© Bethel Tawiah Ababio University of Cape Coast EVALUATING CAPACITY OF GEOGRAPHY DEPARTMENTS FOR STUDENT EMPLOYABILITY SKILLS' DEVELOPMENT IN THREE PUBLIC UNIVERSITIES IN GHANA

BY

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FEBRUARY 2017

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DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature Bissino

Date 07/11/2017

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Supervisors' Declaration

We hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Principal Supervisor's Signature.

ABSTRACT

Some studies posit that education is one of the key drivers of development (Psacharopoulos, 2007; Acheampong,2006; Boateng & Ofori, 2002). Relevant education provided to individuals in a nation is the hallmark for the growth and development of that nation. For such growth and development to occur education should be anchored on highly capacitated training institutions.

Using the pragmatic paradigm and the convergent parallel design, this study sought to explore how geography departments deployed their capacity resources to engender student employability skills' development. The three geography departments included in the study were the only well-established autonomous geography departments in any university in Ghana. Quantitative and qualitative methods were used, the former included a survey of 260 level 400 students, 29 instructors and 19 support staff. Qualitative data were collected from 36 students through four focus group discussions, the deployment of structured interview schedules for two heads of department, four instructors, 19 geography graduates and the four employers of the geography graduates. In addition, six structured observation guides were deployed to collect another set of qualitative data. Document mapping was also used to collect data on the curricula of the geography departments.

The findings of the study showed that the geography departments deployed their capacities to implement the employable skills to a moderate level. The study's recommendations include the geography departments strengthening all the five capacity resources for effective training of students in employable skills.

KEY WORDS

Geography Departments

Public Universities

Human Capital Theory

Employability Skills Development

Education and Development

Mixed Methods

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DEDICATION

In loving memory of my late parents, John Tetteh Ababio and Emma Ladjer Ababio (nee Nyemingor)

TABLE OF CONTENTS

	Page
DECLARATION	ii
ABSTRACT	iii
KEY WORDS	iv
ACKNOWLEDGEMENTS	v
DEDICATION	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	xiii
LIST OF FIGURES	x vi
LIST OF ACRONYMS	xix
CHAPTER ONE: INTRODUCTION	1
Overview	1
Background to the Study	1
Statement of the Problem	9
Objectives of the Study	13
Research Questions	13
Significance of the Study	14
Delimitation of the Study	15
Limitations of the Study	17
Assumptions of the Study	18
Operational Definition of Terms	19
Organisation of the Study	22
Chapter Summary	23
CHAPTER TWO: REVIEW OF RELATED LITERATURE	24

Introduction	24
Placing Geography within the Dimensions of Development	24
Making Tertiary Education relevant to Africa's Development	37
Learning Outcomes in Higher Education	43
History, Aims and Content of Undergraduate Degree Programmes in	
Geography	52
Availability and Quality of Resources in Geography Programmes	81
Ways of Training Geography Students to acquire Employable Skills	92
Empirical Review	98
Chapter Summary	107
CHAPTER THREE: THEORETICAL REVIEW AND	
CONCEPTUAL FRAMEWWORK OF THE STUDY	109
Introduction	109
Theoretical Review of the Study	110
Human Capital Theory (HTC)	110
Systems Theory and Its Application to Education and Training	118
Resource Dependency Theory (RDT)	128
Astin's (1984) Student Involvement Theory (SIT)	130
Constructive Theory and Its Application to Education and	
Training	132
Summary on Theoretical Perspectives	141
Models for Evaluating Capacity of Academic Departments	
The Responsive Model	143
The Context, Input, Process and Product (CIPP) Evaluation	
Model	145

Competency-based Education Model	149
The Conceptual Framework for the Study	156
Summary of Chapter	167
CHAPTER FOUR: RESEARCH METHODS	169
Introduction	169
Research Paradigm	169
Choice of Institutions	172
Research Design	179
Study Design – Descriptive Study	181
Study Population	182
Sample and Sampling Procedures	183
Research Instruments	188
Reliability of Instruments	192
Validity of Instruments	193
Data Collection Procedures	194
Data Processing and Analysis	198
Ethical Considerations	202
Summary of Chapter	203
CHAPTER FIVE: HOW GEOGRAPHY DEPARTMENTS DEPLOY	
CAPACITY FOR EMPLOYABILITY SKILLS IMPLEMENTATION	204
Introduction	204
Quantitative Analysis of Views of Students and Instructors on	
Geography Departments' Capacity to Meet Employability Skills'	
Needs of Undergraduate Students	205
Qualitative Analysis of Views of Respondents on Geography	

Departments' Capacity to Meet Employability Skills' Needs of	
Students	222
Comparing and Contrasting Quantitative and Qualitative Results to	
Establish Role of Geography Departments in Employability Skills'	
Implementation	243
CHAPTER SIX: ROLE OF GEOGRAPHY CURRICULA IN	
ENGENDERING STUDENT EMPLOYABILITY SKILLS'	
DEVELOPMENT	250
Introduction	250
Quantitative Analysis of Role of Curricula in Employability Skills'	
Implementation	250
Qualitative Analysis of Role of Curricula in Employability Skills'	
Implementation	252
Content Analysis of Course Outlines, Examination and Quiz Papers	263
Comparing and Contrasting Quantitative and Qualitative Results to	
Establish Role of Curricula in Employability Skills' Implementation	271
Summary of Chapter	274
CHAPTER SEVEN: SUGGESTED ACTIONS FOR GEOGRAPHY	
DEPARTMENTS TO IMPROVE EMPLOYABILITY SKILLS'	
IMPLEMENTATION	275
Introduction	275
Innovative Training/Instruction	276
Engendering Practice-oriented Training	281
Improving Inter-organisational Linkages	283
Improving Intra-organisational Collaboration	288

Curriculum/Programme Review or Improvement	
Summary of Chapter	
CHAPTER EIGHT: CHALLENGES CONSTRAINING	
EMPLOYABILITY SKILLS' IMPLEMENTATION IN	
GEOGRAPHY DEPARTMENTS	298
Introduction	300
Inadequate Physical Resources	300
Limited Inter-organisational Linkages	301
Limited Intra-organisational Collaborations	304
Obsolete/Inappropriate Instructional Strategies	305
Broad and Irrelevant Curricula	305
Large Class vis-a-vis Limited Physical Space	311
Negative Student Attitude to Learning	313
Summary of Chapter	315
CHAPTER NINE: SUMMARY, CONCLUSIONS AND	
RECOMMENDATIONS	316
Introduction	316
Summary of the Study	316
Key Findings of the Study	317
Conclusions	322
Recommendations for Practice and Policy	324
Contributions of the Study to Knowledge	327
Suggestions for Further Research	
BIBLIOGRAPHY	
APPENDICES:	362

A: Questionnaire for University Teachers	363
B: Interview Schedule for Heads of Department	378
C: Questionnaire for Support Staff	381
D: Questionnaire for Students	387
E: Focus Group Discussion Protocol for Students	399
F: General Observation Guide	402
G: Document Check List	404
H: Interview Guide for Employers	405
I: Interview Guide for Graduate Employees	407
J: Interview Guide for Academic Staff	409
K: Codes for Participants	413
L: University of Cape Coast Ethical Clearance Letter	414
M: Krejchie & Morgan (1970) Table for Sample	
Size Determination	415
N: Action Verbs for Defining Objectives Using Bloom's	
Taxonomy (Revised)	416
O: Potential Areas of Employment for Geography Students in	
Ghana	417
Candidate's Vita	418
Abstracts of Publications from the Study	419

LIST OF TABLES

Table		Page
1.	Nature of Knowledge Component in Honours	
	Geography Degree Programmes	65
2.	Skill Types in Geography Honours Degree	
	Programmes	69
3.	Distribution of Respondents by Academic	
	Departments	183
4.	Research Questions and Related Research	
	Instruments for Data Collection	191
5.	Demographic and Academic Profile of Instructors	207
6.	Students' and Instructors' Views on how Human	
	Resource Capacity of Geography Departments	
	Influences Employability Skills' Implementation	209
7.	Students' and Instructors' Views on how Leadership	
	Capacity of Geography Departments Influences	
	Employability Skills' Implementation	212
8.	Students' and Instructors' Views on how Intra-	
	organisational Capacity of Geography Departments	
	Influences Employability Skills' Implementation	215
9.	Students' and Instructors' Views on how Physical	
	Resource Capacity of Geography Departments	
	Influences Employability Skills' Implementation	218
10.	Students' and Instructors' Views on how Inter-	
	organisational Linkages Capacity Influences	

	Employability Skills' Implementation	220
11.	Demographic and Professional Profile of	
	Respondents	223
12.	Emergent General Themes	224
13.	Emergent Themes resulting from Role Geography	
	Departments in Employability Skills'	
	Implementation	225
14.	Views of Respondents on how the Curricula of	
	Geography Departments meet the Employability	
	Skills Needs of Students	252
15.	Lower Order Intellectual Skills/Concepts	
	Embedded in the Undergraduate Curricula of	
	Geography Departments from 2010 to 2015	263
16.	Higher Order Intellectual Skills/Concepts	
	Embedded in the Undergraduate Curricula of	
	Geography Departments from 2010 to 2015	265
17.	Key Skills Embedded in the Curricula of Geography	
	Departments	267
18.	Personal Attributes Embedded in the	
	Undergraduate Curricula of Geography	
	Departments from 2010 to 2015	268
19.	Commercial Awareness Learning Outcomes	
	Embedded in the Undergraduate Curricula of	
	Geography Departments from 2010 to 2015	269

