Professionalisation Approach of Developing Polytechnic Education Management in Ghana


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Abstract- The number of tertiary level educational institutions in Ghana has significantly increased from three government-owned universities in 1992 with the establishment of both public and private institutions that have additionally gained tertiary status. The proliferation of private universities has become a matter of public concern because some do not have full-time professionally trained staff for both academic and administrative engagements, and good infrastructure and facilities for provision of conducive environments that would enhance teaching, learning, and research. This study sought to examine the impacts of giving professional training to managers of polytechnics in particular, and tertiary level educational institutions in general. Qualitative research paradigm was used and purposive and stratified sampling methods were employed for data collection. The output of the research indicates that managers of tertiary level educational institutions need to be equipped with professional administrative skills to enhance training of high calibre graduates for both research and the job market. The National Council on Tertiary Education could establish an institute and design training modules for the award of professional certificates in Tertiary Level Educational Management to newly recruited administrators and academic heads of tertiary educational institutions.

Index Terms- Professional Managers, Polytechnic Education, Tertiary Level Educational Institutions

I. INTRODUCTION

The upgrading of Government Technical Institutes to polytechnics, the establishment of new universities, approval of accreditation for the running of private universities and upgrading of post-secondary institutions into tertiary status attracted attention of this research that sought to find practices in managing polytechnic education and other tertiary educational institutions in a professional manner. This would enhance smooth running of the academic process to produce high calibre graduates for academic and professional careers.

The number of tertiary educational institutions in Ghana has increased over the last twenty two years. In 1992 the then, University College of Education, Winneba (UCEW), now University of Education, Winneba (UEW) was established to train teachers for the Education system of Ghana (www.uew.edu.gh) after which University for Development Studies (UDS), University of Mines at Tarkwa (UMaT), University of Health and Allied Sciences (UHAS), University of Energy and Natural Resources (UENR), and Ghana Telecom University were also established. Additionally, the first three polytechnics namely; Accra Polytechnic, Kumasi Polytechnic, and Takoradi Polytechnic together with upgrading of some Ghana Education Service Technical Schools to gain tertiary status, and establishment of new polytechnics have significantly increased the number of tertiary level educational institutions in the country. Other professional institutions including the Institute of Professional Studies (IPS), National Film and Television Institute (NAFTI), Ghana Institute of Management and Professional Administration (GIMPA), and Ghana Institute of Journalism (GIJ) have all become tertiary institutions. The government is gradually working towards the upgrading of some post-secondary colleges like Nursing, Midwifery, and Colleges of Education in the tertiary system.

Statement of the problem

Tertiary level educational and professional institutes in Ghana are the highest academic and professional training fields for both middle and top level managers of academic and professional institutions, and industry.

In most academic institutions, only those belonging to academia are mostly mandated to take key or managerial positions as Chief Executive Officers (CEOs) without any background in professional management and skills training. Vice Chancellors, Rectors, and Principals are often nominated and selected based on academic achievements and experience through previous positions held as Sectional or Departmental Heads, Deans, Directors, and Provosts. They are however, bound to work with their registrars most of whom might be professional managers or in some cases have gone through the ranks becoming heads of administrative departments.

Even though, there seems to be a well-defined way in which people are appointed to top management positions in the polytechnics, often times, such people do not have the requisite professional training. This may usually have an adverse impact on performance and growth of their institutions. Appointing people who lack the basic competencies to positions of responsibility may corrupt the organization.

With new and mounting challenges faced by higher education, for instance, upgrading of polytechnics to technical universities, there should be the establishment of a more formal career path into management of polytechnic education in the country. The need to establish a process of professionalising management staff of polytechnics to meet the needs of stakeholders cannot, therefore, be overlooked any further.
Macpherson (2009) defines the process of professionalisation also known as credentialism as ‘mastering a specialist, validated and reliable knowledgeable base, demonstrably acquiring the practical skills of the field, being socialized into the culture of the body of people engaged in the calling, and adhering to the principles and ethics of best practice in that profession’.

