

Funding of Quality TVET Programmes in Tertiary Institutions: The Role of Business Development Units

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Abstract

Funding for TVET activities is mainly through government subvention to tertiary institutions that undertake general education. TVET education is still underfunded in relation to general schooling. Management of institutions has to develop strategies to provide additional sources of funding for specific TVET activities that link education with practical training. In recent years, managers of several tertiary institutions have set up Business Development Units to find innovative ways of sourcing for additional funding for quality TVET programmes. These units have the arduous task of convincing industry and corporate organizations on the need to invest in such programmes. The setting up of business incubators to help grow small businesses borne out of students' ideas has been largely successful in some institutions. Developing businesses in academia may be seen as a deviation from the core mandate of a tertiary institution, however such departure has the potential of not only increasing internally generated funds but churn out entrepreneurs for the future of our country, as they begin to conceive viable business ideas, incubate them and gradually grow them into big businesses, with some financial support. In Accra Technical University, the Business Directorate aims to ensure that the institution provides solutions to specific business and organizational needs through training, contract research or consultancy. This paper examines the critical role the Business Development Units play towards the funding of quality TVET programmes in a tertiary institution.

Keywords: Business Development, Funding, TVET, Incubator, Academia

1.0 Introduction

1.1 Funding Higher Education

The tertiary education sector in Ghana is made up of all post-secondary educational institutions. These include colleges of Agriculture, Nursing Training Institutions, Colleges of Education, Polytechnics, Technical Universities as well as Public and Private Universities. Tertiary education has been funded through a variety of sources. The main sources being grants from the Government, The Ghana Education Trust Fund (GETFund), Development Partners, Internally Generated Funds (IGF) by the institutions and contributions from students and private sector. (Newman & Duwiejua, 2014).

Since its establishment, the GETFund has been a major source of funds for infrastructure development. Tertiary institutions receive their budgetary allocations from government through the National Council for Tertiary Education (NCTE). According to Newman & Duwiejua, the sum of money allocated by the Ministry of Education to the NCTE for the tertiary institutions is decided through a combination of mechanisms including:

- (i) Historical funding or incrementalism;
- (ii) Bidding and bargaining;
- (iii) Discretion.

From 2009, the education sector expenditure accounts for an average of 23.7% of government expenditure. Over the same period, an average of 19.1% of the education sector budget is allocated to the tertiary sector. (Newman & Duwiejua, 2014).

Accra Technical University as an academic and research institution, is faced with a number of problems, including severe shortage of funds, low quality of vocational education, lack of vigorous research activities, lack of laboratories and library resources and frequent loss of experienced lecturers to other tertiary institutions. The institution relies heavily on government funding, and therefore has insufficient funds for maintaining its library resources, for purchasing learning facilities such as computers, and for engaging in research activities. Access to international scientific journals on the internet is limiting. Money is also needed for laboratory equipment, or to construct lecture rooms. Facilities to help publish scientific research findings on an international scale are non-existing.

The level of internally generated funds on the other hand is also not adequate to meet expenditure requirements. Arguably, these problems have made it increasingly difficult for Accra Technical University to effectively carry out its mandate of providing tertiary education in the fields of manufacturing, commerce, science, technology, applied social science, applied arts as well as providing opportunities for skills development, applied research and publication of research findings. There is therefore the need to diversify its sources of income in order to reduce its dependency on government for funding.

There is increasing competition for prospective trainees from other local tertiary institutions offering HND or B-Tech in academic fields similar to courses offered in Accra Technical University. As a result, some

prospective trainees are attracted to other more endowed local academic institutions. This situation has been worsened by the perception of the public that university education is superior to polytechnic education. This has made the polytechnics in Ghana a second choice destination for most prospective trainees. With the current elevation of Polytechnics to technical universities, there arises new competition of reorienting course structure, increase interest of trainees for admission, need to expand infrastructure including spaces in lecture rooms, laboratories, and libraries as well as internet facilities among others.

There is increasing competition for government funding, which is not likely to improve with the establishment of new universities, teacher training colleges and more senior high schools amongst others. As a result, Accra Polytechnic has resorted to a cost sharing by imposing tuition fees on trainees; charging for room and other facilities used by trainee and therefore breaking with the long tradition of free tertiary education for Ghanaians as propagated by President Kwame Nkrumah. The University has also resorted to organizing evening classes for workers as a measure to raise fund to support its activities.

1.2 TVET Programmes in Technical Universities

In Ghana, eight Polytechnics have so far been converted into Technical Universities (TU), by an Act of Parliament (Act 922) and gazetted on 31st August, 2016. According to the TU bill, the aims of a Technical University are to provide higher education in engineering, science and technology based disciplines, technical and vocational programmes, applied arts and related disciplines in accordance with some stated principles. The framers of the bill therefore encourage the TUs to concentrate more on applying technology to its programmes. Several quality TVET programmes are rolled out in tertiary institutions which are geared towards providing a hands-on practical oriented training for our students. Some of the quality TVET programmes include Fashion Design and Textiles, Catering and Institutional Management, Science Laboratory Technology, Building and Civil Engineering, Mechanical and Electrical Engineering, Furniture Design and Interior Architecture, among others.