20.	Perspectives of Respondents on Actions Geograph		
	Departments Should take to Address Student		
	Employable Skills' Needs	275	
21.	Respondents' Views on Challenges Constraining		
	Employability Skills' Implementation in Geography		
	Departments	299	

LIST OF FIGURES

Figure		Page
1.	Conceptual Framework Framework Showing	
	Employability Skills' Implementation in	
	Geography Departments	158
2.	Profile of Intra-Academic Units of the Dept. of	
	Geography and Resource Development and other	
	Academic Departments and Schools	174
3.	Profile of Intra-Academic Units of the Dept. of	
	Geography and Rural Development and other	
	Academic Departments and Schools in the	
	College of Humanities and Social Sciences	176
4.	Profile of Intra-Academic Units of the Dept. of	
	Geography and Regional Planning and other	
	Academic Departments and Faculties/Schools in	
	the College of Humanities and Legal Studies	178
5	Diagram showing how to Use a Logic Model for	
	Employability Skills' Implementation	331

LIST OF ACRONYMS

- 1 1st deg. First degree
- 2 AL Assistant Lecturer
- 3 AP Associate Professor
- 4 ATRA Administrative /Technical/Research/Assistant
- 5 C Cook
- 6 CEO Chief Executive Officer
- 7 DGRD Department of Geography & Resource Development
- 8 DGRD Department of Geography & Rural Development
- 9 DGRP Department of Geography & Regional Planning
- 10 EI–Educational Institution
- 11 FI-Financial Institution
- 12 FT –Full Time
- 13 GIS(M) Geographical Information Systems Manager
- 14 HOD Head of Department
- 15 HRM Human Resource Manager
- 16 ITO Information Technology Officer
- 17 KNUST-Kwame Nkrumah University of Science & Technology
- 18 L Lecturer
- 19 MLM Middle Line Manager
- 20 MM Marketing Manager
- 21 MS Managerial Staff

- 22 MSLC Middle School Leaving Certificate
- N/A Not applicable
- 24 N/R No Response
- 25 OC On Contract
- 26 P Professor
- 27 PATRA-Principal Administrative/Technical/Research Assistant
- 28 PC Private Company
- 29 Ph.D. Doctor of Philosophy
- 30 PO-Public Organisation
- 31 Prof. Design. Professional Designation
- 32 Prof. Qual. in Educ. Professional Qualification in Education
- 33 PT– Part Time
- 34 RA Research Assistant
- 35 SATRA-Senior/Administrative/Technical/Research Assistant
- 36 SL Senior Lecturer
- 37 SM Senior Member
- 38 SS Senior Staff
- 39 T Tutor
- 40 TA Teaching Assistant
- 41 UCC University of Cape Coast
- 42 UG University of Ghana

CHAPTER ONE

INTRODUCTION

The main purpose of this study is to evaluate the capacity of geography departments to train students to acquire employable skills. This chapter is the first of nine chapters into which the study is organised. It introduces the study by focusing on issues such as the background to or rationale for the study, the problem statement, objectives, significance, delimitations, limitations and assumptions of the study. Lastly, definitions of some key terms and the organisation of the study are presented.

Background to the Study

One major problem in the application of the human capital theory is its failure to account for a growing gap between people's increasing learning efforts and knowledge base and the diminishing number of commensurate jobs to apply their increasing knowledge investments, especially in developing nations. In apparent agreement with this critique against the human capital theory, Ayara (2002) asserts that the reason why education has not had the expected positive growth impact on economic growth and development is that the education system has failed such that schooling provides few (or no) skills.

The above development trend stems from the assertion that majority of universities and other tertiary institutions in Ghana are still modelled on the theoretical framework (a legacy inherited from colonial education), which limits teaching mainly to the delivery of factual and abstract knowledge. Due to the mainly theoretical training given to university students, graduates are not equipped with training that will allow them to innovate and become

entrepreneurs and researchers. A critical look at the various programmes of study in Ghanaian universities shows that a large percentage are still very academic and contain mostly theoretical underpinnings. This makes majority become job seekers, the university graduates unemployed or underemployed (Avoke & Avoke, 2012). One key concept or theme closely related to the human capital theory that has closely been associated with the relevance of education to national development in recent times is the issue of employability skills development. The concept of employability has been used in various contexts over a century. The Confederation of British Industries (CBI) (2009) defines employability as a set of attributes, skills and knowledge that all labour market participants should possess to 9 ensure that they have the capability to be effective at the workplace and to be of benefit to themselves, their employers and the wider economy.

The importance of employability as a development concept can be linked to the continued emphasis on skills-based solutions, to economic competitions and work-based solutions and social deprivations (Hillage & Pollard, 1998). Employability is seen as an essential element in the strategies seeking to address unemployment and social exclusion. It is an interaction between the individual and other actors and conditions in the labour market.

Various factors have necessitated governments and other stakeholders' interest in employability as a development concept. One, to stem the 'productivity shortfall' in the economies of many countries, governments are placing greater emphasis on employability of graduates (Jackson, 1999; Knight & Yorke, 2001). Two, some employers regard the degree subject studied by graduates not as important as the graduates' ability to handle

complex information and communicate it effectively (Knight & Yorke, 2001). In other words, employers now want a variety of employable skills rather than specialist subject knowledge (Warn & Tranter, 2001). Three, is the current situation where there is an ever increasing unemployment rate of university graduates, mainly due to the fact that most of these graduates who enter the labour market have been trained mainly in their disciplines' areas of specialisation, but without being fully equipped with transferable or employable skills that are now required in the fast changing world of employment (Nunte & Ainon, 2006). Lastly, Nunte and Ainon posit that the business world is now requesting for prospective employees who can translate their "theoretical" paper qualification into abilities and competencies that will enable them to effectively perform their jobs and tasks. These sets of competencies, abilities and attributes are generically called employable or soft skills.

From a global or international context, employability as a development concept is firmly been foisted on the agenda of international organisations seeking to influence policy formulation and implementation in both developed and developing countries. One of such organisations, the United Nations Educational, Scientific and Cultural Organisation (UNESCO) has carried out extensive research and advocacy on the right to equitable education and the developmental benefits that inure to both individuals and nations from education and training programmes (UNESCO, 1998).

Another international organization, the Organisation for Economic Cooperation and Development (OECD) has come out with international and national reports on education and training that have placed much emphasis on

the human capital approach, having identified both human capital investment and employability as positive strategies that can enhance productivity and economic development (OECD, 1999). Other international organisations that have contributed to the debate on global employment/employability and human capital capacity building programmes are the International Labour Organisation and the World Bank (ILO, 2006; Samoff & Carol, 2003).

From a regional or African context, several studies and policy documents on employment and employability, have stressed the need for upskilling and employability to enable African Union (AU) member countries actively participate in the global competitive economy(ILO, 2012; McCowan, 2014; Page, 2012;). One such organization is the Association of African Universities (AAU). The AAU in partnership with the University of Rwanda, organized a 3-day consultative workshop (Oct.14 -16, 2015) in Kigali, that included a round table discussion by four eminent African intellectuals on how African universities could improve graduate employability by inculcating the spirit of entrepreneurship in the graduates (AAU, 2015). The AAU before the Kigali Workshop had previously collaborated with the Association of Universities and Colleges in Canada (AUCC) to undertake a 3-year project titled "Strengthening Higher Education Stakeholder Relations in Africa (SHESRA)".

In a foreword to the above study document, the immediate past AAU Secretary-General, Professor Olugbenuro Jegede, bemoaned that the knowledge, skills and training that students receive at many African universities do not prepare them adequately to meet the requirements of industry and the job market. He surmised that the mismatch between what

students learn and what industry needs, coupled with under-training in the critical skills of problem-solving, analytical thinking and communication, is partly the reason for the current high graduate unemployment and underemployment in many African countries (Ssabuwufu, Ludwick & Beland, 2012).

From the national context, many national policies, politicians, educationists and social commentators have identified the re-alignment of tertiary education programmes to local needs, as crucial to national development. One of such national development plans, the Medium-Long Term 7-Year Development Plan (2008 – 2015) aims to enhance human capital development through formal education and skills training. The Plan recognizes the demand-supply quality gap in skills training, caused by a lack of fit between what is taught in schools and what is needed on the job, apparently due to the lack of involvement of industry in the design of training curriculum and inadequate skill upgrading of instructors. The Plan, therefore aims to expand knowledge and problem-solving, as well as creativity and competitiveness in human resource development (NDPC, 2008). In a similar vein, the Report on the President's Committee on the Review of Education Reforms in Ghana (2002) has recommended the need for the education system in Ghana to equip the individual with knowledge, skills and competencies needed for the job market. It further went on to challenge tertiary institutions to train students in methods of critical and independent thought, making them aware of their responsibility to use their training for the general good of the country.

From the afore-going discussions, it can be surmised that providing quality and employability skills development to strengthen the human resource base is the hallmark of all educational systems the world over, Ghana inclusive (Fletcher, 2000). Whereas employability skills training can be acquired at different levels of the educational ladder, the university provides the highest level of manpower training globally. Universities provide the framework for helping individuals to develop their personal and organizational skills, knowledge and abilities (i.e. competencies) through a variety of ways such as training, career development, performance management and development, coaching, mentoring, succession planning, key employee identification, tuition assistance and organizational development (Heathfield, undated).