Professional development through in-service training enhances the acquisition of skills to effective management of an organization. However, Macpherson (2009) reiterated that, a systematic leadership development strategy is needed to enable aspirant and serving leaders to acquire role-specific understandings, skills and attitudes prior to appointments. Such training would progressively deepen their knowledge of professional leadership as their careers unfold to guarantee successful leadership services that combine as increasingly strategic contributions in classrooms, school staffrooms, and system boardrooms. Combining individual and organisational perspective imply the need for a systematic leadership development strategy that aims to sustain leadership capacity building in all people providing leadership services, and simultaneously, capability building at each level of leadership service from team to system.

As “knowledge-based business”, professionalisation of polytechnic management could enhance the delivery of success through such highly-skilled personnel who will act swiftly and decisively. Since ideas come from people and it is people who make those ideas happen, professionalised management could transform and enhance management communication capacities to engage stakeholders and partners in achieving the mission and goals of the polytechnics.

On the other hand, professionalism if not followed or used effectively, may hinder the brand name or efficiency of the polytechnics. It could even lead to hurdles in the path of growth and interest of the institutions.

The main aims and objectives of setting up the polytechnics, according to the Polytechnic Law of 1992 (PNDC Law 321) include:

(a) Provision of tertiary education through full time courses in the field of manufacturing, commerce, science, technology, applied social science, applied arts and such other areas as may be determined by the authority for the time being responsible for higher education;

(b) Encouragement of the study of technical subjects at tertiary level; and

(c) Provision of opportunities for the development, research and publication of research findings. (Nsiah-Gyabaah et. al. 2005)

Effah (2005) reported that, the objectives of the polytechnics are reinforced by the Government White Paper on the report of the Education Reform Review Committee (ERRC)-2004, which indicates that Government will continue to equip the polytechnics to make them offer tertiary education in their own right, to emphasise practical skills that are needed to run the productive economy and build a nation. Government further underscores the importance of hands-on experience and undertakes to resource polytechnics to enable them offer degree programmes.

Polytechnic education has over the years played an important role in the development of this nation. The need for its establishment was primarily warranted by the need for skilled technical workforce to keep the wheels of industry running. The second was as a result of the inadequate middle-level manpower supply for both the private and public sectors of the economy (Kludjeson, 2005).

On his part Boakye (2005) stated that, Polytechnics are the breeding grounds for critical middle-level manpower required by the nation to build its industrial base which will ensure the growth and comprehensive one which trains the mind and the hand and, therefore, has the potential to contribute immensely towards the achievement of the development objectives set for various sectors of the economy. Against the foregoing, an evident link can be established between Polytechnic education on one hand, and training and entrepreneurship on the other. Indeed, this fact is emphasised in the Technical Vocational Education and Training (TVET) section of the Growth and Poverty Reduction Strategy (GPRS) where it is clearly stated that without the enhancement of the technical skills development system of the country, the set objectives for poverty reduction and wealth creation cannot be achieved.

These opinions are corroborated by the Polytechnic Act (2007), Act 745 that empowers polytechnics in Ghana to become autonomous. The approach to develop managers of the polytechnics, therefore, becomes unquestionable in the drive to achieve autonomy for the polytechnics.

The Merriam-Webster’s College Dictionary (2009) defines profession as a calling requiring specialised knowledge and often long and intensive academic preparation. Danso-Mensah (2007) defined the severally accepted features of any entity recognised as professional to include the following:

- An entry qualification
- Explicit minimum standard of knowledge or performance
- Stated range of specific skills
- A condition not too fragmented to allow free entry by people, that is its boundaries must be wedged in such a way that laymen cannot easily enter to lay claims to professionalism
- Exertion of influence on its practitioners and employers
- A professional body or association entry into which demands some kind of specialised entry requirement

Consequently polytechnics need to provide professional and specialised training skills to their management staff other than the usual in-service trainings which are based on workshops and seminars.