The Technical University of Kenya distinguishes between Engineering and Engineering Technology programmes. They differ in curricular focus and career paths. On Curricular Focus, engineering programmes often focus on theory and conceptual design, while engineering technology programmes usually focus on application and implementation. On Career Paths, graduates from engineering programs, called engineers, often pursue entry-level work involving conceptual design or research and development. Graduates of engineering technology programmes are called technologists or technicians depending on the duration of the programme of study. These professionals are most likely to enter positions in sectors such as construction, manufacturing, product design, testing or technical services and sales.

1.3 Business Development Units in TVET Institutions

Business development can have several definitions, depending on the institution. According to Forbes, Business development is the creation of long-term value for an organization from customers, markets and relationships. These units exist both in the corporate world and in academia. In corporate organizations its role is to find new strategic opportunities for the organization. In academia, Business Development advances and promotes all new and existing business opportunities or major commercial projects within the University's facilities, community and properties to generate a long term, continuous revenue stream. (King Abdullah UST). A typical Business Development Unit in a TVET institution liaises with the academic divisions to identify and develop new, profitable and sustainable business opportunities and services that leverage the institution's facilities, properties and community. In Accra Technical University, the Business Directorate aims to ensure that the institution provides solutions to specific business and organizational needs through training, contract research and consultancy.

2.0 Methodology

This paper is mainly a qualitative analysis on the role of Business Development Units in funding quality TVET programmes in tertiary institutions. It is based on series of interactions held to garner the views of stakeholders on securing adequate funding for quality TVET programmes. The stakeholder groups from whom views were collected included the Business Development Directorate of Accra Technical University, cross section of staff from the faculties of Applied Sciences and Engineering. Externally, interactions were held with the Venture Capital Trust Fund, Business Factory in Africa, Council for Technical and Vocational Education and Training and the Institute of Chartered Economists. An important stakeholder which was also extensively consulted was the student's body.

Primary data for this paper was collected using a structured questionnaire which was administered formally by a group of trained personnel. Secondary data was informed by a review of different business models for start-up businesses implemented successfully in other jurisdictions.

3.0 Findings

3.1 The Venture Capital Trust Fund

In response to the numerous complaints by the business community of inadequate and high cost of capital to run their businesses, the Government of Ghana, in 2004 established the Venture Capital Trust Fund (VCTF) with a vision to provide low cost financing to businesses to enable them grow, create jobs and improve wealth creation towards poverty alleviation. The Trust Fund operates through institutional partnerships by means of joint venture arrangements that establish Venture Capital Financing Companies managed by Fund Managers, who are responsible for deal sourcing, selection, monitoring and exit of Fund investments. Small and Medium-Scale Enterprises seeking for funding submit a Business Proposal, among other documents, to the Venture Capital Financing Companies. The Business Proposal goes through an initial review, and if found to be viable a second round review is initiated. When all claims are verified and authenticated due diligence follows.

Venture capital is a type of private equity capital typically provided to early-stage, high-potential for growth companies, in the interest of generating a return through an eventual realization event such as a trade sale of the company. In effect it is money used for investment in enterprises that involve high risk, but offer the possibility of large profits. A core skill within Venture Capital is the ability to identify novel technologies that have the potential to generate high commercial returns at an early stage. Venture Capitalists also take a role in managing entrepreneurial companies at an early stage, thus adding skills as well as capital (thereby differentiating Venture Capital from buy out private equity which typically invest in companies with proven revenue), and thereby potentially realizing much higher rates of returns. (Amoamah et al., 2013)

In the author's interaction with VCTF it came to light that they have the capacity to identify and fund start-up projects that are deemed to be viable. VCTF can partner Accra Technical University through its Business Development Directorate to set up business incubators to help grow business ideas.

3.2 Business Factory Initiative in Africa

BUFIA is an innovative continental model - providing young entrepreneurs with the best possible resources – including business planning, training, networking, business team creation, business development and ownership, mentorship and new venture financing – to help turn their innovative ideas into real sustainable businesses. BUFIA partners students from their first year to completion of their programmes to turn their passion into enterprises to create wealth. BUFIA with its Vision of “One Graduate, One Business” is currently being implemented in Ghana and Malawi with the potential to scale up to other African countries.

Its Mission is to manufacture innovative business to create wealth and employment for young people (in and out of school) across Africa through the Business Owners Model.