Universities all over the world serve as the citadels of knowledge and spearhead the development of the human resource base of their societies through their traditional mission of discovering, transmitting and preserving knowledge (Gichaga, 1993). In support of Gichaga's assertion, Miyittah-Kporgbe (2011) states that the university is a place for acquiring knowledge, as well as generating new knowledge to solve the present and future challenges facing society. He surmised that universities have the role to train students for the right job markets and generate new knowledge and technology in solving specific problems of society. This, they do through the establishment of specialized units, faculties and departments that are further divided into disciplines and sub-disciplines.

Geography, a specialized discipline since the historical times of Eratosthenes (Preston & Geoffrey, 1981) has always occupied a singular

department in universities because of its significance in academic circles.

Geography departments the world over are mandated to educate and train their students to acquire knowledge and skills

- (a) of the earth's physical environments and their relationship;
- (b) in understanding of the interrelationship of social, economic, political and cultural factors;
- (c) in the analysis and use of standard statistical methods;
- (d) in writing carefully reasoned reports and academic essays;
- (e) in good visualization;
- (f) in the spatial analysis of socio-economic patterns, problems and forces;
- (g) in operating computer equipment;
- (h) in ability to employ land use data communication (i.e. written, oral, visual and electronic);
- (i) information management;
- (j) teamwork;
- (k) personnel management, and
- (l) problem-solving, etc. (Association of American Geographers, 2009; University of Manitoba, 2009).

With a training culminating in the award of a Bachelor of Arts (B.A.) or Bachelor of Science (B.Sc.) degree in geography, graduates are better placed to be offered an array of job opportunities as environmental impact specialists, waste management specialists, emergency management officers, environmental quality specialists, cartographers and GIS and remote sensing specialists. Other job offers include cultural resource specialists, interpretive specialists, social/urban geographers, city-regional planning, housing

specialists, tourism specialists, community development specialists and demographic analysts. Other professionals with a background in geography include bio-geographers, coastal zone specialists, weather/climate specialists, water resource specialists, soil specialists; agricultural planners, location analysts, real estate analysts, transportation planners, travel/tourism planners; primary and secondary education teachers and publishers (AAG, 2009).

The importance of geography to national development was amply captured by the former UN Secretary General, Kofi Annan when he affirmed that universities (and by extension, geography departments) have become a primary tool for Africa's development in the new century. Geography departments can help develop African expertise; they can enhance the analysis of African problems, strengthen institutions, serve as model environments for good governance and conflict resolution, and enable Africa to play an active part in global community of scholars (Bloom, Canning & Chan, 2005).

According to Hoggart (1996), four thematic areas that have become very significant and are driving the global development agenda (and where geography is offering the way) are; climate change, politics, sustainable development and national policy. It is for this reason that geography courses such as Climatology, Political Geography, Geography of Development and Geography of Public Policy have become 'hot issues' and are the most subscribed in American universities.

The link between the kinds of human resources the universities produce and what employers require has become a pertinent issue in the labour market as it has formed the focal point on all discourses on un/employment in Ghana. One working committee group at a National Productivity Conference

in Accra in 1997 for example, commented on the role of the education system, especially universities in prosecuting the agenda of industry. Participants expressed the view that the educational programmes should be re-structured to provide relevant skills for industry, that is, a development-oriented kind of curriculum was advocated with an increasing involvement of industry in the development of appropriate curriculum (Wiafe, 2003).

A time has therefore come for the searchlight to be thrown on Ghanaian universities with a view to identifying the prospects that their programmes offer and the challenges that they are confronted with in their attempts to meet the requisite manpower needs of society. One way of doing this is to undertake a capacity assessment of these universities with a view to identifying their deficiencies for effective employability skills development. This study's focus is on geography, a discipline that has occupied important academic space in Ghana's school curriculum (either as an independent subject or as part of an integrated curriculum) in various educational institutions such as Basic Schools, Senior High Schools, Colleges of Education and the Universities at different levels for training in this area.

Statement of the Problem

Geography has been a school subject for over a hundred years (Talbot, 2000). It has evolved from what began as an essential place-based gazetteer of facts and figures into a mature subject offering insights into an understanding of the world around us (Talbot, 2000). Indeed, a measure of successful evolution is its popularity and the skills it provides. The subject provides unique elements for school curriculum like the study of place and patterns and processes on the earth's surface and looking at how people interact with the

environment. Geography also gives students a field experience; where would map reading be without the subject? The subject also contributes to a battery of skills and competences in the world of work. For example, when these skills are developed, they will enhance students' abilities and talents as well as their reasoning faculties which are likely to result in a cumulative change in their values and increase their receptivity to new ideas towards society.

Additionally, skills acquisition in geography will give the graduates the increased capacity for not only creating productive wealth, but also for enhancing technological progress and facilitating their applications in productive activities. The skills training will give the geography graduates both technical and transferable or generic skills needed for the effective utilization of Ghana's natural resources for the creation of capital resources for sustainable national development (Acheampong, 2006).

To make these general skills available to geography students, efforts have over the years been directed at employability skills development in geography education at Ghanaian public universities through the diversification of the curricula of Geography Departments. For example, the Geography Departments at the University of Ghana (UG), Kwame Nkrumah University of Science and Technology (KNUST) and the University of Cape Coast (UCC) have adopted the following broad areas of curriculum specialization: Geography and Resource Development, Geography and Rural Development and Geography and Regional Planning respectively. In order to carve a niche in these curricula areas, the departments have benefitted from numerous national and international capacity building conferences, symposia, workshops and short refresher courses that have been organized by both

national and international organizations such as Ghana Geographers' Association (GGA), Ministry of Education, UNESCO, the USA, Netherlands, Canada and Norway. The subject has an undoubted breadth of study and can be studied in increasing depth through following any syllabus. The width and variation of geography curricula are in themselves a major source of job ideas.

Even with all the above efforts to make geography departments contribute meaningfully to skills development in the country, the labour market in Ghana portrays a mismatch between the demand for skills of geography graduates and their supply from the universities. The mismatch, according to Proctor and Dutta (1995) are the various gaps or imbalances in the knowledge, skills or competencies of graduates and those demanded by the world of work. The mismatch may be due basically to lack of labour market information with the supply side (that is, the university) not informing itself about what is happening in the labour market. This mismatch has resulted in some graduates not finding jobs related to the skills and knowledge that they have acquired from the universities (Amankwah, 1999 cited in Wiafe, 2003). Additionally, there appears to be some institutional constraints which might have contributed to the apparent mismatch between the expected skills that they must have and the current skills that undergraduate geography students are now having.

From literature, some studies have been done on the role of geography in development [e.g. Hinderson, Shalizi & Venables (2000), Winners and losers from regional integration agreement; Krugman (1998), The role of geography in development; Lambert & Morgan (2011), Geography & development: Development education in schools...; Naude (2007), Geography

and development in Africa: Geography and development; Talbot (2000), Careers in geography]. None of these studies link geography to employability skills development.

Additionally, other authors (e.g. Akinyemi, Ofem & Ikuenomore, 2012; Asafu-Adjaye, 2012; Baah-Boateng & Baffour-Awuah, 2015; Bawakyillenuo, Akoto, Ahiadeke, Aryeetey & Agbe, 2013; Boateng & Ofori-Sarpong, 2002; Darkwa & Adu-Gyamfi, 2013; Mgangira, 2003; Oppong & Sachs, 2015; Wiafe, 2003; Zukri bin Sidek, 2004) have also researched on higher education and employability skills development in Ghana and elsewhere. They also do not link their studies on employability skills to the study of geography undergraduate students, but rather graduates of other academic disciplines such as engineering, social science disciplines in general, business, agriculture, information technology, the humanities, etc.

Lastly, these studies did not consider (i) the capacity of geography departments to equip students with employable skills; (ii) the number and types of employable skills embedded in the undergraduate geography curricula; (iii) challenges that constrain geography departments' capacity to equip students with employable skills; (iv) types of capacity building support needed by geography departments to improve student employability skills' development. This therefore, clearly demonstrates a gap in the depth of research on employability skills development in geography education in Ghana. This research therefore sought to fill the lacuna by assessing the employability skills training given to undergraduate geography students in three public universities in Ghana.

Objectives of Study

The general objective of the study was to evaluate existing capacity of geography departments in three public universities in Ghana with the aim to investigating how their capacities (both existing and latent), are deployed for effective employability skills training of undergraduate students. To achieve this, the following specific objectives guide the study.

- (1) To investigate how the geography departments have deployed their capacity to train undergraduate students in employable skills in the three universities;
- (2) To evaluate how the contents of geography programmes or curricula in the three geography departments meet the employability skills requirements of the work place;
- (3) To examine actions the three geography departments should take to improve the current state of student employability skills development in the three universities;
- (4) To determine capacity challenges of student employability skills development in the geography departments; and
- (5) To make recommendations on the types of capacity building support available to the geography departments to improve the current state of employability skills development of undergraduate students.

Research Questions

The following research questions guided the study:

1. How have the geography departments deployed their capacity to meet the employability skills needs of their undergraduate students?

- 2. How are the contents of the geography programmes or curricula in the three geography departments meeting the employability skills requirements of the workplace?
- 3. What actions should the geography departments take to improve student employability skills' development in the three universities?
- 4. What capacity challenges constrain employability skills' implementation in the geography departments?
- 5. What types of capacity building support are available to the geography departments to improve their current provision of student employability skills development in the three universities?