Polytechnics in Ghana have been mandated to train students, and award degrees in Master of Technology (M. Tech.), Bachelor of Technology (B. Tech), Higher National Diplomas (HND), Diplomas, and other certificates accredited by the National Accreditation Board (Polytechnic Act, 2007). In carrying out the mandate by polytechnics, some professionals including Accountants and Computer Engineers are employed as middle level managers to head administrative departments. Although, they are professionals in their own fields they need to
have some skills training in educational management to enhance efficiency in the performance of their functions. This study focused on polytechnic education even though, it is on tertiary education in general.

Objectives of the study
1. To inquire into the general public and stakeholders’ perception on polytechnic education management as a recognised profession.
2. To examine how polytechnic management staff acquire professional skills to enhance effective work.
3. To critically assess the needs of polytechnics in terms of developing and equipping management staff with professional training skills.

Research questions
In order to achieve the objectives of the study, the following research questions were developed:
1. How is polytechnic management perceived as a recognised profession?
2. How do management staff of polytechnics acquire professional skills to manage their institutions?
3. What do polytechnics need to develop in order to equip management staff with professional skills?

II. MATERIALS AND METHODS
Research design
Both primary and secondary data sources were used for the study. The primary data used were obtained from the views of respondents expressed through a set of questionnaire. Secondary data were based on review of related literature from libraries and internet sources.

Qualitative research paradigm focusing on exploratory, descriptive and contextual data was adopted for the purpose of this study. These designs were considered as a result of suitability. Babie and Mouton (2001) state that, exploratory research is based on an inductive approach and aims to arrive at a dense description of the phenomena under inquiry. Furthermore, descriptive research aims at unfolding situations or events and it implies that the representation of reality of participants should be clearly related. Contextual research is based on the attempt to understand events, actions and processes in participants’ contexts instead of generalising results.

Survey instruments
The survey instruments used for data collection were questionnaire, interviews, and focus group discussions. Participants included educational managers, researchers, teaching and non-teaching members of tertiary educational institutions, parents of university and polytechnic students, managers of industry, students, and the general public.

Population and sampled population
The population for the study covered management of tertiary institutions. However, 190 respondents were sampled for the study. Purposive sampling was used to select the 190 respondents from management staff in all the 10 polytechnics, Management staff of public and private universities, administrative staff of tertiary level educational institutions, Research fellows, Staff of Analogous institutions (NCTE, NAB, NABPTEX, and CSIR), and Management staff of industry; whereas, the stratified sampling method was used for data collection from lecturers, students of tertiary level educational institutions, and parents of university and polytechnic students.

Methods
A lot of information for the study was based on review of literature including internet sources particularly on professionalisation of leadership and management of higher education in general.

The qualitative method using a semi-structured questionnaire with open-ended questions was used to obtain descriptive data. Data collection did not depend so much on demographic information and variables of respondents as all the respondents identified were parents or Senior Members of organisations. However, out of the 30 questionnaire distributed to top management staff of selected institutions, 3 went to females and 27 to males, and all the females responded. The 160 questionnaire administered to staff and students of various institutions involved 103 males and 57 females. The instruments were self-administered and semi-structured questionnaire.

Data collection
Data were collected from the sampled population through self-administered questionnaire. The first set of 30 self-administered questionnaire was distributed to the polytechnic and university management staff, and management staff of industry including financial institutions, manufacturing industries, and construction firms. Another set of self-administered data was collected from respondents including senior members of polytechnic analogous institutions, senior members of tertiary educational institutions, students of universities and polytechnics, parents of tertiary level students, and members of the general public with the minimum of secondary school education. The questions prepared were set based on the following research questions:
1. How is polytechnic management perceived as a recognised profession?
2. How do management staff of polytechnics acquire professional skills to manage their institutions?
3. What do polytechnics need to develop in order to equip management staff with professional skills?

III. FINDINGS
Analyses and interpretation of data
Table 1 shows the distribution of questionnaire to respondents. Top management of polytechnics, and universities constituted about 8% of respondents. The single largest category of respondents was tertiary level students, constituting about 32% of respondents.
Table 1. Distribution of Questionnaire to respondents.

