and Southern Africa. But the vast majority move within West Africa, where mobility across porous borders within the region is among the highest in the world (Olsen 2011; World Bank 2016).

The most comprehensive data set on international migration from Ghana is based on census data from OECD countries. These estimates suggest that the Ghanaian Diaspora in OECD countries in 2010 was equivalent to 2.3 percent of the population in Ghana, an estimated 270,000 Ghanaians, most of them in the United States and the United Kingdom (World Bank, 2016). The migration rate to OECD countries has been growing steadily over the past 20 years, and is high compared to African peers and is also high in relation to other West African countries. Wage differentials, demographic patterns, and political instability have acted as push factors spurring migration to OECD countries (World Bank, 2016).

The costs and benefits of high-skilled migration are much debated (World Bank, 2016).The International Organisation for Migration (IOM, 2009) reported that 56% of doctors and 24% of nurses trained in Ghana worked abroad. Between 1995 and 2002, 482 out of 602 representing 69.4% of general practitioners and medical officers that trained in Ghana left to practice in other countries (Young, 2008).

Generally, the desire to have a better work and family life has often been the consideration for many skilled migrants from Ghana. The World Health Organisation (2006) noted for example that health care workers in Ghana as in other sub-Saharan African countries experience very poor career development. Understaffing, underemployment, lack of skilled staff and lack of job satisfaction contribute to poor working conditions and stress at work (Mwita, Nyagero, O'Neill & Elqura 2009, Nurse & Midwives Council of Ghana, 2010, Pillinger, 2011) and these compel

people to consider migrating. These observations are consistent with the findings of the 2014/2015 Global Competitiveness report, which ranked Ghana low on its ability to retain and attract smart brains into its labour force. Ghana's labour market was said to be characterized by inefficiencies, and the country was noted to be not sufficiently harnessing new technologies for productive enhancement. Such poor conditions in the labour market often "push out" skilled workers who are in high demand by other countries perceived to offer better wages and living conditions.

For young graduates, however, frustrations in the labour market in addition to desire for better life can cause them to migrate. Majority of graduates after fruitless job search pursue further education preferably abroad and subsequently do not return home to take up employment. Many of such migrants have found themselves in jobs below their capacity.

# 4. Findings of Research

## 4.1. Demographic Characteristics

### *4.1.1. Social Characteristics of Respondents*

#### 4.1.1.1. Age of Respondents

Analysis of the student respondents showed that more than seven (7) in ten (71%) were aged between 18-25 years, while about a quarter (24%) were aged between 26-35 years . In the case of the graduates, majority (70%) were within the ages of 26 to 35 years. A quarter (25%) of the graduates was also between the ages of 18 to 25 year bracket. the remaining 5% were 36 years and above.

#### 4.1.1.2. Gender

A solid majority of student respondents were males (60 %) while 40 % were females. Given the age bracket of the students, it was not surprising that 95 % of respondents were single while 5 % of respondents were married. In terms of gender, majority of graduates were males (68 %) with females forming 32 %. Eighty two percent of the graduates were married while the remaining 18% were single.

#### 4.1.1.3. Educational Level

An overwhelming majority of student respondents (96%) were studying for first degree programme, while 2% were studying for Post Graduate Diplomas (2%) and Master's Degree programmes (2%). While eight (8) in ten (10) graduates were holders of Bachelor's Degrees (85%), one in ten (10) had completed their Masters programmes (10%) and 2% were PhD holders. This finding is consistent with the World Bank report that education levels have increased in Ghana, and gender disparities are falling in the younger generation. By 2012, 61 percent of young women and 72 percent of young men had at least finished basic education (2016).

#### 4.1.1.4. Educational level of Guardians/Parents

Parents' education is an important determinant of choices about schooling and transition to work. In sub-Saharan Africa, young children from households with a parent with more than secondary education are 20 percent more likely to be in school than children in households where the head has little or low education. The number of working adults in the household also increases the probability that the young will attend school, especially in countries with good schooling outcomes (Inoue and others 2015; World Bank, 2016). A third of student respondents (34%) said their fathers had completed some tertiary education other than university while 28% had fathers who had completed university education. One in ten of the fathers of the students had completed SHS education (11%) and up to JHS (15%). In the case of about 4% of the

students, their fathers had no formal education at all. In terms of the educational level of fathers of the graduates, at least four (4) in ten (10) were university graduates (41%) or completed some higher education other than the university (40%). One in ten fathers of the graduate respondents had no formal education.

Similar to the case of the respondent's fathers, a third said their mothers had completed some tertiary education other than the university. However, only about half the mothers had completed formal university training. One of ten reported that their mothers had completed SHS while about a quarter (22%) reported that their mothers had completed up to JHS or Middle school. Again, twice as many students reported that their mothers had no formal education (8%) compared to their fathers (4%). The situation of the mothers of the graduates with no formal education was quite similar to the fathers of the graduates, with 15% having no education. Only a quarter (24%) of the mothers of the graduates had completed university degrees or some higher education other than university degrees. The findings of the low levels of education among mothers is consistent with the findings that there are over 3 million people in Ghana between ages 15 and 39 who have completed no more than primary education; nearly one out of five in this age group of women does not have any education at all (World Bank, 2016).

#### 4.1.1.5 Type of Institutions Respondents Attend/Attended

Given the quota allocated to institutions in the data collection for this study, 64% of the students were enrolled in public institutions, while a third (36%) were enrolled in private universities.

#### 4.1.1.6 Period of Study of Respondents

Majority of the student respondents had first enrolled for their bachelor's degree programmes in year 2012 (64%) and 2013 (9%). For students who reported that they were pursing their Masters programmes, one in ten (17%) first enrolled in 2008. Analysis of the data on the first time of enrollment of graduates into universities showed that 13% first enrolled between 1990 and 2005, while 65% first enrolled between 2006 and 2010. About a quarter (22%) first enrolled for their university education between 2011 and 2015.

#### 4.1.1.7 Areas of Study of Respondents

Two in ten student' respondents pursued business administration courses (23%), general science and agriculture (24%) or social science and arts related programmes (21%). One in 10 students also pursued medical science or nursing programmes (19%) or other professional courses offered at the universities (12%). In the case of the programmes pursued by graduates while they were in school, close to half (48%) had studied for programmes in the areas of arts and social sciences. Almost a third (29%) had pursued courses in the general and natural sciences. Eighteen percent had also taken courses in business administration and management.

## 4.2. Considerations for Choice of Tertiary Institutions

Various factors influence decision of final year students to choose particular universities to attend in Ghana. Nine of ten students said their decision to enroll was influenced by the nature of courses offered at the universities (92%) and the reputation of the university or academic department (90%) in respect of the programmes they wanted to pursue. Other eight (8) in ten (10) identified the admission standards and their results from examination prior to their application to the university (88%), the practice-oriented study of the university (85%) (which more students in public universities identified as a more critical factor compared to the private university students) and the combination between theory and practice in the programme at the university. (84%) (which more students in public universities (63%) identified as a more critical factor compared to the private university students (37%)) informed their choice of university. While seven (7) in ten (10) said the institution collaboration with industry (77%), the areas of specialization of the universities (76%) and the advice by their parents (77%) influenced their decision, (66%) attributed their choice to the availability of quality accommodation.