Significance of the Study

Findings of the study are expected to be useful to stakeholders in geography education and training, particularly the management, staff and students of geography departments, who wish to identify issues influencing student employability skills development. This is because the findings would reveal the extent to which the geography departments have been able to equip students with employable skills. Additionally, the results of the study will help identify challenges constraining geography departments' capacity to produce employable graduates. The study will therefore, provide insight to geography departments and other analogous departments to be proactive in the employability skills training of students. Furthermore, it is anticipated that the findings would provide a research-based capacity assessment framework for skills training of geography students. This framework could be used by other cognate departments with similar characteristics. Again, the study contributes to the current debate as to whether universities in Ghana are producing the

right calibre of graduates who could meet the human resource needs of the country. Against this backdrop, it is imperative that this study examines the factors that constrain the effective skills training of geography students.

Lastly, it is anticipated that some of the issues that have emerged from this study would serve as a reference point for a major future research on employability skills development in other educational institutions. The perspectives of the study's participants will help suggest the actions that could be considered in garnering capacity building support for geography departments.

Delimitation of the Study

According to Pajares (2007), delimitation addresses how a study will be narrowed in scope, that is, how it is bounded. It explains the issues that the researcher is not doing and why he/she has chosen not to do them. This includes the literature that he or she will not review and why, the population he or she is not studying and why, the methodological procedures he or she will not use and why. In a Training and Human Resource Development Model designed by Wierner and Desimone (2009), there are four phases in any human resource development programme. These are Needs Assessment, Design of Programme, Implementation of Programme and Evaluation of Programme.

Taking a cue from Pajares' assertion, phases two, three and four are not included in the study because the investigator does not know the type of programmes and activities that the three Geography Departments would like to design after the needs assessment phase. The major aim of this study is to proffer to the three departments a research-based evidence of identified and

assessed capacity needs and assets for future programme or policy formulation in skills training. Again, phases two, three and four are not part of the objectives of the study taking into account the main focus of the study – that is, assessing capacity of geography departments.

The population that will not be included in the study are all academic and technical staff whose responsibilities involve the training of postgraduate students (both regular and sandwich). The exclusion of these categories of staff is due to the orientation of the study – finding out the missing link in the skills training of undergraduate Geography (major and combined) students. Again, literature will not be reviewed on issues which do not have any direct bearing on capacity assessment research and employability skills development. This is because such literature will not help define or inform the aspects of the study such as the statement of the problem, research questions, methodology and the findings.

The results of the study are delimited to the staff and management of the three geography departments who teach undergraduate geography major students and have taught for at least two years. Any staff member who does not handle the said students is excluded from the study. Again, the study is delimited to the competencies (in geography and other related thematic areas) of the management and staff of the geography departments. Staff whose competencies in other subject areas that do not have a direct bearing on the skills training of students, were not considered.

Lastly, methodological procedures which are exclusively reserved for purely quantitative studies were excluded since this study is a mixed methods study. Such quantitative methodologies include the use of hypothesis,

positivist philosophies, research instruments such as structured interviews, postal questionnaire, standard tests of performance, etc. and statistical and mathematical models of analysis (Scott & Usher, 1996). Again, issues of knowledge, skills and attitudes of the respondents will be measured on a Likert-type scale questionnaire designed specifically for the proposed study. Only those questions that are approved by the supervisors of the thesis have been included in the survey instrument.

Limitations of the Study

A limitation identifies potential weaknesses of the study. In other words, they are those elements over which the investigator has no control. These weaknesses may be related to issues such as threats to internal validity (that may be impossible to avoid or minimise); analytical procedures, instrumentation and the sample (Pajares, 2007). The major limitations that the study might face may stem from the case study orientation of the study. The bases of the study's orientation include the following:

Firstly, data collection is based mainly on semi-structured interview schedules, structured observation guide, document checklist and Likert-type Scale questionnaire - these instruments are limited by their reliability and validity. Secondly, purposive sampling will be utilised to select the units of analysis, that is, the three geography departments, the key informants (i.e. the HODs), academic staff, support staff, students, graduate employees and employers— the study will therefore be limited by how well the participants represent the population.

Thirdly, the population from which the sample will be drawn is limited as it shall exclude some groups of people (as discussed in the delimitations). It

would have been necessary to cover a wider section of the staff and students of geography departments in other public and private universities in order to come up with more valid and accurate assessment of the problem at hand.

Fourthly, in view of the above, the study's major limitation will be that the findings cannot be greatly over-generalised but should be viewed as being specific to the population. Lastly, the results of the study will be limited by the honesty of the participants or their nonbiased participation (i.e. not changing their behaviour because they know they are participating in a study). Again, the results of the study will be limited by the analytical techniques selected which must be appropriate to address the research questions.

Assumptions of the Study

Some assumptions were put in place to assist in responding to the research questions. These assumptions are a result of common issues that found within geography departments, namely:

Geography departments in Ghanaian public universities play a major role in the provision of human capital for the country. It is generally assumed that geography departments can give off their best when the right incentives (by way of capacity building) are put in place. In other words, a poorly resourced geography department will not adequately provide the enabling environment for tapping the full potentials of its students for national development.

It is also generally assumed that an ill-equipped and under-capacity geography department could prevent or frustrate qualified staff and students and by extension, the general public from patronising its services of teaching, research and extension. Further, it was assumed that capacity needs exist in both the human and capital resources of geography departments in public universities in Ghana and that, there are specific factors which account for the gap between the current and intended capacity needs of those departments. In that regard, it is to be noted that churning out of good final results of graduating students does not mean the absence of capacity needs (deficiencies) in those departments as there exists a level of perception of capacity deficiencies among the staff and students in these departments.

This study further assumed that the main research instruments to be used (interview schedules, observation guide and Likert-type scale questionnaire) are easy to understand, valid and reliable and that the respondents in this study will be honest in providing accurate responses. To ensure clarity, the instruments were subjected to discussion with thesis supervisors and reviewed after a pilot testing exercise.

It was further assumed that the respondents had nothing to lose by expressing their views truthfully as the identity of each individual respondent was to be kept confidential. It was also assumed that the methodology was appropriate to the research problem and the purpose of the study and that the results of the study would be meaningful and relevant to the stakeholders. Finally, it was assumed that the theoretical framework to be used was an accurate reflection of the phenomena being studied and therefore the results of the study will be limited by the accuracy of the theoretical framework.

Operational definition of Terms

1. Capacity: It is the ability of individuals, institutions and society to perform and adapt functions, solve problems, set and achieve objectives in a sustainable manner or the ability of individuals and

- organizational units to perform functions effectively, efficiently and sustainably.
- 2. Capacity Assessment: It is a measure of actual and potential of individual, group or community resources that can be inherent and/or brought to bear for geography education maintenance and enhancement. From the perspective of the individual, capacity can be measured in terms of assets. At the group or community level, it can be considered as unique histories, culture, structures, personalities, politics and systems all brought together for geography education enhancement.
- 3. Employability: It is the capability of individuals to gain initial employment, maintain employment and obtain new employment if required (Hillage & Pollard, 1998).
- 4. Skills: They are specialized abilities that come from one's knowledge, aptitudes and experiences (Jones, 1992). Lees (2002) has also defined skills as capabilities, competencies or attributes or learning outcomes that enable one to perform a task or function well.
- 5. Employability Skills: They are a set of skills such as i) intellectual skills, ii) generic/transferable skills, iii) personal attributes and iv) knowledge about organizations and how they work, that an individual possesses to enable him/her gain and maintain a job (Coopers & Lybrand, 1998).
- 6. Geography Department: It is a unit within a faculty/school or college in the university mandated for the development, organization and dissemination of knowledge and understanding, skills and attitudes in

- geography (i.e. geography education). Such departments run various programmes at the undergraduate, masters' and doctoral levels of university education.
- 7. Academic Staff: They are the lecturers or senior members who are responsible for the education and training of students admitted into the university.
- 8. Non-academic Staff: They are those personnel at the Geography departments responsible for administrative and auxiliary functions and the operation of equipment and the maintenance of geography laboratories and resource rooms.
- 9. Undergraduate degree programmes: They are all those programmes of study designed to provide students with intermediate academic and/ or professional knowledge, skills and competencies, leading to a first degree or equivalent qualification. Programmes at this level are typically theoretically-based, but may include practical components and are informed by the state of art research and/ or best professional practice (UIS, 2011). The UNESCO Institute for Statistics (UIS) refers to undergraduate programmes as Level 6 programmes.
- 10. Undergraduate students: They are a group of students reading for their first degree programme at the Geography departments.
- 11. Geography Education: It is concerned with all those activities involved in the production and dissemination of knowledge and understanding, skills, attitudes and values in geography (Ababio, 2007).

12. Curriculum: It is a programme or course of study deliberately organized by a school system for the realization of educational aims and objectives of the society.

Organization of the Study

This thesis is a qualitative-quantitative study on how the capacities of Geography Departments influence skill development training of students in three Ghanaian Public Universities. The thesis is organised into nine chapters.

Chapter 1 contains the background to the study, statement of the problem, description of the purpose, research questions and significance of the study. The rest of the chapter describes the assumptions, delimitations and limitations of the study. Chapter 2 contains a review of related literature concerning an assessment of how some capacity dimensions of geography departments influence employability skills development of students. Appropriate development theories, models and research studies are summarized and critically analysed in chapter 3. Chapter 4 contains the methodology for the study, including rationale for the research design and strategy, the selection of the sample and sampling procedures, an outline of data collection and analysis procedures and some ethical issues.

Chapter 5 focuses on the role of geography developments' capacity in student employability skills development. In Chapter 6, the role of the geography curricula in engendering student employability skills development is discussed. Chapter 7 discusses actions by geography departments to improve student employability skills development.