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Status</th>
<th>Number of Questionnaire</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polytechnic &amp; University Management Staff</td>
<td>Vice Chancellors, Rectors, Vice Rectors, Registrars, Provosts, Deans</td>
<td>15</td>
<td>7.89</td>
</tr>
<tr>
<td>Senior Members of Analogous Institutions</td>
<td>Administrators &amp; Research Officers</td>
<td>20</td>
<td>10.52</td>
</tr>
<tr>
<td>Senior Members of Tertiary Educational Institutions</td>
<td>Teaching and Non-Teaching Staff</td>
<td>50</td>
<td>26.31</td>
</tr>
<tr>
<td>Management Staff of Industry</td>
<td>Directors &amp; Managers</td>
<td>15</td>
<td>7.89</td>
</tr>
<tr>
<td>Students of Tertiary Level Educational Institutions</td>
<td>University &amp; Polytechnic Students</td>
<td>60</td>
<td>31.57</td>
</tr>
<tr>
<td>Parents &amp; General Public</td>
<td>Members with Minimum of Secondary Education</td>
<td>30</td>
<td>15.78</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>190</td>
<td>99.96 (Approx)</td>
</tr>
</tbody>
</table>

Source: Field survey (2014)

Table 2 shows the return level of both sets of questionnaire. Overall return rate was about 93 %. Again, the return rate of students was higher (about 32 %) while the return rate among industry management (3.68 %) and polytechnic, and university management (4.73 %) were among the lowest.

Table 2. Data return level.

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Status</th>
<th>Number of Questionnaire</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polytechnic &amp; University Management Staff</td>
<td>Vice Chancellors, Rectors, Vice Rectors, Registrars, Provosts, Deans</td>
<td>09</td>
<td>4.73</td>
</tr>
<tr>
<td>Senior Members of Analogous Institutions</td>
<td>Administrators &amp; Research Officers</td>
<td>20</td>
<td>10.52</td>
</tr>
<tr>
<td>Senior Members of Tertiary Educational Institutions</td>
<td>Teaching and Non-Teaching Staff</td>
<td>50</td>
<td>26.31</td>
</tr>
<tr>
<td>Management Staff of Industry</td>
<td>Directors &amp; Managers</td>
<td>07</td>
<td>3.68</td>
</tr>
<tr>
<td>Students of Tertiary Level Educational Institutions</td>
<td>University &amp; Polytechnic Students</td>
<td>60</td>
<td>31.57</td>
</tr>
<tr>
<td>Parents &amp; General Public</td>
<td>Members with Minimum of Secondary Education</td>
<td>30</td>
<td>15.78</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>176</td>
<td>92.59 (Approx)</td>
</tr>
</tbody>
</table>

Source: Field survey (2014)

Table 3. Questionnaire returned with responses.

<table>
<thead>
<tr>
<th>Code</th>
<th>Respondents</th>
<th>Status</th>
<th>Returned with responses (176)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Polytechnic &amp; University Management Staff</td>
<td>VCS, Rectors, Vice Rectors, Registrars, Provosts, Deans</td>
<td>09</td>
<td>5.11</td>
</tr>
<tr>
<td>B</td>
<td>Senior Members of Analogous Institutions</td>
<td>Administrators &amp; Research Officers</td>
<td>20</td>
<td>11.36</td>
</tr>
<tr>
<td>C</td>
<td>Senior Members of Tertiary Educational Institutions</td>
<td>Teaching and Non-Teaching Staff</td>
<td>50</td>
<td>28.40</td>
</tr>
<tr>
<td>D</td>
<td>Management Staff of Industry</td>
<td>Directors &amp; Managers</td>
<td>07</td>
<td>3.97</td>
</tr>
</tbody>
</table>
While about 93% of questionnaire were retrieved, some did not have any responses at all. This is presented in Table 3. Answered questionnaire retrieved from polytechnic and university management constituted 5.11% of the entire questionnaire returned with responses. While the corresponding percentage for industry management was 3.97%. The largest category was response from students (34%).