Analysis of the graduate responses showed that the key factors that influenced decision of graduate to choose universities were mainly informed by the nature of courses offered (86%), practice oriented study programme of the subjects being offered (84%) and reputation of the university or department offering the particular programme (83%). Indeed, others pointed to the combination between theory and practice (77%) and areas of specialization provided by the institutions (73%) as the key determinant of their choice while six (6) in ten (10) also said the advice of parents (60%) and the institutions' collaboration with industry was a key factor in their choice. Only half of graduates were influenced by the availability of accommodation (52%) to enroll at a particular university.

The least important of the factors identified by student and graduate respondents was the vicinity of the university or institution to home of parents, the attractiveness of the town in which the institution is located, and the availability of scholarships. Given the obvious absence of scholarships in many tertiary institutions, it was not surprising that the availability of scholarships at the institution of choice did not feature prominently in their selection of higher institutions.

### *4.2.1. Funding of Tertiary Education*

For majority (86%) of students, family members were sponsoring their education at the university. Eight percent said that they financed their own education, while 3% pointed to private scholarship. Less than one in ten (10) student respondents said they were being sponsored by university administered grant (0.5%) and their employers (1.0%). Like the final year students, an overwhelming majority of graduates reported that their family members (86%) sponsored their education, while 13% sponsored their own education. Private and other scholarships featured less prominently. It is worth noting that no employer sponsored students in private universities while students that reported that they were on full university administered scholarships attended private universities.

### *4.2.2. Knowledge and Awareness of Financial Aid*

Six in 10 (64%) of student respondents were aware of the existence of financial aid schemes or office in the university they attended. While 59% of the students who were aware of the existence of financial aid schemes or office in the university they attended were in public institutions, 41% attended private institutions.

For more than half (56%) of the graduates, however, they were not aware of the existence of financial aid schemes or offices at the universities when they were in school.

For those students and graduates who were aware of the existence of such aid schemes, the key schemes were the student loan, Student Financial Aid, SRC scholarships, Ashesi Foundation, CUC scholarship, MasterCard foundation etc.

Of those student respondents who indicated awareness of the existence of such facilities, 42% reported that they were aware of the process to access such information on the financial while 14% had no such information. For the minority of graduates who also reported awareness of the availability of financial aid while they were in school, close to 6 in 10 (58%) reported awareness of a process at the institution for accessing information on financial aid.

Again for those who had information of the availability of financial aid, the information was available to students at the university financial aid office (78%), university website (19%) and the university application process (3%). For the graduate, four (4) in 10 (43%) said the information was available at the university financial aid office. About a quarter knew of the information through the university website (21%) and the faculty/department notice board (23%). One in ten also referred to the university application system as their source of information on the availability of financial aid to needy students.

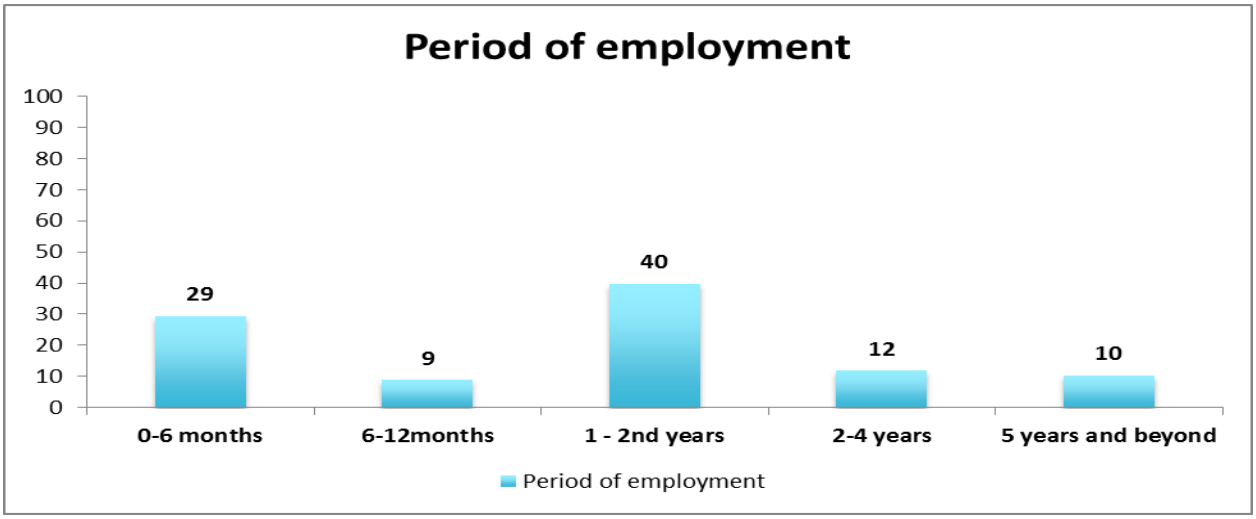
Respondents in the in-depth interviews equally corroborated that various scholarship exist through the National Scholarship Secretariat, GETFund or other university administered financial aid schemes. They also pointed to the existence of employer sponsored scholarship programmes for short term courses as well as study leave with pay for employees who have served for a minimum number of years.

## 4.3. Employment Situation of University Graduates

Less than half (47 %) of graduates reached by the study were employed[46]. Majority (78%) found employment within the first two years of graduation from the university; while 12% waited for between two and four years. For 10 % of the employed however, the wait was five years or more.

[46] Respondents indicated yes to a question asking if they were employed.

**Figure 1** Period within Which Graduates Found Employment




Source: Survey Data, 2016

The mandatory National Service Scheme provided an entry into first employment by many employed graduates (38%) while 17% found employment by applying to vacant positions advertised by private companies or government agencies. A fifth of employed graduates returned to their previous employment before enrolment into the university. This group perhaps combined their study with work. Personal contacts through family or friends helped 10% of all employed graduates to gain employment. Other channels used by graduates to secure their first employment included contacts established through internship programs (6%) university placement office (5%), and self-employment (5%). Nearly a fifth (4%) gained employment by contacting employers even without knowledge of existing vacancies.

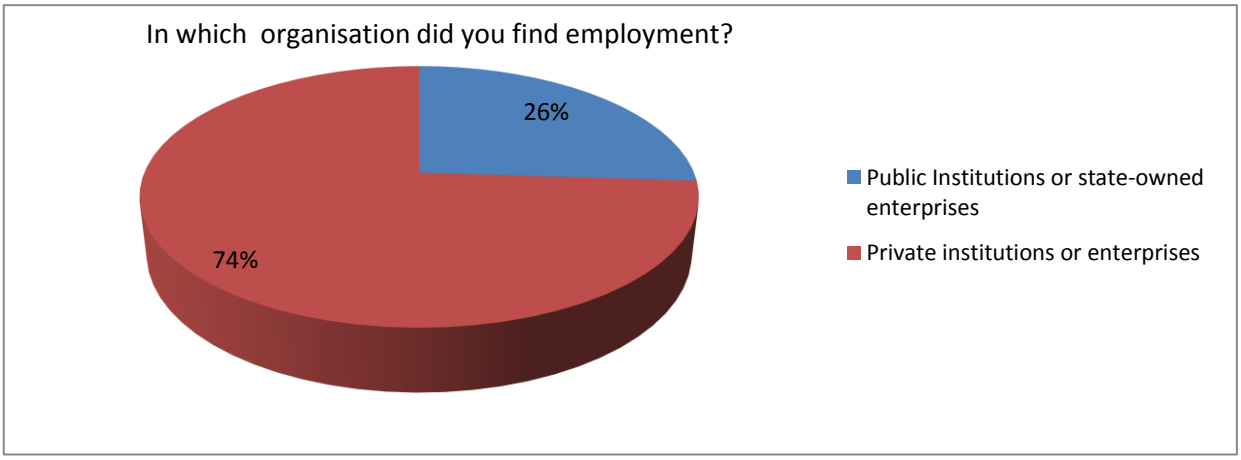
For those who applied to vacant positions, information about the vacancy was largely sourced from recruitment agencies' websites (40%), family (27%), friends (21%); other graduates colleagues, former colleagues or school mates (27%).
Majority (74%) of the employed graduates were employed by private institutions or enterprises compared to 26% in public institutions or state-owned enterprises. Most of these enterprises/organisations were formal in nature (91%) which confirms the assertion that high educational attainment reduces informality[47].

