Polytechnic Education in Ghana:  
The Case of the HND Estate Management Programme  

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SUMMARY

Polytechnic education has contributed significantly to the development process of the country. In the field of surveying, which requires technicians to collect and analyse field data for effective decision making, the polytechnics have contributed immensely through the training of technicians, especially, in building technology and estate management. The continued training of the estate management professional is crucial to the success of land administration especially at a time when Ghana is implementing its Land Administration Project. In this respect, quality assurance in students enrolled onto the programme, academic staff and facilities as well as strong partnership with industry would be needed to improve the training of technicians for the real estate industry. This paper focuses on the current state of polytechnic education in Ghana in relation to the training of the estate management technician. It also takes a look at some of the challenges involved in the training of the technician and prospects for improving the quality of training to enhance their job delivery.
1. INTRODUCTION

Polytechnics are higher educational institutions responsible for training in scientific and technical subjects. Since 1992, when Government directed Polytechnics in Ghana to run tertiary programmes, significant gains have been made in the output of the Polytechnic graduate. The Polytechnics provide the bulk of our people with technical education that is relevant, up-to-date in technology, and forward looking in approach. As such polytechnic graduates play a significant role in the development of the nation.

1.1 Historical Background

The Polytechnics in Ghana were first established as technical institutes that offered craft courses. In 1960, following the industrial development policy and rapid technological progress in a broad range of areas, technical education became a necessity for the country. Since the technical institutions (polytechnics) were offering second-cycle craft courses while the universities were offering higher tertiary courses, there was a gap in the manpower supply needs of the country (Nsiah-Gyabaah, 2005). In recognition of this, a number of the technical institutes were established to train lower and middle-level skilled manpower to fill the gap. These technical institutes were established in Accra, Kumasi and Takoradi.

In 1963, the technical institutes were re-designated as polytechnics to run non-tertiary programmes. The Tamale and Ho technical institutes were elevated to polytechnic status in 1984 and 1986 respectively. The Cape Coast Polytechnic which was planned as a polytechnic was opened in 1986. In 1987, the Government of Ghana constituted a University Rationalisation Committee (URC) to develop proposals for reforming the management, academic structure and funding of tertiary education in Ghana. Following the submission of the URC’s report, the government issued a white paper in 1991 on the Reforms to the Tertiary Education System. The White Paper gave prominence to polytechnic education and in 1993, following the promulgation of the Polytechnic Law, 1992 (PNDCL 321), the Polytechnics were upgraded to tertiary status. In line with government’s policy of making the polytechnics regionally based institutions, the Sunyani, Koforidua, Wa and Bolgatanga polytechnics were also established. In 1994 the polytechnics commenced the running of HND programmes.

The White Paper specifically stated that the Polytechnics have a distinct and important role to play in middle-level manpower development and that programmes and courses were to be offered at the middle-level of technical training leading to the award of higher national diplomas but not departing from syllabi dedicated to practical training. The provision of such programmes will complete the cycle of technical education and provide a capacity for higher-level technician training and practical research (Ministry of Education, 1993).
1.2 Objectives of the Polytechnics

The Polytechnic Law assigned appropriate aims and objectives which the Polytechnics are to strive to achieve as follows:
- Provide 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.
- Encourage study in technical subjects at tertiary level, and
- Provide opportunity for development, research and publication of research findings.

The Polytechnic Law also gave legal backing to desirable changes in polytechnic administration, course structure, grading, certification and staffing. The Polytechnics in Ghana now have their own governing boards or councils and the right to design their own curricula, plan their management and development activities.

1.3 Institutional Support and Collaboration

In the performance of their functions, a number of key institutions have been set up to co-ordinate the activities of the Polytechnics to ensure quality of programmes and award diploma certificates to students. The institutions who impact on the governance and activities of the polytechnics include:
- The Ministry of Education (MoE)
- National Council for Tertiary Education (NCTE)
- National Accreditation Board (NAB)
- National Board for Professional and Technician Examinations (NABPTEX)

The Ministry of Education (MoE) and NCTE

The Ministry of Education has ministerial responsibility for all levels of education in Ghana. The National Council for Tertiary Education (NCTE) advises the Minister in charge of tertiary education on matters relating to the development of tertiary education. It has a leading role in guiding and co-ordinating the tertiary education sector, and in interpreting and implementing government policy on tertiary education.

National Accreditation Board (NAB)

Accreditation is necessary to ensure the quality of programmes and to foster public confidence in the programmes offered in tertiary institutions. The National Accreditation Board (NAB) is mandated under National Accreditation Board Law 1993, (PNDCL 317), to accredit programmes offered in each polytechnic. Programme accreditation is given to polytechnics that meet or satisfy academic, staffing and physical facility requirements and other conditions of NAB.
National Board for Professional and Technician Examinations (NABPTEX)

The NABPTEX was established by the National Board for Professional and Technician Examinations Act, 1994 (Act 492) to among other things, formulate and administer schemes of examinations, evaluation, assessment, certification and standards for skills and syllabus competencies for non-university tertiary institutions. NABPTEX has taken steps to coordinate the appointment of moderators for the various polytechnics.