![Figure 1. General response of returned questionnaire.](source)

**Source:** Field survey (2014)

IV. **DISCUSSION OF FINDINGS**

The general responses to the group of questions set under the three research questions:

1. Under how polytechnic education management is perceived as a recognized profession, majority of the respondents stated that, the general perception of polytechnic management as a recognized profession is lower than expected. Although polytechnics are institutions that train middle-level professionals at the Higher National Diploma (HND), Bachelor of Technology (B-Tech), and Master of Technology (M. Tech) levels, most of their management staff members gain pre-service skills from their fields of training. Majority of the respondents perceived the polytechnic to have lower than expected professionalism in management.

2. On how management staff of polytechnics acquire professional skills to manage their institutions; majority indicated that some staff acquire pre-service professional skills before they are recruited but their skills are not usually related to tertiary education. They might, however, be made to do in-service training through workshops and seminars to equip them with some form of skills but that is still not enough in terms of the professionalisation process.

3. On what polytechnics need to develop in order to equip management staff with professional training skills, majority contended that a professional training institute be established by government to carry out the task of professional training as soon as practicable. The general response of participants indicated that managers of polytechnics and tertiary educational institutions in general need to belong to a professional institution or body that would exert influence on the members to be
able to exhibit certain standard of skills in carrying out their performance as tertiary educational managers.

Specific views
The response rate of participants was very encouraging as seen in Table 3 and Figure 1. As a result, the following views emanated which would enhance the professionalisation approach.

1. Need to a use professionalising approach in developing management staff
A greater number of respondents were of the view that management of polytechnics and other tertiary educational institutions must be professionalised to enhance confidence, work efficiency, consistency, quality of service, value, prestige and maintenance of appropriate standards in terms of leadership and student academic and skill performance.

2. Educational qualifications of management staff
Majority of the respondents believed that the academic qualifications of staff in leadership positions of polytechnics are very good. However, they are generally purely academic and need professional development to make them more skillful.

3. Field experience
The study revealed that most respondents were not happy about staff who had no field experience but are made to head academic departments and administrative departments. Their inexperience is a barrier to professionalisation and could lead to irreparable losses in the organization.

4. Entry requirement to the profession

All the respondents accepted a basic requirement of a Master’s degree before being recruited to the pre-service professional training. This they believed would prepare them fully for the tertiary level educational institutions’ job market.

5. Role of the industry
Majority of respondents argued that industry must play an active role in the professionalising approach because polytechnics have been mandated to train middle level manpower to feed industries and that the industry is the main beneficiary of the total output of polytechnics. Industry should lead the way in pushing for professionalisation in the polytechnics as this would impact positively on the quality of graduates from the polytechnics and subsequently their output in industry.

6. Award of certificates and registration
All the respondents agreed that a professional certificate be awarded to participants of the training programme and they should be made to register as members of a professional body. They shall periodically pay dues, attend meetings, organise seminars and conferences, and make publications to keep them abreast with current developments in their profession and management functions.

Table 4: List of polytechnics in Ghana and their institutional mottos.

<table>
<thead>
<tr>
<th>S/N</th>
<th>NAME OF INSTITUTION</th>
<th>INSTITUTIONAL MOTTO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Accra Polytechnic</td>
<td>Truth, Excellence and Service</td>
</tr>
<tr>
<td>2</td>
<td>Kumasi Polytechnic</td>
<td>Nimdee Hyeren (Knowledge is power)</td>
</tr>
<tr>
<td>3</td>
<td>Takoradi Polytechnic</td>
<td>Nsa na Adwen ma Mpuntu. (The Hand and Brain Enhance Development)</td>
</tr>
<tr>
<td>4</td>
<td>Ho Polytechnic</td>
<td>Adanu Nazu Kekeli (Knowledge is Light)</td>
</tr>
<tr>
<td>5</td>
<td>Cape Coast Polytechnic</td>
<td>Nyimdee na Nkyerekyere ma Nyansa. (Knowledge and Education Culminate in Wisdom)</td>
</tr>
<tr>
<td>6</td>
<td>Koforidua Polytechnic</td>
<td>Technology for Development</td>
</tr>
<tr>
<td>7</td>
<td>Sunyani Polytechnic</td>
<td>Education for Progress</td>
</tr>
<tr>
<td>8</td>
<td>Tamale Polytechnic</td>
<td>Knowledge and Skill</td>
</tr>
<tr>
<td>9</td>
<td>Bolgatanga Polytechnic</td>
<td>Niuse Tuma Nde Bere (Practical Work is the Future)</td>
</tr>
<tr>
<td>10</td>
<td>Wa Polytechnic</td>
<td>Knowledge, Application and Service</td>
</tr>
</tbody>
</table>