In terms of the sectors graduates found employment, about a quarter (26%) worked in banking, finance and insurance; followed by education (18%), health (11%), the non-profit organizations (11%) and other commercial services (10%). Other sectors including construction, mining/ energy/ water supply, production industry, public administration, transportation and trade employed the remaining 23%. The tendency for graduates to be employed in the services sector

[47] There is also a high tendency that those who set up their own employment would formalize it given their educational background

rather than industry lends credence to the recent findings on the Ghanaian labour market that, as in other African countries, the share of the manufacturing sector has been declining over time. Between 2005 and 2012, the manufacturing sector contributed only 5 percent to the total increase in value added. The higher costs of inputs have undermined the already low competitiveness of the sector (Ceglowsky and others 2015; World Bank, 2016). Unlike in Asian countries, the structural transformation in Ghana skipped the intermediate stage of moving from agriculture to traditional manufacturing industries. Workers leaving agriculture have been absorbed mostly in service sector, and mostly in urban areas, accommodating the higher demand created by the recent rapid rise in urbanization (World Bank, 2016).

**Figure 2 : Employment Sectors of Graduates**




**Source: Survey Data 2015/2016**

It is worth noting that 5% of graduates had been self-employed. Indeed, research has shown that the growth in self-employment between 2005 and 2012 has been accompanied by an improvement in education and aggregate earnings among the self-employed. Analysis based on different rounds of the Ghana Urban Household Panel Survey (GUHPS) points to increasing returns to capital and education among the self-employed. Returns to education for the self-employed were lower than for wage workers between 2004 and 2006, but grew faster between 2009 and 2011 (Rankin, Sandefur, and Teal 2010; Twumasi-Baffour 2015; Falco and Haywood 2016; World Bank, 2016). Similarly, the level of education attainment among the self-employed increased between the two periods. This is consistent with the idea that changes in returns are driving changes in the composition of the workforce. Finally, consistent with GLSS data, the panel survey also provides evidence of a decreasing differential between the wage and self-employment premium between 2009 and 2011 (Falco and Haywood 2016). Taken together, the findings support the view that the self-employment sector became an attracting option for relatively higher educated workers (World Bank, 2016).

### *4.3.1. Employment Conditions*

The 2003 Labour Act (Act 531) establishes conditions of employment in Ghana. Provisions include signed agreement, minimum wage, statutory benefits and rest periods among others. There is no doubt that some jobs offer more opportunities than others simply because they

offer higher earnings. What one earns on the job is, of course, a key aspect of job quality. Different employment sectors differ significantly in the quality of jobs they offer, considering earnings as a benchmark for quality. Most clearly, the public wage sector offers higher wages, and a public sector premium is present at all ages and levels of education. Work in farming, on the other hand, pays the least. The private wage sector also offers higher wages than off-farm self-employment, but the differences are quite small (World Bank, 2016). The study observed that over half of employed graduates (60%) were in permanent employment, while 21% and 19% were apprentice and casual workers respectively. Nine out of ten employed graduates were in full time employment as opposed to only 4% part time workers and 6% in flexible self-employment.

### *4.3.2. Employment Benefits*

Statutory benefits mandated by the 2003 Labour Act include social security contribution (pension), paid sick leave, paid maternity leave, paid annual leave and severance pay in situations of redundancy. Other benefits which, though, are not statutory but have become common include medical care, transport and rent allowances. The ability to take paid sick leave or maternity leave and retain both job and income, for example, reduces household exposure to health or pregnancy risks. Access to a pension reduces the risk of income shortfalls in old age. The existence of a written contract implies contractual obligations on the part of both employer and employee, and thus, some measure of job security. In Ghana, the public wage sector has far more to offer than the private wage sector in terms of benefits. Majority of public sector employees have access to paid holidays, pension contributions, and sick leave; two out of five have access to subsidized health care as an extra benefit. Less than 5 percent lack a contract. By contrast, in the private wage sector, 30 percent of workers, or fewer, have access to any form of social security, and less than 30 percent have a written contract. The low levels of social security coverage or formal contracts suggest that informal work is the norm in Ghana, even in the wage sector (World Bank, 2016). Data gathered imply violation of some statutory provision by employers of the university graduates surveyed as less than a quarter has access to retirement benefits. Interestingly, more employers provided transportation (49%) and health care benefits (43%) than retirement benefits (23%). The concern that most paid employees are not being treated fairly was shared by officials of academic institutions and labour unions contacted by the study. A respondent from the university expressed concerns that most new graduates do not have good employment conditions.

### *4.3.3. Income Levels*

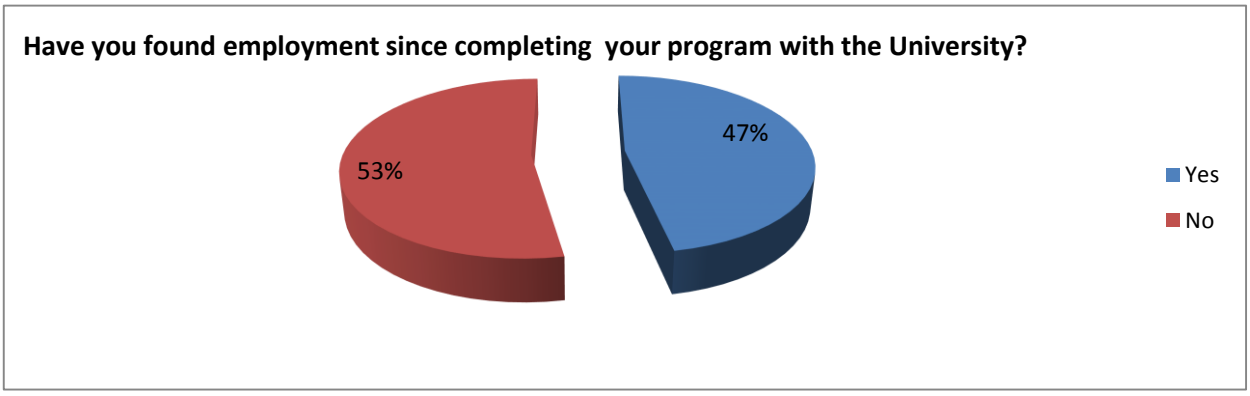
Generally income levels in Ghana are low compared to countries at similar developmental levels. The national daily minimum wage in 2016 is GH₵8 (US$2.10) which translates into GH₵ 216 (US$56.84) per month. In 2012/2013, the average monthly earnings of paid employed persons in Ghana was GH₵495.47 (US$256.72). Males (GH₵592.64; ($307.06)) earned much higher than females (GH₵395.48 ($204.91)). The average earnings of employed graduates who provided information was GH₵1041.80 ($274.16).The highest earning was GH₵3800.00 (US$1000.00), while the lowest was GH₵200 (US$52.63) which suggests that some graduates are earning below the minimum wage.