1.5 The Role of the Polytechnics in the Training of the Surveying Technician

In the case of the surveying profession, technicians are indispensable in the collection and analysis of field data required for decision making. Since Polytechnic education emphasises on technical training, it is imperative that they offer technical programmes in surveying. All the Polytechnics in the country run programmes in Building Technology. Technical training in Estate Management is offered only at the Kumasi Polytechnic, thus giving it a national character. Plans are also underway for the introduction of HND in Land Surveying at the Kumasi Polytechnic.

2. THE ESTATE MANAGEMENT PROGRAMME

2.1 Brief History

As stated earlier, during the 1994/95 academic year, the Polytechnics were directed to give full implementation to their part of the tertiary reform programme. This involved the mounting of Higher National Diploma (HND) programmes in various fields. Simultaneously, the universities were to wind up their diploma programmes. Pursuant to this, the Kumasi Polytechnic started preparing the grounds for mounting the HND programmes including the HND in Estate Management. Unlike some other disciplines in the polytechnic, Estate Management was new as such; a new department had to be established to run the programme. The programme started at the beginning of the February 1996 and is now in its 10th year.

2.2 Admission, Retention and Award of HND

2.2.1 Entry Requirements

a) Senior Secondary Certificate Applicants
   Passes in core English Language, Mathematics and Integrated Science and three (3) elective passes, in Geography, Economics and any other third subject with an aggregate not exceeding 24.

b) General Certificate Examination (G.C.E.) Applicants
   Five (5) G.C.E “O” Level credits including English Language and Mathematics and three (3) G.C.E “A” Level passes including Geography and Economics plus General Paper.

c) Mature Applicants
   i. Must be at least 30 years old
ii. Must have five (5) GCE “O” Level credits including English Language and Mathematics
iii. Must have relevant working experience (letter from employer is required)

2.2.2 Retention

A student shall be expected to take part in all coursework which includes class work (theory and practicals), seminars and assignments. He/She should pass all subjects including those referred at the end of the academic year and maintain a minimum Cumulative Grade Point Average (CGPA) of 1.50 throughout the duration of the programme.

2.2.3 Award of HND Certificate

At the end of the programme, successful students are awarded the Higher National Diploma by the Polytechnic in conjunction with the National Board for Professional and Technician Examinations (NABPTEX). For the award of the HND Estate Management, a student must have passed all courses and done at least one semester industrial attachment.

2.2.4 Accreditation

The Department has been granted full accreditation by the National Accreditation Board to run the programme, giving credence to the quality of the programme.

2.3 Current Training

2.3.1 Course Content

Currently, the Department runs a three-year (six semesters) HND programme in Estate Management. Students take courses in:

**Year One - First Semester**

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>ESM 101</td>
<td>Law I-Principle of Law &amp; Equity</td>
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<tr>
<td>ESM 103</td>
<td>Elements of Central &amp; Local Government</td>
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<tr>
<td>ESM 105</td>
<td>Principles of land Surveying I</td>
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<td>ESM 107</td>
<td>Principles Accounting I</td>
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<td>ESM 109</td>
<td>Mathematics</td>
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<td>ESM 111</td>
<td>Building Construction I</td>
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<td>ESM 105</td>
<td>Principles of Economics</td>
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<td>CLT 101</td>
<td>Communication Skills I</td>
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<td>CLT 111</td>
<td>Computer Literacy I</td>
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Second Semester  
ESM 102  Law II-Contract & Tort  
ESM 104  Elements of Central & Local Government  
ESM 106  Principles of Land Surveying II  
ESM 108  Principles of Accounting II  
ESM 110  Introduction to Valuation  
ESM 112  Building Construction II  
Econ 106  Principles of Economics II  
COS 102  Communication Skills II  
CLT 111  Computer Literacy II  
AS 100  African studies

Year Two - First Semester  
ESM 201  Law Relating to Estate Mgt I  
ESM 203  Principles and Practice of Valuation I  
ESM 205  Land Economics I  
ESM 207  Building Construction III  
ESM 209  Land Use Planning & Administration I  
ESM 211  Property Management I  
ESM 213  Research Methods  
ETP 201  Entrepreneurship I

Second Semester  
ESM 202  Law Relating to Estate Mgt II  
ESM 204  Principles and Practice of Valuation II  
ESM 206  Land Economics II  
ESM 208  Building Construction IV  
ESM 210  Land Use Planning & Administration II  
ESM 212  Property Management II  
ESM 216  Rating and Taxation I  
ETP 202  Entrepreneurship II

Third Year - First Semester  
ESM 301  Practical Training in Industry  
ESM 303  Technical Report  
ESM 305  Project Work

Second Semester  
ESM 302  Law Relating to Estate Management V  
ESM 304  Principles & Practice of valuation III  
ESM 306  Rating & Taxation II  
ESM 308  Building Construction V  
ESM 310  Elements of Building Quantities  
ESM 312  Property Management III
2.3.2 Industrial Attachment

In line with the objective of the Polytechnics to train skilled middle-level manpower for the nation, the Department with the approval of the Academic Board of the Polytechnic and NABPTEX, organizes six-months industrial attachment for students during the fifth (5th) semester of the programme to equip them with the skills needed for post-qualification employment.