The Business Development Directorate of Accra Technical University, as part of its mandate, focuses on business management, entrepreneurship and leadership development programmes, which provides stepping blocks for students to grow academically and professionally. It also has the mandate to create sustainable environment to prepare students for the job markets and establish their own businesses.

Accra Technical University can partner BUFIA to assist students turn their passion into enterprises to create wealth. The context of the partnership with BUFIA is to support our students form their own businesses based on their passion or areas of studies to add value to their lives and that of society at large.

Through this partnership, BUFIA will:

- (i) Lead in designing, developing, planning, management, implementation and monitoring of the Business Factory Initiative for Africa project in the school;
- (ii) Provide mentoring and coaching services to the participating and targeted young people;
- (iii) Assist in the development of investment profiles and business plans to link them to investors for funding;
- (iv) Build the capacity of participants in entrepreneurship, business and financial training before, during and after school;
- (v) Provide resource persons as potential facilitators for the PROJECT to provide management and entrepreneurial training to participants;
- (vi) Use its entrepreneurship book “Embracing Your Inner Courage” and other relevant materials, as resource tools for all the participants and the student population;
- (vii) Report accurately on the impact of the partnership periodically and publicize the partnership in both prints and media;
- (viii) Collaborate, develop, manage, implement and monitor innovative and creative projects of mutual interest to share proceeds equitably;
- (ix) Provide Business Advisory Services and consultations to the Business Development Directorate where necessary.

The Business Development Directorate will in turn:

- (i) Support in designing, developing, planning, managing, implementing and monitoring of the Business Factory Initiative for Africa project in the school;

- (ii) Facilitate the process to make the programme institutionalized in the school by working with the appropriate authorities and channels of communication;
- (iii) Invest directly both in cash and in kind towards the project.

A five-month work plan is shown in Appendix 1.

3.3 Skills Development Fund

As part of efforts to source for external funding, the Business Development Directorate must encourage the academic departments, lecturers and individuals to submit proposals to be screened for onward submission to the Council for Technical and Vocational Education and Training (COTVET) to access the Skills Development Fund (SDF).

This program was passed by parliament in 2006; ACT 718 to provide demand driven response to challenges faced by the productive sector of Ghana including:

- (i) Inadequate qualified labour force for immediate employment;
- (ii) Urgency of providing gainful, employable skills to new market entrants;
- (iii) Address weaknesses in our technical and practical skilled sector;
- (iv) Inadequate access to new technologies and innovations.

The SDF seeks to:

- (i) Upgrade skills of employee for enhanced productivity and adoption of new technologies;
- (ii) Enable employees to earn higher technical and vocational skills, qualifications and income;
- (iii) Upgrade skills of master craft persons and self-employed graduates and or apprentices etc.

The sole objective is to increase productivity, generate employment and enhance profitability or income.

The categories of organizations that benefit from this SDF include:

- (i) Micro, small and medium and large enterprises/industries;
- (ii) Labour union, trade unions, associations;
- (iii) Public and private training institutes;
- (iv) Universities, Polytechnics etc

The prioritized sectors of economic life include:

- (i) Construction
- (ii) Information and communication technology
- (iii) Tourism & hospitality
- (iv) Livestock and horticulture
- (v) Energy
- (vi) Master Craft development..

There are four (4) windows of funding threshold that a beneficiary could draw funds from depending of nature of organization and project/program to be achieved.

- (i) Window 1: Training for the Formal Labour Market

This sector of funding is focused on the formal sector and 80% of the program to the maximum sum of US\$350,000 shall be disbursed by SDF with the beneficiary contributing the matching 20%.

- (ii) Window 2: Training & Entrepreneurship Development in the Informal Sector

This sector of funding is focused on the informal sector, medium, small, associations' enterprises. Here, 90% of the total request to the maximum tune of US\$60,000 shall be disbursed while the beneficiary provides the remaining 10%. It must be noted that the 10% could be demonstrated in kind.

- (iii) Window 3: Innovative Training

This section focus' on developing new innovation and 75% of the total request summing to a maximum of US\$500,000 shall be disbursed while the beneficiary provides the remaining matching funds.

- (iv) Window 4: Science & Technology

This section is divided into two (2) categories thus:

- Technology Partnership with a threshold of 25% - 50% totaling a maximum US\$200,000
- Technology Centres with a threshold of 100% totaling a maximum of US\$1,000,000.

With regard for competition for prospective trainees, Accra Technical University needs to restructure the contents of its courses in order to give more practical-oriented training that has the potential to meet the standards of the job market in order to attract more trainees. One of such key areas of restructuring is via skills development technical courses which also makes adjustments to accommodate the informal sector as well. Taking into consideration the prime location of Accra Technical University, enormous revenues could be generated through the establishment of a part-time education unit to offer more certificates, diplomas, or degree programme.