These findings reflect the findings of a recent World Bank research which indicated that the public-private wage differential in Ghana may crowd out other types of employment and increase unemployment among the higher-skilled workers. Ghana experienced an increase in both the size of government employment and the wage bill during the 2000s although the civil service has contracted since the mid-2000s. The higher wages, greater job security, and more generous provision of nonwage benefits make jobs in the public sectors very attractive for prospective entrants in the labour market. In Ghana, public sector workers on average earn about twice as much as workers in the private sector, after controlling for the double selectivity into wage and public employment (Falco and others 2011; World Bank 2016). Moreover, individuals in districts with a larger share of public workers are more likely to be unemployed, suggesting that new entrants in the labour market prefer to wait and queue for a public sector job (Ranzani and Tuccio 2016, forthcoming; World Bank 2016). Public employment is also more geographically concentrated than private wage employment, and accounts to 10 percent of total employment in only a few districts in Ghana, most particularly in Accra (World Bank 2016).

### 4.4. Unemployment among Graduates

Over half of graduates (53%) interviewed were unemployed although some had left school for over 5 years. Unemployment among male graduates was almost equal to those of their female counterparts. In terms of course of study, however, the study observed high proportions of unemployment among graduates of arts and general science courses compared to medical science/nursing and administration courses.

**Figure 3 : Employment Status of Graduates**




Source: Survey Data, 2015/2016

Majority (88%) of unemployed graduates attributed their situation to non-availability of jobs in the country. Tertiary education in Ghana has expanded in recent years, producing more graduates than what existing enterprises could accommodate. Most graduates recognized freeze on public sector employment and poor economic management as causes of low supply of jobs. This was corroborated by respondents from employers/industrial associations, labour unions and universities. In addition, they mentioned that Ghana's private sector is weak; and hence, unable to provide jobs in quantities required. . According to respondents from employers/industrial associations, the recurring power crises and inadequate support to private sector were some of the reasons for the weak private sector performance in creating jobs. In

addition, an informant from the university perceived that trade liberalization has caused collapse of industries in Ghana and therefore inadequate supply of job.

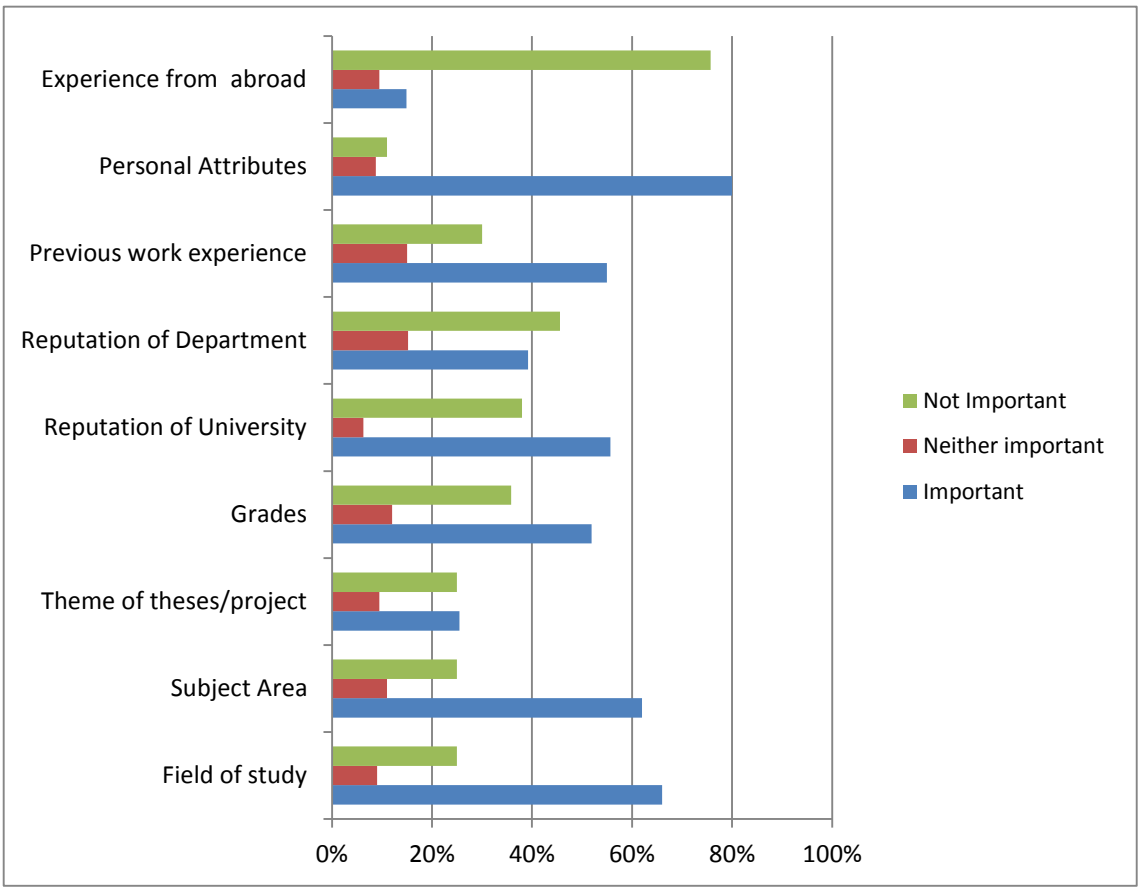
For few unemployed graduates (8%), lack of requisite skills was a barrier to gainful employment. This concern was highly rated by employers representatives interviewed. They bemoaned that in as much as job supply is inadequate, most graduates do not possess requisite skills. Most graduates when employed cannot perform basic tasks. According to them, highly skilled training is lacking in Ghana's tertiary institutions. Others were concerned that tertiary institutions were focused on training students in humanities, and business administration (human resources, marketing and banking and financing) neglecting applied sciences and technology. They believed that Ghana's new sectors like the oil and gas cannot find requisite skills locally, and are therefore employing expatriates as the same time the country experiences high unemployment. Yet a few respondents disagreed that the few science and technology trained were even struggling for jobs; laying the blame again on low supply of jobs.

Almost a tenth (9%) of graduates contacted had enrolled for further education after their degree programs. In addition, 43% of unemployed graduates indicated plans to enroll for further education if they did not find employment within six months to one year from the date of the survey. Similarly, 38% of students mentioned plans to pursue further education if they did not find job by a year after graduation. This was confirmed by university officials interviewed who mentioned that most students return to the University for further education after frustrated job search. Over half (63%) of these unemployed graduates intended to continue further studies in the same course area as their previous qualification, while the remaining (27%) intended to change the course of study. This may suggest that majority of them did not see a link between their joblessness and the course of study. Students made similar projections with 71% indicating plans to pursue advance degree in their current area of study, while 29% intended to change course of study during advance degree. These findings of graduates and students hoping to pursue further education to escape unemployment are corroborated by recent studies by Twumasi-Baffour (2015) and the World Bank (2016).

### 4.5. Employability of Graduates

Competitiveness of job seekers is determined by both demand and supply side variables. For graduates seeking employment, their strength lies in skills possessed, previous employment experience, and personal attributes, among others. For new graduates, however, grades earned at the university, reputation of academic institution and or course of study may influence employers' decision to hire or not to hire them. Figure 4 summarizes employed graduates perspectives on factors which influenced their employment. The pattern of graduates responses were shared by students.