Chapter 8 discusses challenges impeding student employability skills development in geography departments. Finally, Chapter 9 focuses on the

summary of the study, conclusions, recommendations for the study, and suggestions for further research.

Chapter Summary

The chapter is the introductory aspect of the study. It introduced the reader to the main chapters of the study. In all, there are nine chapters in the thesis spanning over 300 pages. Discussions in each chapter were based on the main ideas in the chapter title. For example, Chapter 1 introduced the reader to themes such as statement of the problem, objectives of the study through to the organisation of the study, which outlined the purpose of each of the nine chapters in the study. The next chapter is a discussion on literature related to the research problem.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Introduction

The focus of this chapter is the examination of literature related to the theme evaluating capacity of geography departments for student employability skills development in three public universities in Ghana. The review takes into consideration the main themes related to the research topic.

Placing Geography Education within Dimensions of Development

Due to the multi-dimensional nature of development as a concept, stakeholders such as development practitioners, international organisations, policy advisors and analysts, researchers and academics have defined and outlined the various dimensions of development from different perspectives. It is in this light, that this section attempts to place geography within the dimensions of development. This section first begins with the four dimensions of development as espoused by Bellu (2011) and one other type of development by Robbins and DeCenzo (1998). In the ensuing discussions, the study shows the relevance of geography education and training to development.

Bellu has classified development as economic development, human development, sustainable development and territorial development though he claims his list is not exhaustive. Robbins and DeCenzo (1998) also add that there is another form of development called national development.

Economic development

Economic development is the process whereby natural endowments, goods and services are utilised by a system to generate new goods and services, with the aim to provide value-added consumption and investment opportunities to the members of that system (Bellu, 2011). Traditionally, this type of development has been regarded as the pioneer among all types of development, and has often been identified with the concept of economic growth. This dimension of development limits development to the structural transformation of an economic system, instead of improvement of the various segments of the system such as the social, cultural, institutional, economic and political. Economic indicators such as the Gross Domestic Product (GDP), Gross National Product (GNP), Per Capita Income and Real Per Capita Income measure this type of development (Acheampong, 2006). Those who have contributed in popularising this type of development include Shumpeter (1911), Solow (1956) and Romer (1986) all cited in Bellu (2011).

Geography's main contribution to economic development is in a branch of geography called development geography. Development geography highlights economic development issues such as interpreting and evaluating the spatial patterns of the modernisation process. For this reason, modernisation theories that originated from development studies are called 'geographical theories of development' (Lambert & Morgan, 2011).

Again, geography has contributed to a better understanding of economic development issues by describing, analysing and interpreting the spatial aspects of economic activities. For instance, Lambert and Morgan (2011) have posited that geography has given Rostow's model of economic

growth a further boost as the discipline explains how the rate of economic development differed spatially between the more developed countries (MDCs) and the less developed countries (LDCs) and within nations (i.e. the notion of growth and backward regions). One reason adduced for the development gap between the MDCs and the LDCs is the unbalanced terms of trade across the globe (a spatial dimension of development).

Furthermore, geography's contribution to economic development is in the role played by some geography-trained professionals such as agricultural, transportation and tourism planners; location and real estate analysts, and waste management specialists. These professionals help formulate policies, analyse and evaluate the impact that economic activities such as agriculture, transportation, tourism, real estate development and waste management are likely to have on local economies (Association of American Geographers, 2009).

Lastly, development and economic geography define how space in its various manifestations (e.g. distance, separation, proximity, location, place, etc.) dictates the form and shape of economic indicators of development such as export and import trade, transport networks, agricultural systems, industrial conglomerates, etc. In other words, these two subsets of human geography aid in our understanding of the spatial organisation of the above-mentioned economic indicators of development (Benke & Scot, cited in Morgan, 2012).

The above assertions by Lambert and Morgan (2011), the Association of American Geography (2009) and Benke and Scot (2012), show that geography contributes to an understanding of economic development. An analysis of their views show that geography's role in economic development

lies in its focus on the nature and scale of the spatial organisations of economic activities that bring about economic development. Another inference is that geography's interest in economic development is in how the nature, quantity and quality of space determine the scale of economic activities that takes place within those spaces. In other words, spatial indicators such as place, location, distance and proximity determine the types, quality and density of economic activities in an area, which in turn affects that area's level of economic development.

Human development

It is a people-centred development focusing on improvements in the various aspects of human life (e.g. capabilities, entitlements, empowerments, education, health and nutrition, etc.), particularly the general wellbeing of individuals and their relationship with society. Under this concept of development, knowledge serves as a means of empowering people, thus enhancing their self-reliance, leading to a general improvement in community and social relations (Bellu, 2011). In recognising the importance of human development, Schultz (1981) has argued that investment in population quality and in knowledge, in large part determines the future of humankind. He surmised that, the decisive factors of production in improving the welfare of a people are not space, energy, cropland, but rather the improvement in population quality and advances in knowledge. Other key contributors to the popularity of this type of development are the UNDP (2010) and Amartya Sen (1999). The former considers the concept of human development on the basis of three criteria: (i) long and healthy life, (ii) knowledge development and (iii) a decent standard of living. The latter has written a popular book titled

Development as Freedom. In this book, Amartya Sen describes development as freedom from poverty, tyranny, social deprivation, lack of economic opportunities and the machinery of repression.

Geography's contributions to issues of human development are many and varied. The German Geographical Society (2012) has outlined some of these contributions. They include training individuals in certain skill areas such as

- (i) subject specific knowledge on issues affecting the environment, society and the economies of particular regions;
- (ii) giving spatial orientations (e.g. the ability to read and interpret maps, gather information using the scientific method), acquiring GIS skills, etc.;
- (iii) acquiring communication skills such as oral, written and graphical;
- (iv) training people in how to evaluate spatial interactions and in how to take action on decisions arrived at.

Talbot (2000) has highlighted geography's contribution to human development. To him, training in geography equips the individual with the following employability skills:

(i) Communication skills: Written skills are developed by students through activities such as notes-taking; writing essays, assignments and project work. Oral skills are also acquired through discussions and class presentations. Technological skills are developed through the gathering of information, use of information technology media in individual study;

- (ii) Teamwork skills: One major way by which this skill is acquired by students is field work, where students are allowed to work on either teacher-directed themes (field teaching) or student-initiated themes (field investigation) in proximal or distal places. Another means of developing teamwork skills in geography is through small group work or group assignments;
- (iii) Problem-solving: This type of skills is honed when students are enabled to use their powers of reasoning to test out hypotheses, explain spatial patterns and take actions on issues that they have tackled. Activities that lend themselves to the development of problem-solving skills are normally inquiry-based such as field work and case study;
- (iv) Decision-making: This demands that students choose the most appropriate step or measure in addressing a problem, out of many plausible options. In developing such a skill, geography exposes students to the analysis of problems and then deciding the course of action which is the most appropriate;
- (v) Powers of analysis: Geographical issues which help students to develop this skill include, tasking them to explain, analyse, breakdown, examine, relate, compare, measure, experiment, plot, etc. (Bloom, Engelhart, Furst, Hill & Krathwohl, 1956) the constituent parts and functions of a process or concept such as marine erosion, climate change, deforestation or sustainable development;

- (vi) Flexibility: The study of geography predisposes the student to a variety of subjects, materials and spatial scales. It therefore, behoves geography graduates to possess this skill in order to function appropriately in any business or work environment;
- (vii) Self-management: Geography enables its students to develop self-management skills from the variety of tasks or assignments assigned to students. Students learn to manage themselves, in for example activities such as project work or case as they have to plan, collect data, interpret the data and write-up their assignment within a specified timeline.

A close observation of the views of Schultz (1981), Talbot (1981) and the German Geographical Association (2012) on human development shows that development without any quality human capital input is no development. The three authors were unanimous on one issue – that education empowers people to put to judicious use the knowledge and skills that they have acquired to exploit other factors of production such as space, energy and land. That without the appropriate technical and transferable skills, there will be very little development, no matter the amount of natural resources a people may have. This is the reason why geography students are trained in these skills.

Sustainable development

It is a type of development that considers the long-term perspectives of the socio-economic system when measures are provided to ensure that short-term activities or events in the system do not compromise the long term or development potential of the system (Bellu, 2011). The sustainability of the development is often viewed from three contexts, namely environmental

(ecological), social and economic contexts. The 1987 Bruntland Commission Report described sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (UNESCO, 2012:1). In ensuring environmental sustainability, this concept of development emphasises good agricultural practices based on effective waste management and recycling, wastewater treatment, use of renewable energy sources such as biomass and solar panels, reduced use of energy, pesticides and chemicals (Bellu, 2011).

The sustainable development paradigm is a major change from the previous paradigm of economic development, with its attendant damaging social and environmental consequences (UNESCO, 2012). A key proponent of this type of development is the United Nations (UN), which on 25thSeptember 2015 initiated a 17-goal agenda on sustainable development to be prosecuted over a 15-year period (i.e. 2015 to 2030). The Sustainable Development Goals, also called Global Goals, are described by the UN Resident Coordinator in Ghana, Ms Christine Evans-Klock as "being transformative and purposeful, aimed to improve lives now and for generations to come" (www.unghana.org/site/index.php).

Geography promotes sustainable development in several ways. First, students are trained to examine how physical and human features interact over space and to evaluate the outcomes of such interactions (e.g. land-use in various regions, urban climates, provision of drinking water, regulation of rivers and flooding, etc.). Such competencies are a key store of education for sustainable development (German Geographical Society, 2012).