Source: Field survey (2014)

A short analysis of keywords in the institutional mottos of the ten polytechnics in Ghana.
The study identified 16 keywords in the mottos of the 10 polytechnics namely; Truth, Excellence, Service, Knowledge, Power, Light, Hand, Brain, Development, Education, Wisdom, Technology, Progress, Practical Work, Future, and Skill. With reference to Table 4, Knowledge appeared four times, while each of the following- Development, Technology, and Education appeared twice.

Okyere-Boateng (2012) states that, among the 10 logos of polytechnics in Ghana the sprocket is a feature that appears most. The sprocket is a wheel that has teeth which engage the links of a chain and it is technically used in controlling movement, hence, the incorporation of the sprocket in the logo design of the Journal of Polytechnics in Ghana (JOPOG). The study, therefore, develops this slogan from the keywords that appeared more than once; Polytechnic means knowledge acquisition through the power of technical education for the enhancement of technological development in Ghana. Polytechnics therefore, play a pivotal role in national development, and at the time that government is considering converting polytechnics into technical universities, stakeholders and the general public should embrace the professionalising approach of polytechnic management. In view of this a number of professional programmes including the following are suggested to enhance the professionalisation agenda of Ghanaian polytechnics:

**Suggested professional programmes offering**

1. Higher educational leadership and innovation management
3. Academic Facility Management
4. Curriculum development
5. Student Affairs Management (Admissions, Examinations, Quality Assurance and Control)
6. Conflict and riot management
7. Financial management
8. Community education and extension
9. Educational ethics
10. Research and publication
11. Internally Generated Fund mobilization
12. Monitoring and evaluation

**VI. CONCLUSIONS**

Analyses and discussions of results place premium on the following:

The need for additional professional skill training to managers of polytechnic education as most of the professionals who are recruited have the deficiency of educational leadership and management.

Establishment of a professional institution that would be made a direct professional body to develop polytechnic managers in particular and managers of other tertiary level educational institutions in general.

**VI. RECOMMENDATIONS**

This study sought to explore and describe the opinions of stakeholders of polytechnic education and consultancies about the need to use a professional approach in the process of developing the management staff of polytechnics in particular and other tertiary level educational institutions in general. Majority of educational stakeholders consulted gave their full support to the professionalisation of management staff of the polytechnics even as they seek upgrading to Technical University status. Among many other benefits, professionalisation is seen as enhancing the value and prestige of tertiary level education.

- The NCTE as the main agency of professionalising the administration of tertiary educational institutions could come out with the establishment of an Institute of Professional Academic Educational Managers (IPAEM) as a registered professional body to provide professional training to polytechnic management
- Heads of polytechnics and other tertiary level educational institutions, and all Senior Members who hold offices should be made to undergo mandatory inservice professional development at the proposed IPAEM or either appropriate training institutes
- Newly recruited administrative officers should be made to complete the training at pre-service level before their appointments are confirmed after the probationary period
- Professional certificates should be awarded to beneficiaries of the training programme
- The NCTE should design modules for the training and engage the services of both academic and professionals to facilitate the running of the programme.
- All trained personnel must be made to register and be inaugurated and inducted as full members of the appropriate professional body
- All registered members could practice as full time managers of tertiary level educational institutions
- A proposal for the establishment of this professional body could be drafted from this research report to government and stakeholders of higher education for consideration

**REFERENCES**


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