**Figure 4** : Employed Graduates Perspective on Important Factors Which Influence Employment




Source: Survey Data, 2016

For both graduates and students, soft skills such as team working abilities, analytical skills, good communication skills, and good interpersonal skills were prime considerations in their employability. More than any other factor, majority of students believed these soft skills had stronger influence on their employability. This was corroborated by an expert who mentioned that basic requirements by the labour market were five strong skills. These included literacy, numeracy, team work, problem solving abilities and communication skills. Another expert from the university stated that university education is to a large extent programmed to help students acquire some soft skills (except in specialized fields like medicine), while practice on the job would transfer hard skills. Darvas, Favara, and Arnold (2016) have also argued that the increase in education attainment needs to be accompanied by the accumulation of skills in terms of cognitive, socioemotional, and job-specific competencies. A wide set of skills are needed to do more advanced jobs well. These are: cognitive skills (reading, writing, analysis), socioemotional skills (discipline, team work skills), and job-specific skills (technical skills, but also management, supervision, computer skills, and the like). There is evidence from advanced economies, as well as Ghana, that the use of skills are an important determinant of earnings, even when education levels are taken into account. In Ghana, the best-paid jobs require intensive writing and job-specific skills, as well as conscientiousness (the ability to stay on task) (World Bank, 2016).

Similarly, both graduates and students strongly believed in the positive role work experience plays in finding employment, but majority (71 %) of graduates employed did not have any work experience prior to enrolling into their university programmes. For the remaining 29 % who had worked prior to university enrolment, over two-thirds (76 %) worked for up to two years. Although most graduate respondents indicated most employers did not indicate reasons for not hiring them, a few mentioned limited experiences as reason given by employers who failed to hire them.

For students and fresh graduates, work experience is often gained through compulsory national service, voluntary employment or internship/industrial attachment. The situation of internship/industrial attachment programmes differ from one university to another. Commonly in all universities, industrial placement is facilitated for students pursuing applied science courses (e.g. medicine, nursing) and other professional courses (Social Work, nursing, etc). For students pursuing social science, arts and administration programmes, most universities provide introductory letters to those who may on their own seek industrial placement.

Most public and private sector officials interviewed indicated that their organisations offered internships to students upon request based on their capacities. A respondent from GEA mentioned that the organisation was working on Industrial Attachment Policy which would encourage its members to drive internship.

However, most private enterprises are often constrained financially to take in more interns; and therefore called for government to support in a form of incentive. One respondent bemoaned that, “It takes money to create a desk for intern and to send them to the field. Some of these interns are also not willing to volunteer for free.” Another respondent observed that poverty levels in the country made it difficult for some interns to support themselves especially when placement is offered outside their town of residence.

These observations confirm challenges universities face in seeking placement for students. A university lecturer interviewed mentioned that most organisations (especially public sector institutions) refuse to offer internship to students because they claim they do not have budgets to support them.

Yet, there are students who prefer placement with bigger and reputable organisations instead of smaller ones which may be within their vicinity, a concern shared by a University Placement Center. This could be due to students’ expectation to find employment through placement. Thus, an internship with a reputable organisation presents better opportunity for actualizing their expectations.

### *4.5.1. Expectations of Employment of Students*

Majority (94%) of students surveyed were studying full time. They expected to find employment in either the public sector (45%) or the private sector (43%) after graduation. Almost a quarter (24%) of them expected to set up their own businesses which is far higher

than graduates who have been able to set up their own businesses (5%). For majority of them, however, the mandatory National Service was anticipated first employment. Other expected channels included application to vacant positions (57%), personal and family contacts (49%) and employment agencies (35%). The proportion of students who expected to return to employers they worked for prior to university enrollment tallied with those who indicated to be gainfully employed. This finding is consistent with an analysis of labour market participation and selection into different employment sectors using the urban worker survey data from 2004 to 2006 which showed a clear preference by educated workers for formal sector employment, particularly in the public sector. Higher levels of education reduce the likelihood of being self-employed and increase the probability of formal sector employment. In addition, individuals with secondary education preferred to wait in unemployment for formal sector jobs rather than enter into self-employment (Twumasi Baffour 2015; World Bank, 2016).

Except for the banking, finance, insurance, public administration, construction and other commercial services, students' expectations of the sector in which they would find employment varied widely with employed graduates as shown in Table 9.

**Table 9** Sectors of Employment of Graduates vs. Students' Expectations of Sectors of Employment

| Sectors | Students Expected Sectors of Employment (%) | Employment Sectors of Graduates (%) |
|---|---|---|
| **Agriculture, Forestry, Fishery** | 4.2 | 0 |
| **Mining, Energy, Water supply, etc.** | 4.6 | 2.8 |
| **Construction** | 2.3 | 2.8 |
| **Production Industry** | 6.5 | 2.8 |
| **Transportation** | 1.4 | 4.2 |
| **Banking, Finance, Insurances** | 19.9 | 26.4 |
| **Trade** | 2.8 | 5.6 |
| **Other Commercial Services** | 8.3 | 9.7 |
| **Health care** | 26.4 | 11.1 |
| **Education (Pre-Tertiary)** | 1.4 | 6.9 |
| **Education ( Tertiary)** | 4.6 | 11.1 |
| **Non-profit Organization** | 3.2 | 11.1 |
| **Public Administration** | 7.9 | 5.6 |
| **Total** | **100.0** | **100** |

Source: Survey Data, 2015/2016

This may suggests that students may not have adequate knowledge of the Ghanaian job market situation. When graduates do not find their expected job, they are compelled to accept available jobs regardless that they may not suit their career objectives. Almost a fifth (19%) of employed graduates indicated that they had to accept jobs hardly linked to their course of study. A similar proportion of students mentioned willingness to accept jobs which guaranteed higher income (21%) even if they were not in line with their course of study. According to an informant from labour unions, this situation represented a mismatch between academia and

job market; and contributed to the high underemployment situation Ghana experiences. The respondent cited the example of university graduates working as tellers in banking halls as a case of skill underemployment.

### *4.5.2. Brain Drain in Ghana*

Generally, the situation of brain drain appeared to have slowed down in recent years according to key informants interviewed by the research team. Some believed that the brain drain situation improved along with Ghana's economic improvement. However, some were quick to add that the current economic challenges could reverse the situation.

An informant from the university believed there was a need to overturn brain drain into brain gain. Given the low capacity of the economy to absorb job seekers, the respondent argued that it may be in the interest of Ghana to export labour because it would bring the country returns through remittances.

Almost all respondents mentioned the health sector as the loser in terms of brain drain. This has resulted in high health care professionals to population ratio, particularly doctor and midwife per capita. While the nurse per capita has improved, respondents noted that recent collective actions by unemployed nurses which suggested that they are no longer guaranteed of employment after graduation may reverse gains made in improving the situation of brain drain in the health sector. Government has already scrapped the bond which compelled nurses trained in public funded institutions them to work in Ghana for five years[48]. With the bond no longer in place and guaranteed jobs fading out, some believed the issue of brain drain in the health sector could resurface.