Another way by which geography contributes to the understanding of sustainable development issues is its major focus on the earth's environment and its resources. In view of the limited and finite nature of resources, geography trains students to acquire various skills that call for the efficient and lasting use of the available resources in the environment (Aikins, 2014). Aikins further asserts that the relationship between geography and sustainable development is four-fold – economical, ecological (environmental), political and cultural. Firstly, the type and quantity of resources needed for development in any community depends on the economic aspirations and needs of that community. Secondly, the types, quantity and quality of resources in any community, are determined by the ecological setting and sensitivity of that community. Thirdly, the political will of the ruling political class and government policies or local by-laws on the use of natural resources, determine the limits for the exploitation of those resources. Lastly, the rules, regulations, taboos, and the aspirations of the local community also set limits on the extent to which the resources are utilised. In other words, the culture of the people largely determines how much resources are needed within a given time period.

Aikin's (2014) and the German Geographical Society (2012) both agree on the contribution that geography makes to the understanding of sustainable development. From their assertions, it can be inferred that

- (i) geography is interested in the spatial outcomes of the interaction between cultural and natural features across the globe;
- (ii) geography is interested in the efficient and long lasting use of available resources for the survival of people; and

(iii) geography's concern for sustainable development is expressed by how economic, social/political and ecological/environmental factors, influence the exploitation of available resources.

Territorial development

This is a spatial type of development, which focuses on the development of a specific region or space, through the exploitation of the region's socio-economic, environmental and institutional potential and its external relationships (Bellu, 2011). Developments in territorial systems are subject to varying degrees of influence from national and supra-national entities and from their interrelationships with other territorial systems. Regions where this type of development is emphasised, often come out with policies on its territorial assets, potentials and constraints (FAO, 2005 as cited in Bellu, 2011). Some of the territorial assets include the conservation and utilization of natural resources, land, water and minerals. A country's security system (land, air & water), political system and traditions are all part of territorial development (Chapagain, 2004).

Geography's contribution to the understanding of territorial development is in regional geography. Regional geography helps one to understand how both natural and cultural features in a particular territory or region integrate to give that territory its unique identity. Out of such interaction, natural landscapes turn into cultural landscapes such as urban climates, botanical gardens (with exotic plants), human-made lakes, etc. Again, regional geography enables students to study selected regions or territories from a geographical or geo-scientific perspective. Students are able to analyse structures, functions and processes in these areas, and per their

training, are able to recognise the similarities and differences among areas.

Lastly, knowledge of the interaction among the factors and processes taking place within and between regions/territories also enables students to predict the future territorial development of those regions. Thus, regional geography helps students to develop the skill to evaluate the expected consequences of human interventions in the environment and to act accordingly (German Geographical Society, 2012).

Geography by its nature, deals with the spatial characteristics and attributes of places. A country's territory includes its land area, water bodies (both inland and offshore), and its airspace. Geography-trained professionals such as weather/climate specialists (e.g. climatologists, meteorologists, etc.), water resource specialists/planners, hydrologists, etc. study the distribution and changes in the quantity and quality of these resources at specific locations and across regions with the remit of protecting and managing them for territorial development (AAG, 2009).

Geography's contribution to territorial development has been explained by both from the view point of the AAG's (2009) and the GGS's (2012). A synthesis of their views shows that (i) geography describes the uniqueness of particular territories/regions due to the interaction between cultural and natural features — this gives such a region its identity exemplified by either a combination of natural and cultural features, or by the presence of only one of them in that particular region;

(ii) geography's interest is in the characteristics and attributes of places, and for this reason, geographers are trained to study the distribution and changes in the quantity and quality of resources (both natural and human) in those places, with the aim of protecting and managing them;

(iii) geography trains students and geographers to develop competencies that would enable them to identify, analyse, evaluate, predict and take actions on spatial activities, involving human and natural agencies.

National development

This type of development focuses on the ability of a nation to improve the social wellbeing of its people, through the provision of social amenities such as quality and relevant education, efficient health delivery system, good transport system, potable water and sanitation systems, etc. (Robbins & DeCenzo, 1998). National development encompasses all facets of national life – natural, physical and human resources. It is much broader than economic growth, as its major goal is to ensure that economic growth brings about positive changes in the welfare of the people. Psacharopoulos and Woodhall (1997) describe national development as both qualitative and quantitative in nature. Some of the factors for national development are, equal distribution of income and capital, equal share of profit from economic activities, equal living standards for all; equitable access to education, health facilities and housing; and the preservation of the environment (Fagerlind & Saha, 1997).

In national development, geography helps citizens to learn about responsible behaviour and actions that they have to take towards other people and their environment. To promote national development, geography enables people to choose where to go for a holiday and the best ways to use their leisure time to be of benefit to their communities and environment (Gerber, undated). Gerber further asserts that geography trains students to develop

communal virtues, by learning how to be involved in the life and concern of their neighbourhood and community. The study of geography equips students with the knowledge of institutions, issues, problems and practices of democracy, thus ensuring social and political cohesion.

Geography education again trains students to acquire:

- (i) Knowledge and understanding in human rules, the democratic process, human rights, the economy, sustainable development, and grasp the understanding of concepts such as justice, equality, freedom and authority;
- (ii) Skills and attitudes such as critical thinking, analysis of information, expressing opinions, negotiating, conflict resolution and participating in community action; and
- (iii) Values and dispositions such as respect for justice, democracy and the rule of law, openness, tolerance, courage to defend a point of view, teamwork, interest in the surroundings, care for the quality and planning of the environment, care for the life of future generations; readiness for responsible use of knowledge, skills in personal, professional and public life (Kolnik, 2012).

A synthesis of the views of Gerber (2009) and Kolnik (2012) reveals that geography indeed contributes to the development of all the three facets of national development – natural, physical and human. A summary of their views is as follows:

(i) geography helps people to make informed decisions in order to respond appropriately towards the use of both human and natural resources;

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(i) geography helps people to make informed decisions in order to respond appropriately towards the use of both human and natural resources;

- (ii) geography promotes national unity and social cohesion through its citizen education themes such as democratic and civil rights and duties; and
- (iii) geography equips students with both technical and generic skills to enable them manage and care for the environment through their private, vocational and public lives.

Making Tertiary Education relevant to Africa's Development

Tertiary education as defined by the Committee on Review of Education Reforms in Ghana (CRERG) (2002) is the "education offered at the tertiary level at the university, polytechnic, specialized institutions, Open university and any other institution offering training leading to the award of diploma and degree qualifications" (p. 111). In illuminating this definition, the UNESCO Institute for Statistics (2011) adds that tertiary education builds on secondary education, by the provision of learning activities in specialized fields of education. Its main remit is academic education, but also includes advanced vocational or professional education. In view of the current knowledge-based economies due to globalization, tertiary education has a key role to play in the creation, dissemination and application of knowledge, production of human capital, as well as the development of skills and knowledge to meet developmental needs (CRERG, 2002).

The relevance of tertiary education to development has two dimensions, namely quality dimension, that is, the match between aggregate supply and demand of tertiary education graduates; and the quality dimension, that is, the match between the supply and demand of particular skills and attributes of tertiary education graduates (Boateng & Ofori-Sarpong, 2003). In this study,

the focus is however, on the quality dimension, that is, the labour market relevance of tertiary education.

The need to enhance the relevance of tertiary education to the socioeconomic development of African countries has been made timely by studies
conducted in some Ghanaian state institutions whose findings also serve as
reference points for some policy statements. These policies and institutions
unanimously conclude that the various forms of training offered by tertiary
institutions in Ghana are not relevant to the needs of the labour market (Min.
of Manpower, Youth & Employment, 2009; Min. of Education, 2011). The
reasons for these conclusions are that Ghana's education system continues to
produce unskilled, semi-skilled and unemployable graduates coupled with a
relatively slow-growing labour market. Additionally, is the issue of mismatch
between the supply of graduates and the needs of the world of work that are
not being met due to lack of skills (Min. of Education, 2011).

Similarly, some studies have shown that there is some evidence of a mismatch between education qualification of university graduates and the needs of the labour market in Ghana (Boateng & Ofori-Sarpong, 2002; Gandwe & Walenkamp, 2011). These studies conclude that whilst a few training programmes at the higher education institutions are relevant as regards skill demands of the world of work, majority of the programmes run by the tertiary education institutions are not relevant. In apparent support of this assertion, Mohammedbhai (2008) links the origin of the graduate unemployment situation in Africa to the irrelevant courses read by those graduates. He adds that what has made the unemployment situation more daunting is the relative high enrolment in the arts and humanities where

employment opportunities are rather few. Paradoxically, science an technology programmes that have a higher chance of offering job opportunities to graduates rather have fewer students pursuing such programmes.

On the nature of university courses read by students, Adu and Orivel (2006) have also posited that the increase in the enrolments of the arts and humanity programmes is not the result of employment needs but rather students find such programmes more apt to their capabilities and aptitudes. The non-functional type of higher education students are exposed to has been described by Obanyi as "education for the world of no work" (as cited in Mohammedbhai, 2008: 13). Again, the apparent mismatch between the nature of university education offered and labour market needs is been worsened by the downward trend in the economies of some African countries where new graduates take a much longer time in getting their first jobs after graduation (Mohammedbhai, 2008). In other words, the proportion of graduates who find employment after school is increasingly dwindling. From the foregoing discussions, the question now is how should higher education institutions in Africa function in order to make them relevant to the socio-economic development of their respective countries? The ensuing subsection will address this issue.