2.3.3 Job Placement Centers

The Estate Management programme has fulfilled its mandate - the training of skilled middle-level manpower for the real estate industry. This is evidenced by the number of graduates from the department who have found employment in organizations such as:
- Land Sector Agencies - Lands Commission, Land Valuation Board, Office of the Administrator of Stool Lands and Land Title Registry
- Quasi-government institutions - State Insurance Company, Volta River Authority etc.
- Universities and Polytechnics
- Ministries, Departments and Agencies especially the Ministry Of Health.
- District/Municipal/Metropolitan Assemblies
- General Practice Surveying Firms

2.4 Staffing and Resources

2.4.1 Staffing

The Department has the compliment of full-time teaching staff supported by part-time lecturers from Kwame Nkrumah University of Science and Technology (KNUST) and service lecturers from within the Polytechnic. The department has a staff development policy which offers opportunity for further training of staff who have served a minimum of three years. The government has also helped in the development of human resource by financing training of academic staff, both locally and abroad.

2.4.2 Physical Facilities

All the Polytechnics have improved the level of infrastructure and facilities on their campuses with financial support from Ghana Education Trust Fund (GETFund). The proximity to the Kwame Nkrumah University of Science and Technology (KNUST), Building and Road Research Institutes (BRRI) and Forestry Research Institute of Ghana (FORIG), provides the staff and students of the Department of Estate Management the opportunity of sharing human resources, library and other physical facilities.

2.4.3 Funding

Like all tertiary institutions in Ghana, academic staff of the Polytechnics are eligible to access funds under the Teaching and Learning Innovation Fund (TALIF), Netherlands Organization
for International Cooperation in Higher Education (NUFFIC) of the Netherlands Government and Ghana Government scholarships. Additionally, the Polytechnics qualify for funding under the GETFund which can be used for expanding both academic and residential facilities.

2.5 Linkage with Industry

In fulfilling its role as a producer of middle-level technical manpower for the nation, the Department and the Polytechnic as a whole have been collaborating with industry to provide on-the-job training for staff and students. The Department is recognized by the Ghana Institution of Surveyors (GhIS) as a training institution. The GhIS makes significant input in the curriculum and training of the technician estate manager.

The Department has established strong linkage with industry through its industrial attachment programme which offers General Practice Surveyors all over the country the opportunity of contributing to the training of students. Feedback from the industrial attachment programme has influenced the development of the programme content. Additionally, the Department, with support from the Polytechnic, participates in all educational programmes of the GhIS. So far three (3) graduates from the Department have qualified as General Practice Surveying Technicians of the GhIS.

3. CHALLENGES/THREATS

The running of the HND Estate Management programme has not been without problems. The major challenges facing the Polytechnics and for that matter the Department of Estate Management include:

3.1 Competition for Quality Academic Staff and Students

With the presence of other tertiary institutions in Kumasi, the Department faces strong competition for academic staff as well as first class students. High-calibre academic staff and brilliant students are usually attracted to KNUST where better financial rewards are available. The polytechnics are not first choice institutions for many students because, opportunities for academic progression are limited in Ghana and public recognition of the HND is quite low.

3.2 Misconception about the Nature and the Role of the Polytechnics

The role and nature of polytechnic education are not clearly understood by many. Until recently, many polytechnic students had the erroneous impression that the HND certificate was equivalent to the degree while some members of the public felt that the polytechnics are duplicating what the universities are doing. Lack of understanding of the career-oriented nature of polytechnic education has been responsible for these misconceptions.
4. PROSPECTS

Graduates from the Department find employment in public and private institutions where they may be engaged as estate/property management technicians. In terms of academic progression, plans are underway for the running of a Bachelor of Technology (B-Tech) in Estate Management.

5. CONCLUSION

The aims and objectives of the Polytechnics show that polytechnic education is career-oriented and more practical in content. The Polytechnics therefore, play a crucial role in the developmental process of the nation by offering varied programmes which provide the country with the middle-level manpower requirements. Most of the graduates of the polytechnics are expected to be self-employed since they acquire practical skills in their training. However, most polytechnic graduates soon after graduation, rush to universities to pursue any programme in the hope of obtaining degrees and academic credentials. In order to avoid this and create an identity for the Polytechnics the proposal for the introduction of Bachelor of Technology (B-Tech) degrees in the Polytechnics should not be seen as duplication of university programmes nor should it be seen as the springing up of competitive institutions but rather, as institutions which have specific role to play in the national development process.

The Polytechnics have come of age and are the centres of scientific and technological excellence. Staff training has improved the quality of teaching, so has infrastructure and funding. Linkage with industry has also improved. The technician estate manager is adequately equipped to play a meaningful role in the land administration of this country. However, much depends on the output of each graduate who must prove his/her worth in the job market.

REFERENCES

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