The restructuring of the course contents so as to improve vocational training and sharpen practical skills of trainees will make Accra Technical University more attractive to prospective trainees. The absence of an innovative training programme in maintenance and repair of Biomedical Equipment, the Lack of access to technology to offer the training programme and inadequate skills to train Biomedical Technicians/Technologists

in the maintenance and repair of Biomedical Equipment makes it prudent for the institution to source for the Skills Development Fund so as to establish a centre to give basic, intermediate and advanced training in Biomedical Equipment maintenance and repair.

These problems have persisted for over 20 years since the advent of Health Technology Management in Ghana in 1990. Currently the technical staff available in the country is limited in number as well as in their ability to repair faulty Biomedical Equipment, and this limits the availability of the devices for productive work and this in turn affects the quality of service delivery. The maintenance of the equipment can significantly reduce operating expenses and increase profits of the service provider. With the wider distribution of Biomedical Equipment in hospitals countrywide, the training of Technicians/Technologists at the basic and intermediate levels is non-existent. The requirements for setting up a training programme for the maintenance and repair of Biomedical Equipment are costly and cannot be funded with the institution's traditional sources of funds alone.

There is a huge demand for Biomedical Equipment Technicians / Technologists in the Health Sector and its allied institutions. According to the WHO over 50% of Biomedical Equipment in the country are non-functional. It is also estimated by the World Bank that 80% of the equipment eventually become non-functional due to lack of spare parts (Zienaa, 2014).

The proposed project would undertake the following to address the challenges:

- (i) Curriculum development to train personnel at basic, intermediate and advanced levels The same argument as above
- (ii) Equip trainees with competent-based employable skills to meet and close the huge demand gap that exists in the industry.
- (iii) This would make available the required human resource for routine maintenance as well as repair of Biomedical Equipment for increased and sustainable healthcare delivery in the country.

The long term benefit is that the established training centre would extend its services to member countries in the sub-region.

3.4 Political Party Manifestos

Being an election year, several political parties seeking the people's mandate to either remain in office or be elected into office presented their manifesto. A look into the manifestos to know the political parties commitment to TVET issues regarding its funding of quality programmes revealed the following:

- (i) Awarding bursaries to students who are pursuing science related programmes in Polytechnics and Technical Institutes;
- (ii) Training Master Craft persons in Competency Based (CBT) methods of instruction;
- (iii) Construction of modern school infrastructure in Technical and Vocational Institutes;
- (iv) Training school leavers in garment making, cosmetology, welding and fabrication, auto mechanics and electronics;

4.0 Discussions and Conclusions

4.1 Role of Business Development Units

As part of an academic institution's strategic plan, the setting up of business development units aims at securing funding for quality programmes and projects that emanate from the academic divisions and other commercial centres. If nurtured very well, these business development units can play a pivotal role in an academic institution by linking academic work to industries. Developing businesses in academia should not be seen as a deviation from the core mandate of a tertiary institution. Such departure, however, has the potential of not only increasing internally generated funds but churn out entrepreneurs for the future of our country, as they begin to conceive viable business ideas, incubate them and gradually grow them into big businesses, with some financial support.

4.2 Sources of Funding for Quality TVET Programmes

The following have been identified as possible sources of funding quality TVET programmes if the right approach and discussions are made by institutions:

- (i) The Venture Capital Trust Fund, which can help set up business incubators on campuses to empower students with both financial resources and efficient Technical Assistance to ensure business expansion and job creation. The trained venture capitalists are able to identify novel technologies that have the potential to generate high commercial returns at an early stage.
- (ii) The Business Factory Initiative in Africa, which is an innovative continental financing model, providing young entrepreneurs with the best possible resources, including investments, training, networking, enterprise development and ownership, coaching, mentor-ship and new venture financing, to help turn their innovative ideas into profitable businesses. An institution can partner BUFIA to assist students turn their passion into enterprises to create wealth. The context of the partnership with BUFIA is to support our students to form their own businesses based on their passion or areas of studies to add value to their

lives and that of society at large.

- (iii) The Skills Development Fund, which seeks to provide demand driven response to challenges faced by the productive sector of Ghana. This includes addressing weaknesses in our technical and practical skilled sector, where TVET institutions operate. It also addresses inadequate access to new technologies and innovations.

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APPENDIX

Table 3.1: 5-Month Work plan of Implementation of BUFIA- ATU Project

Project Overall goal: Supporting student entrepreneurs to start and manage their own businesses.							
IMPLEMENTERS: BUFIA - BDD							
SPECIFIC ACTIVITIES	JULY	AUG	SEPT	OCT	NOV	Dec	RESPONSIBILITY
-							
1							BDD/ BUFIA/Entrepreneurship Club
2							BDD
3							BUFIA/BDD
4							BUFIA/BDD
5							BUFIA/BDD
6							BUFIA
7							BUFIA
8							BUFIA
9							BUFIA/BDD
10							BDD/ BUFIA