Relevance of tertiary education to Africa's development

By the remit given to higher education institutions, they are to prepare students for more specialized study at the end of which students qualify for professional activity or employment (Ogundele, 2011). Traditionally, higher education institutions have played two important roles in the development of

any country. These are (i) to foster critical thinking skills and prepare students for indeterminate vocational tasks, and contribute to innovation (UNESCO, 1998), and (ii) to prepare students to be able to call to question the prevailing rules and tools in the world of work (Teicher, 1991; Nowotny, 1995). However, the popular stance of many development practitioners, probably emanating from current global socio-economic trends has made it imperative for higher education institutions not to limit their educational role to the transmission of knowledge, but rather to opt for a more holistic approach to education (UNESCO, 1998).

Developmentally, higher education institutions have the mandate to equip people with advanced knowledge and skills required for positions of responsibility in government and other spheres of the economy. Their research outcomes can serve as channels for the transfer, adaptation and dissemination of knowledge. The academia can support government and development stakeholders with advice and consultancy services (Mohammedbhai, 2008). Mohammedbhai adds that in most countries, higher education institutions contribute to increases in labour productivity and to higher long-term economic growth, which are necessary for poverty alleviation.

For higher education institutions to contribute their quota to the development of their countries they must first ensure that their enrolment patterns and curricula reflect national and local skill requirements. The focus of enrolment must also be tilted more towards science and technology. In this vein, higher education can help address unemployment issues by monitoring labour market outcomes of their graduates, including the supply and demand of various skills. This will put them in the best position to run relevant courses

of study and make evidence-based decisions on curriculum changes (World Bank, 1994).

The World Bank adds that one other way African higher education institutions can become more development-oriented is to promote the development of more professional programmes as determined by the requirements of the world of work. These programmes can help the institutions to respond to fast changing needs of countries for different variety of skills (World Bank, 1994). Such professional programmes aim to develop a range of competencies and attributes that enable the graduate to not only cope with any job that he or she gets, but also transform his/her organization (Bowers-Brown & Harvey, 2004). To Bowers-Brown and Harvey, employers want graduates who show the ability to learn and use their knowledge, skills and abilities to anticipate and lead change and help transform their organizations. In summation, the acquisition of skills through professional education helps graduates to be self-reliant which aids their prospective employers to survive and prosper during harsh economic upheavals.

Another reason why African higher education should be more functionally relevant, that is, aligning the role of higher institutions to the socio-economic needs of their countries and the dynamic nature of the labour market, is to promote inter-organisational linkages between them and the world of work. Such linkages can take several forms including

- (a) being actively involved in the design of new curricula;
- (b) monitoring the management of higher education institutions;
- (c) organizing student internship placements;

- (d) arranging for professionals from the world of work to be seconded to higher education institutions; and
- (e) providing avenues for the staff of higher education institutions to have industrial experience (World Bank, 1994).

In addition to the above, Boateng and Ofori-Sarpong (2002) also suggest the need for the funding of research activities or donation to specific funds and programmes by corporate entities, and the representation of employers and corporate professionals on the boards and committees of tertiary education institutions. The World Bank has added that all these types of arrangement are prevalent in the newly industrialized countries of South East Asia, where the help of industrialists and corporate professionals is sought formally and informally, on curricula design in higher education and in the research and development direction that could best cater for the needs of industry.

To ensure a steady socio-economic development of African countries, higher education institutions must prioritize the development of employability-based programmes that will provide graduates with the opportunity to develop skills, abilities, knowledge and understanding, and the working habit for useful productive ventures (Ogundele, 2011). Employability education can serve as a means of preparing graduates for productive and satisfactory careers for socio-economic development (Owotunde, 2000). Ogundele summed his assertions by stating that working class graduates contribute to socio-economic development by using their critical thinking skills, reflective abilities and life-long learning skills to come out with innovations to enhance the technological development of their countries (Ogundele, 2011).

In summary, this section has discussed at length, how African tertiary education institutions can make themselves relevant to the development of Africa. To ensure relevance, African tertiary education institutions need to be clear on their development agenda and work assiduously towards their realisation. In the end, these institutions will not only be assessed by their intellectual discourses, laboratory and greenhouse experiments, or their cutting edge research, but also how they use such achievements to create a better society for the people of Africa (Mosha, 1986). The next section discusses how learning outcomes in higher education can be made relevant to national development.

Learning Outcomes in Higher Education

It is widely believed that Ghana must improve the skills level of her workforce if she is to compete successfully in the current global economy. Moreover, as university tuition fees and enrolments continue to grow, stakeholders in tertiary education (governments, employers, parents, and students) are increasingly becoming more interested in not only how public universities operate, but also the quality and relevance of the learning outcomes that students acquire after successfully going through their courses of study. Widespread dissatisfaction with rising unemployment and underemployment amongst university graduates has recently led to a vigorous public debate on the relevance of university education and training to national development. There is the general contention that, it is not enough for policy makers and governments to focus on the educational quality of university graduates, per their paper qualifications. Stakeholders would like to know the training regimen by which university students earn their degree certificates,

and how well they are trained for the world of work. This now calls for the searchlight to be focused on the concept of learning outcomes in education and training. This is because, learning outcomes account for the essential knowledge and skills that education and training develops in students. The rest of this section is devoted to a discussion of the meanings of learning outcomes, the dimensions of learning outcomes, with their associated assessment methodologies and the importance of learning outcomes in the training of students.

Definition of learning outcomes

The UNESCO-UIS (2011:81) has defined learning outcomes as "the totality of information, knowledge, understanding, attitudes, values, skills, competencies or behaviours an individual is expected to master upon the successful completion of an education programme". Similarly, the World Bank Group (2013) also defines learning outcomes as the particular knowledge, skills or behaviours that students are expected to exhibit after a period of study. Ewell (1983 cited in Lubinescu, Ratcliff & Gaffney, 2001) further asserts students' learning outcomes to be any changes or consequences resulting from their enrolment in a particular educational institution and involvement in its programmes. Nusche (2008) refers to learning outcomes as the personal changes or benefits that follow due to learning. Allan (1996 cited in Nusche, 2008), on the other hand, describes learning outcomes to be what the student actually achieves, as opposed to what the institution intends to teach.

From the afore-mentioned definitions on learning outcomes, this study can surmise that learning outcomes are educational experiences that inure to the benefit of students or learners after going through a programme of study. However, from a critical scrutiny of the above definitions, especially those of Ewell (1983) and Alan (1996), this study can infer that learning outcomes are not just the intended competencies that students are to acquire in educational institutions, but their actual attainment of those competencies, which can be observed, demonstrated and measured (Melton, 1996 as cited in Nushe, 2008). It follows, therefore that, for students to attain the requisite learning outcomes, their educational institutions must create and sustain a learning environment that would engender the effective acquisition of those learning outcomes.

Dimensions of learning outcomes and their assessment formats

"There are students with excellent academic records, but those who can truly make the difference, are those who learn how to rely on themselves to solve problems, to handle pressure and additionally, to meet their deadlines" (Orinos, 2012:53). The implication of the above quotation is that there are two major classifications or typologies of learning outcomes. These are the cognitive outcomes and the non-cognitive outcomes (Nusche, 2008). However, other scholars have their own typologies of learning outcomes. For instance, Hatfield (2001) has noted three dimensions of learning outcomes – cognitive, behavioural and affective. The University of California, Los Angeles (UCLA) (2009) has classified learning outcomes into four general dimensions: knowledge outcomes, skills outcomes, attitudes and values outcomes and behavioural outcomes. Nonetheless, it is the contention of this study that the classifications by Hatfield and the UCLA can conveniently be subsumed within the two broad classes provided by Nusche.

Cognitive learning outcomes

There are various classifications of cognitive learning outcomes, including popular ones such as knowledge, skill or behavioural and attitudes and values outcomes (Gagne, 1977; Kolb, 1981; and Eraut 1990; all cited in Nusche, 2008). The thrust of this subsection is a discussion on the distinction between knowledge and skills outcomes.

Knowledge outcomes are classified as general content knowledge and subject-specific knowledge (Nusche, 2008). The former refers to knowledge of certain core curricula or programmes that are essential and for that matter, compulsory for all students at a particular level of education. For instance, the American Association of Colleges and Universities (AAC-U) (2002) has stipulated that all undergraduate students should acquire a body of essential content knowledge across courses, programmes and institutions. These general content knowledge outcomes may include issues such as biodiversity, sustainable development, climate change, global warming, public policy, globalisation, citizenship, social networks, current events and challenges, etc.

As part of a programme of assessing the educational quality of higher education institutions, using general content knowledge as part of the assessment package will be a useful way of comparing how different institutions promote certain "common" learning contents in a particular system of higher education. Assessment methods used in measuring general content knowledge include direct measures such as tests (pre- and post-test), examinations, projects and oral examinations (Lopez, 1996 as cited in Hatfield, 2001). A typical example of a current general content knowledge assessment practice is the Brazilian ENADE examinations, which assesses not

only domain-specific learning outcomes, but also general content knowledge and skills outcomes (Nusche, 2008).