More recently, the discovery of oil in Ghana, as well as other pull factors, has attracted internal and international migrants. The discovery of valuable resources is often accompanied by a boom in services and other industries, leading to a boom in employment that attracts a diverse population of job seekers and stimulates entrepreneurship among the local population and migrants (Center for Migration Studies, University of Ghana). Although oil and gas experts are not many locally, some of the few had reportedly left the country following crisis at the national refinery (Tema Oil Refinery), some respondents believed. Ghana's natural resource sector (mining, oil and gas) was also mentioned by some experts as facing brain drain. Experts in the sector in Ghana are often attracted by mining companies in other African countries such as Guinea, Sierra Leone and DR Congo.

A little over a tenth (14%) of unemployed graduates aspired to travel abroad for greener pastures if they did not find employment within six months from the date of the survey. Interestingly, only 4.5% of students aspired to do same. This may be an indication that, all things being equal, most people would like to stay and work in Ghana. However, frustrations in the job market could cause them to review their decision.

[48] Effective 2017/2018 academic year, nurses trained in public institutions would no longer be bonded.

### *4.5.3. Labour Market and Education Mismatch*

There is rising concern over a possible mismatch between academia and the labour market. Indeed in May 2014, the Ministry of Education hosted a two-day national conference aimed at finding solutions for "bridging the gap between education and industry". The conference which was themed: "Achieving a Strong Partnership between Education and Industry: The Way Forward" was held in the Accra International Conference Centre and brought together key stakeholders. Government, in 2015, launched a new National Employment Policy which among other things seeks to address the issue of mismatch between education and labour market. An informant from a labour union was however concerned that the 2016 National Budget Statement and Economic Policy did not make any provision for the implementation of the policy.

In-depth interviews with officials of labour unions, employers' associations and universities confirmed the usual blame game between academia and industry. While respondents from industry complained about poor caliber of graduates being produced, university players disagreed. According to informants from employers/industrial association, most graduates lack requisite skills to function on the job. A respondent stated that: "*Graduates cannot write common minutes.*" Another informant believed that universities are not preparing students adequately for the job market. Learning in the university, according to the respondent, is theory-based than practical orientation. The respondent believed polytechnics have also deviated from their core mandate of training middle level manpower for industry by pursuing humanities, marketing, and human resource courses and neglecting applied sciences and technology. Another informant felt a lot of time is spent on training new graduates when hired; yet industry received very little support from government.

However, officials from academic institutions interviewed did not agree that graduates did not possess the requisite skills for employment. They argued that no matter the course of study, everyone requires training to be able to perform. Another university official interviewed mentioned that the idea that university graduates should be able to function at work right after graduation without any training was wrong. The respondent noted that except for professional courses, university is only supposed to provide a broader orientation and give students analytical skills; so that with training they can perform on the job.

Information from employed graduates showed that almost a quarter (25%) was not trained on their first job. This finding is corroborated by existing research that majority of formal firms do not provide further training to their staff. Incentives for firms to take on less experienced workers and train them can be part of a package to develop skills (Adams, Johansson de Silva, and Razmara 2013; World Bank, 2016).

Majority (61%), however, received some form of training on the job (49%) and or off-the-job (11%). The training programmes were largely sponsored by employers (87%), with few funded by government (5%) and donors (5%). Majority of training programmes lasted for one to five days (68%); 16% of the training programmes were done from six to ten days, while 11% were

conducted over a period between eleven to 15 days. Only 2% of training programmes were given over a month and two months (2%).

In the view of labour market expert interviewed, a mismatch exists in Ghana when the country's level of development is compared with emphasis on education. Ghana's level of development requires that it develops more human resources in science and technology areas. However, the few applied science graduates currently being produced cannot even find jobs. Such graduates are often compelled to take up employment not in line of their course of study, which constitutes a mismatch. The respondent mentioned cases of science and technology graduates taking up employment in the banking, finance and insurance industries as an example. In terms of industry, the respondent argued that most industries do not require highly skilled human resources; and therefore it cannot be said that there is a mismatch between academia and industry. The respondent, however, acknowledged that a mismatch exists in few industries like Ghana's new oil industry.

The study assessed the application of knowledge and skills acquired through university education to job performance. Employed graduates rated the level of application of a number of skills acquired from the university to the performance of their current job. Interestingly, the application of knowledge and skills acquired to current job was lower for graduates of applied science and technology courses such as natural science (chemistry and physics), ecology and conservation and engineering as shown in Table 10.

**Table 10**: Extent of Application of Knowledge Acquired by Graduates at University to Their Current Job

| Skill | Very/ High extent | Sometimes | Rarely/Not at All |
|---|---|---|---|
| **Scientific &Technical Knowledge** | 47.5% | 26.3% | 26.3% |
| **Mathematics** | 57.1 % | 28.6 % | 14.3% |
| **Natural Sciences (Physics & Chemistry)** | 14.1% | 15.4% | 70.5% |
| **Ecology and conservation** | 9.2% | 11.8% | 78.9% |
| **Theoretical Basics of Engineering** | 9% | 5.1& | 85.1% |
| **Applied Technical Fields (Technical Sets & Machine Systems)** | 16.7% | 11.5% | 71.8% |
| **Knowledge of Research Methods** | 50.6 % | 19.8% | 29.6% |
| **Planning, Design, Calculation & Construction** | 52.4 % | 15.9% | 31.7% |
| **Experimental and Practical Work** | 41% | 19.2% | 39.7% |
| **EDP Applications (e.g. SPSS,CAD & SIM)** | 25.6% | 24.4% | 50% |
| **Knowledge on Non-technical Areas** | 45% | 25% | 30% |
| **Social Sciences (Sociology, Psychology, Political Science)** | 42.3% | 17.9% | 42.3% |
| **Economics (Finances, Costing)** | 48% | 16% | 35.8% |
| **Law (Elements Relevant to the Discipline/Subject)** | 36.7% | 20.3% | 43% |
| **Knowledge of English Language** | 88.6% | 6.3% | 5.1% |

Source, Survey Data, 2015/2016

## 4.6. Retrospective Assessments of Experiences with University Education

### *4.6.1 Experiences of Students and Graduates of Relevance of University Education*

#### 4.6.1.1 Highly Rated Conditions and Facilities

Respondents were asked to rate the quality of the study conditions provided and experienced at the universities they attended. For the students, 8 in 10 rated teaching quality of lectures as very good or good (87%). Seven in 10 students also rated the academic advice offered (79%), contact with fellow students (79%) highly. The availability of equipment and stocking library (77%), structure of the degree programmes (78%), opportunities for out of class contact with teaching staff (75%) and availability of internship programmes facilitated by the university (71%) were all rated highly. In the case of the graduate, an overwhelming majority highly rated the quality of teaching (91%), opportunity for out of class contacts with teaching staff (83%), contact with fellow students (83%) and structure of the degree programmes (80%).

#### 4.6.1.2 Poorly Rated Conditions and Facilities

In spite of these very positive ratings of the quality of the study conditions provided and experienced at the universities they attended, 2 in 10 students poorly rated catering services on campus (20%), accommodation facilities on campus (20%), while 1 in 10 rated quality of equipment in laboratories and workshops (18%), provision of supervised practical work (18%), internship programmes facilitated by the institution (14%) and grading system in the examinations (15%) as very poor or poor.

Like the students, the least rated study conditions and facilities was the availability of internship programmes. Indeed, more than 2 in 10 graduates rated internship programmes (21%), provision of supervised practical work experience (21%), availability of technical equipment (21%) and quality of equipment at laboratories and workshops (24%) badly.

### *4.6.2 Expectations of University Education for Students and Employability*

In respect of the ability of the university education to influence their employability, 8 in 10 final year students strongly agreed that their university education enabled them to learn and acquire employable skills (83%), improve on their skills and ability they already had (89%), improve their social status (81%) and quality of (87%). Six in 10 also pointed to the potential of their university education to improve their financial security (62%), and acquire basic tools for self-employment (61%). In terms of the extent to which they could help get permanent employment or jobs, only 55% strongly agreed. Indeed about a quarter of respondents indicated that they strongly disagreed that their education would enable them get permanent jobs, while 1 in 10 said they strongly disagreed that their education could help them acquire basic tools for self-employment (16%) and improve financial security (15%).

Further analysis of students' expectations of their university education and employability showed that more students in private universities, compared to students in public universities, strongly agreed that their university education would enabled them get permanent employment as well as improve their social status in the community. This perception of the

students in private universities might be born out of the very high tuition and related charges they paid for their education, but this would obviously require further research. Again, compared to the private counterparts, more students in public universities strongly agreed that their university education would enable them learn and acquire employable and basic skills for self-employment as well as improve on their quality of life.

### *4.6.3 Retrospective Assessment of Experiences of Graduates from University Education and Employability*

Retrospective assessment by graduate of the university institution they attended showed that, the key factor influencing their assessment was the ability of institutions to improve on the skills and abilities they already had (95%). The ability to learn and acquire employable skills (86%) and improve their quality of life (80%) featured prominently in choice of graduate. However, close to a third strongly disagreed that their education enabled them acquire basic tools/equipment for self-employment (27%) and improve their financial security (31%).

#### 4.6.3.1 Relationship between University Education and Employability

Six in 10 (64%) of students said their university programmes were adequately designed to equip and empower them to find employment after school. However, a third (36%) said their programmes could not equip them find employment after school. Compared to their private school (29%) counterparts, more students in public universities (71%) responded in the negative that their education was adequately designed to equip and empower them to find employment after school.

Only half (52%) of student respondents said the university programme is adequately designed to enable them set up their own business. Indeed, about another half (48%) said their programmes are not adequately designed to enable them establish their own business. Again, compared to their private school (24%) counterparts, more students in public universities (76%) responded in the negative that their education was adequately designed to enable them set up their own business.

#### 4.6.3.2 Collaboration between University and Industry

Collaboration between universities and industries is critical for skills development (education and training), the generation, acquisition, and adoption of knowledge (innovation and technology transfer), and the promotion of entrepreneurship (start-ups and spin-offs). The benefits of university-industry linkages are wide-reaching: they can help coordinate R&D agendas and avoid duplications, stimulate additional private R&D investment (additionality effect), and exploit synergies and complementarities of scientific and technological capabilities. University-industry collaboration can also expand the relevance of research carried out in public institutions, foster the commercialization of public R&D outcomes, and increase the mobility of labour between public and private sectors. The benefits of university-industry collaboration are also evident in developing countries. For example, a study in Chile and Colombia shows that collaboration with universities substantially increased the propensity of firms to introduce new products and to patent (Marotta, Blom, and Thorn 2007; World Bank, 2013).

The many types of university-industry links have different objectives, scopes, and institutional arrangements (see Table 1). Collaboration may be more or less intense and may focus on training or research activities. Collaboration may be formal or informal; from formal equity partnerships, contracts, research projects, patent licensing, and so on; to human capital mobility, publications, and interactions in conferences and expert groups, among others (Hagedoorn, Link, and Vonortas 2000; World Bank, 2013). For the majority of firms, the most important link to a university is through recruitment of skilled graduates. Education and training remains one of the key roles of universities, especially in lower income countries where the lack of skilled workers is a major bottleneck hindering the competitiveness and innovative capacity of firms. Governments may seek to improve the quality of university graduates by fostering a stronger collaboration of universities with industry. A first step is to establish a consultative process whereby the voice of relevant business managers is considered in curriculum development, so that university programs better respond to industrial needs. Governments can also establish and support student internship programs for undergraduates, as well as seek the participation of firms in graduate programs, and even the joint supervision of PhD students who may undertake part of their research within firms. Governments can seek to stimulate university-industry collaboration through their role in funding public universities. The performance measures that determine the funding received by public universities normally include indicators like numbers of students, PhD graduates, scientific publications, and patents. In addition, governments can reform the reward systems for university professors and researchers by introducing new incentives to collaborate with industry. Introducing new regulations to stimulate the patent activity of universities and to enable commercialization of research products can also promote university industry collaboration. National governments can further shape university-industry links by developing science parks in the vicinity of universities and by spurring university research spin-offs and start-ups with university connections, for example, through public venture capital and grants to entrepreneurs (World Bank, 2013).

The priorities and scope of university-industry collaboration differ significantly between developed and developing countries. In developing countries, a major concern is the poor quality of education and the lack of financing available to universities, which often indicate insufficient capacity to join industry in innovation-related projects. Building effective university-industry linkages in this context takes time and sustained effort, in part, because universities in developing countries generally have little experience in industry collaboration and limited managerial capacity in research. Existing collaboration tends to be more informal and to focus on the firms' recruitment of university graduates for staffing, internships, and consulting. The research activity of universities is less likely to lead to spin-offs or patents that can be commercially exploited. In many developing countries, university-industry collaboration is constrained by historically based cultural and institutional barriers, which take time to overcome (World Bank, 2013).

It is in the context of university-industry collaboration in developing countries that respondents were asked to indicate their awareness and knowledge of the forms of collaborations that currently exist in Ghana. In terms of the awareness of the existence of programmes to

undertake industrial attachments or vacation employment, more than half (53%) of graduates said they knew of such facilities, while 47% had no such information. For graduates who reported knowledge of the availability of industrial attachment programmes, 71% said the industrial attachment programmes were very effective. Unlike the graduates, an overwhelming majority of students (80%) said that collaboration between university and industry could improve choices of seeking employment after graduation. Two in 10, however, held a contrary view. Further analysis of students' responses showed that more students in public universities (86%), compared to their private university (14%) counterparts, did not believe that collaboration between university and industry could improve choices of seeking employment after graduation.

This collaboration, in their view, could come through internship programmes (54%), industrial attachment programmes (27%), and curriculum designs (19%). While more students in public universities identified the collaboration along the lines of industrial attachment programmes, students in private universities favored collaboration in terms of curriculum designs.

From the perspective of the in-depth interview respondents, universities should organize seminar for experienced professionals to share their experience with students. Universities need to find out from industry what is happening in terms of skills demands; so they can tailor curriculum along skills demand by engaging with industry, conducting industrial survey and developing curriculum to meet the needs of the labour market. Even within growing sectors, what are job prospects and how long would those skills be needed? This helps not to over-produce skills also. Tracer study of graduates would provide a better view of where the jobs in Ghana exist. Universities have been trying to facilitate internship but face a lot of issues. From the perspective of academics, companies, especially public institutions, complain about no budget to support internship programmes. Private sector associations and individual organisations also admit to taking students on internships to offer them opportunities for training and gaining work related experiences. For instance*, "The Association of Ghana Industry members does offer internships to university students. We [the National Chamber of Commerce) do have internship programmes for them. For example, at the secretariat of the Chamber, we offer internships; we have branches around the country that also offer internships. The Chamber also facilitates internships for its members and individual companies within it."* In the view of the business associations and companies, therefore, some state-led initiatives in employment should be ceded to the private sector to be better managed. Again, some business associations are represented on university boards and councils; UCC, UG, UPS, and various polytechnics. The president of the National Chamber of Commerce, for instance, represents the chamber on WAEC and UCC councils. Some private sector actors also called on government to streamline the collaboration between business and universities by creating business parks for industry to train these interns from the universities. They also called for government-–funded research and development fund to enable them collaborate with universities in a longer term. They again suggested the need for some tax-reliefs for private companies that engaged a fixed quota of students for internships over an agreed period of time. All these, in their view, should happen when there is also a structured policy framework on internship from government and quality of supervision and assessment guaranteed by the universities.

#### 4.6.3.3 Satisfaction with University Education

Overall, however, an overwhelming (82%) of students were very satisfied with their university programme. Indeed more students in public universities compared to their private counterparts were satisfied with their education. Only 6% were unsatisfied with their university programme. Of this proportion, almost all were students of public universities, though. Compared to the students, an overwhelming 91% of graduates were very satisfied with the university programmes they received.

## 5. Conclusion and Recommendations

### 5.1. Conclusion

Unemployment particularly among the youth is a general concern globally and for developing countries like Ghana in particular. Slow expansion of the labour market due to pursuance of neo-liberal policies, weak support to private sector and poor educational outcomes are blamed for the high unemployment and underemployment rates in Ghana. While unemployment among the unskilled youth has been a longstanding issue in Ghana, there is an emerging phenomenon of growing unemployment among graduate youth. Ghana's tertiary educational system has expanded to produce more graduates, but the labour market is unable to absorb them in the required quantities.

The study highlights stakeholders (government, academia and employers) acknowledgement of high unemployment among graduates. Generally, stakeholders agree that the causes include slow expansion of the labour market due to weak support to the private sector, trade liberalization and low capacity of the public sector to employ. Although employers and academia disagreed on the issue of mismatch between education and the demands of the labour market, government acknowledges its existence. Like their lecturers, few unemployed graduates believed that a mismatch of their skills and the demands of labour market accounted for their situation.

An assessment of application of knowledge and skills acquired from university to current job varied among employed graduates. It was lower for graduates of applied science and technology courses such as natural sciences (chemistry and physics), ecology and conservation and engineering compared to; planning, design, calculation and construction and economics, for instance. This could be that most graduates of natural sciences (chemistry and physics), ecology and conservations and engineering surveyed ended up in jobs not linked to their study area. Application of skills in Mathematics and English were higher than all other skills. This perhaps underscores why these two subjects are mandatory for basic to secondary school children. Most experts agreed that curricula should be constantly reviewed to reflect labour market demands. However, some courses would continue to be taught because they are part of the general social structure of development.

Even when curricula are tailored to meet the demands of the labour market, there will always be the need for employers to train new graduates on the job to enable them acquire hard skills relevant for their roles. Employers can only get the best of new recruits if they adequately prepare them for their roles and continuously support upgrade of their skills through further education and training.

Ghana has reduced the phenomenon of brain drain significantly. Public sector reforms between 2000 and 2012 improved conditions of public sector employees, particularly in the health sector which was the most affected. There was an introduction of a five-year bond to some health professionals though a general improvement in salaries through implementation of public

sector pay policies (e.g. the Health Sector Salary Structure and the Single Spine Policy Structure) may have made the difference. Yet, there are concerns that growing unemployment and current economic hardship may "push" skilled workers out in search for greener pastures. This is evident as 14% of unemployed graduates aspired to travel abroad if they did not find employment within a stipulated timeframe.

Given that tertiary education in Ghana is largely financed from family resources and student loan which is repayable, decent employment is the best returns to graduates and their family. This is particularly so because social-protection cover for unemployment is nonexistent in Ghana.

## 5.2. Recommendations

A strong and structured collaboration among education, government and enterprises in a broader national framework aligned to the development goals of the country is urgently needed. In view of this, the following recommendations are made to government, academia and enterprises:

**Government:**

- There is a need to establish a national policy on businesses-academia relationship, and government, as the major stakeholder, should champion this course. The National Development Planning Commission must recognize this, and with the tacit collaboration of enterprises and other stakeholders, flesh out a blueprint which would address these lapses, and put the nation on the path to resolving the yawning gap of skills training and job placement. This should include special incentives for enterprises to encourage stronger collaboration with educational/training institutions, particularly in the area of industrial placement. The incentives can be in the form of tax breaks for businesses to support education/training as per their needs.
- To strengthen links between education and demands of industry, the National Council for Tertiary Education should consider establishing a unit to liaise between academia and enterprise to strengthen the partnership between them.
- Government should also address the governance of higher educational institutions. If industry linkages are to happen, universities need to have the autonomy and transparency to be able to pursue their own partners. These cannot be mandated or directed from ministries or government agencies. The appropriate role for government agencies is to set up and enforce favourable policy frameworks that would enable research and development partnerships to flourish. Universities that are proactive and successful in developing industrial ties should be rewarded for their efforts. Demonstration projects can be sponsored, where strong proposals for university-enterprise partnerships addressing local innovation needs are sponsored on a merit basis, and their results widely communicated. Such projects might contribute to

instilling the view among relevant stakeholders that partnership with universities is feasible, possible, and potentially rewarding.

**Universities**

- Universities should take advantage of their position as public institutions to exercise the role of public spaces for open-ended debate on local, economic, social, and technological challenges. Universities may organize and host events bringing together academics and industrial representatives, along with other relevant stakeholders. Informal social interactions can also be helpful in sparking dialogue and working relationships. Purposefully using university facilities for events and social engagements can facilitate such interactions.
- Universities need to build and strengthen their research and education infrastructures. Firms need greater research and development capacity and incentives to invest in partnerships with universities. Greater awareness across the sectors of their needs and capabilities is also needed. Fundamentally, governments need to establish predictable funding mechanisms for university research, business R&D, and specifically for partnerships involving the two sectors. Uncertainty as to the availability of resources in relatively short time horizons mitigate against productive university-industry engagements.
- There is the need to revamp the educational curricula that would update the capacity of lecturers to meet the current skills demands such as applied science, technology and engineering. Education should provide analytical and reasoning skills as well as skills in numeracy to equip students for the world of work. The review should be evidence-based and done in collaboration with industry.

**Enterprises/Employers**

- There is the need for enterprises and universities to collaborate periodically to provide stakeholders with data and statistics on job opportunities, required skills and skills available through regular skill gap survey to guide education/training and policy.
- Enterprises/employers must contribute significantly to funding research and development in institutions, and establish distinguished chairs in their fields in the various institutions.
- Enterprises should be prepared to invest in a top-up skill training to suit their needs since all over the world, employers offer on-the-job training to fresh school leavers to make them adapt to the requirements of a particular job.
- Enterprises/employers should also work with higher educational institutions to improve their research and training capacity. This can be done in multiple ways. For example, businesses may provide internship positions for students, and make their staff available for guest lectures, bringing their expertise to universities. More sustained forms of engagement can also be pursued. Individual firms, or even business associations, may work together with higher educational institutions to establish educational standards to inform the curriculum and educational experience of students in relevant fields. Such

initiatives might contribute to addressing the perceived irrelevance of university education to the business sector.

- Finally, following the example of their peers internationally, enterprises/ employers can also be a supportive partner in the creation, support, and staffing of research laboratories through gifts, donations, and research funding. Through these kinds of practices, industry can be a stronger partner in the process of strengthening the academic quality and relevance of African universities.

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