Subject-specific knowledge outcomes involve the learning of the knowledge of a particular discipline, for example geography. It includes key concepts, theories, applications, basic principles of inquiry, a broad history, etc. (Hatfield, 2001; UCLA, 2009). The importance of such a learning outcome lies in the remit given to higher education institutions to train students in their major fields of specialisation. For example in geography, students can decide to specialise in human geography or physical geography by reading for the B.A. or B.Sc. honours degree programmes respectively. Direct assessment instruments often used to measure subject-specific knowledge outcomes are tests and examinations. In Ghana, almost all the assessment frameworks of the tertiary education institutions are based on the Grade Point Average (GPA) as a way of assessing whether a student is failing or passing. However, individual institutions have their own way of calculating GPAs, because of their individualised marking scheme. For example, a mark of 80 and above which is an A at an institution (e.g. University of Cape Coast), but may be an A+ in another institution (World Bank, 2010). Furthermore in Brazil, the Exame National de Cursos (ENC) test is used to assess domain-specific knowledge and skills in 26 subject areas that are considered essential and common to all higher education institutions curricula in the specific domain (Nusche, 2008).

Skills outcomes or behavioural learning outcomes (Hatfield, 2001) involve the capacity to demonstrate a set of cognitive skills and abilities, usually within a specific domain related context. The subject-specific skills are

the thinking patterns used within broad subject fields such as the natural sciences, social sciences and the humanities. Such outcomes are stated in the form of procedural knowledge outlining the methods of enquiry, ways of evaluating evidence, and patterns of procedure needed to confront new contextual situations in a particular broad area. By virtue of the nature of subject-specific skills outcomes, students' learning is assessed when they avail themselves of new documentation taken from their fields of specialisation, and then instructing them to assess the quality of the evidence, and lastly, make use of it to write complex answers.

The generic skills outcome is another type of skills learning outcomes that transcends disciplines and is transferable between subject areas and contextual situations (Nusche, 2008). By virtue of their cross-disciplinary nature, they allow students to develop competencies in a number of contextual situations. Examples of generic skills outcomes are the ability to apply basic knowledge, to analyse and synthesise information, assess the value of information, communicate effectively, ability to collaborate (UCLA, 2009), verbal and quantitative reasoning, information processing, comprehension, critical thinking, problem-solving and evaluation of new ideas (Nusche, 2008). The specific discipline skills outcomes are often assessed by application of knowledge such as in presentations, simulation exercises, demonstrations, longitudinal designs, etc. (Hatfield, 2001).

Non-cognitive learning outcomes

They are referred to by the UCLA (2008) as attitudes and values and Hatfield (2001) as affective outcomes. Such outcomes are usually contained in the mission statements of higher education institutions, which depict the role

of such educational institutions as going beyond training of students to acquire knowledge and skills. The aim of non-cognitive or affective outcomes is to develop or change the attitudes, values and beliefs of students. It is a way of complementing the intellectual training that takes place during instructions in the classroom. The affective nature of non-cognitive outcome makes its assessment in higher education institutions more complicated than cognitive outcomes. Whilst there appears to be universally recognised procedures for assessing cognitive learning outcomes, there is however, much controversy around what should constitute the essential domain of non-cognitive outcomes.

Available empirical evidence on how affective indicators, such as values and beliefs, could be demonstrated and measured by the use of behavioural data is scant. In view of this setback, non-cognitive outcomes are not amenable to the use of direct measurements such as tests and examinations. If the aim of any educational institution is to measure non-cognitive skills such as working independently, prioritising work, managing time efficiently, knowing how to find and use resources efficiently, self-motivation, reflecting on personal development, being flexible or adaptable, being self-confident, lifelong learning, leadership, etc. (Manchester Metropolitan University, undated), then it behoves those institutions to use indirect assessment methods. Such methods include self-reports, focus groups, questionnaires and surveys, faculty and employer surveys (Hatfield, 2001; Nusche, 2008). These indirect measures are based on individual perceptions and facts. However, a more objective data on learning in this domain can be

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obtained by observing student group work and simulation exercises and regularly monitoring participation rates (Hatfield, 2001).

Importance of learning outcomes in higher education

A body of research suggests that graduate employment rates depend not merely on higher education learning outcomes, but a variety of factors such as macro socio-economic factors, students' prior learning, the subject studied, and social networks (Nusche, 2008), However, development-oriented organisations such as the World Bank and UNESCO still recognise the role of learning outcomes in developing quality human resources. It is in light of this recognition that this study supports the rationale for the inclusion of learning outcomes in higher education programmes. The World Bank (2013) contends that

- (i) In the context of international development assistance, focus on learning outcomes increases stakeholder attention programme benchmarks and results and may increase accountability based on performance;
- (ii) Though it is important for governments to be concerned about the quality of inputs in education, it is equally important for policy makers to know what students are learning in the classroom; what kind of knowledge, skills and attitudes do the education system develop? How do assessed learning outcomes reflect the stated goals and objectives of national education systems?;
- (iii) Students will need higher levels of knowledge and skills, if they are to participate meaningfully in the world of work; and

(iv) Information on learning outcomes assists countries in making informed decisions about interventions to improve education quality and help policy makers monitor trends in the nature and quality of student learning.

Additionally, the UCLA (2009) stresses the importance of learning at the institutional level. They recognise among other issues, current developments where learning outcomes are part of higher education programmes for a variety of reasons. These are:

- (i) Learning outcomes describe in concrete terms what programme goals mean and provide a mechanism for the academic staff to determine whether students have mastered key programme goals;
- (ii) Published student learning outcomes serve as a public relations mechanism for all stakeholders to be aware of types of programmes on offer at educational institutions;
- (iii) Learning outcomes make students to have expectations of themselves, hence they tend to focus their learning time better, and thus improve learning;
- (iv) Student learning outcomes place emphasis on the kinds of experience students must acquire, in contrast to situations where the focus is on "coverage of topics" in the curriculum;
- (v) Assessment of student learning outcomes serves as a diagnostic instrument to gauge the strengths and weaknesses of students in relationship to specific profile dimensions;
- (vi) Assessing student learning outcomes also provide instructors with information for programme enrichment or improvement (p. 9).

From the discussions on the definitions, dimensions of learning outcomes, associated assessment methodologies and the importance of learning outcomes, it is very clear that learning outcomes are integral to any academic programme or curriculum for the following reasons:

- (i) Firstly, learning outcomes by way of the school curriculum, serve as a vehicle through which educational or programme goals are transmitted to students at the classroom level;
- (ii) Secondly, learning outcomes define the major purpose of education and training whether it should be economic, educational or social;
- (iii) Learning outcomes make it imperative for countries to not only focus on the enrolments and inputs into tertiary institutions, but also about the quality of the learning outcomes in these institution; and
- (iv) Research literature shows evidence of the causal relationship between learning outcomes and economic growth (Becker, 1964; Lee, 2004; Leewen & van Praag, 2002, all cited in Aguinis & Kraiger, 2009). It therefore behoves Third World countries to expend their resources and efforts on the training of students in quality learning outcomes

History, Aims and Content of Undergraduate Degree Programmes in Geography

Geography is an integrative scientific discipline that serves as a bridge linking the social sciences, natural sciences and the humanities. It aims to study the location, distribution and interactions between natural and

physical phenomena, and the spatial patterns that they form over the earth's surface. The integrative nature of the subject makes geography occupy a very important position in our social world, since the resolving of social problems calls for a discipline that can provide an understanding of the interdependence between the cultural and natural environments. The reconciliatory role of geography in matters bordering on human-environment interactions can be linked to the history of the discipline which is basically the history of interactions between nature and society, or society and nature (Sala, 2009).

Development of geography as an academic discipline

The development of geography as a discipline is often grouped into four different eras (NIOS, 1989). These are the ancient, pre-modern, modern and recent periods. In the ancient period, specifically in the third century B. C., a Greek scholar, Erastosthenese (276 – 194 BC), is reputed to have first coined the term, geography from two Greek words, geo (earth) and graphos(description), meaning description of the earth. Geography, in this era was in the main descriptive as records show that the interest of Greek scholars such as Hower, Herodotus, Thales, Aristotle and Erastosthenese was in exploring geography as both an art and a science, through different approaches such as cartography, philosophy, literature and mathematics (Baker, 1963). In fact, the form of geography practised by the ancient Greeks was more than mere map making and cartography; they were also interested in learning about the spatial nature of human and physical features found on the earth's surface (Pidwirny, 2006). Before the end of the ancient period, the Greeks had been joined by the Romans, whose interest in geography was more of utilitarian as Roman military commanders and administrators used their geographical

knowledge to guide the expansion of the then Roman Empire (Pidwirny, 2006).

The pre-modern era begun from the middle of the 15th century and ended around the 18th century. This was the period when numerous journeys of geographical explorations were commissioned by European nation states. These voyages, in spite of their pecuniary motivations, added significant contributions to geographic knowledge. Some of the important explorers were Christopher Columbus, Vasco da Gama, Sir Francis Drake, Fesdinend, Meghellan and Thomas Cook. The early 17th century and 18th century witnessed the beginnings of a new scientific geography, with geographers such as Berhadus Varenius(1622 - 1650), Immanuel Kant (1724 - 1804) and Alexander Von Humboldt (1769 - 1859), blazing the trail (Pidwirny, 2006). The systematisation of geography was begun by Varenius in the 17th century, but the full development of geography as a modern discipline is attributed to Alexander von Humboldt and Carl Ritter (1779 - 1859) in the 18th century. Humboldt provided the basis for physical geography, while Ritter did that for human geography, thus proving the foundation for the two main branches of geography (Sala, 2009). Their contributions were mainly in the discovery of new lands, development of cartography and the development of geography as a scientific discipline.

The modern era (circa 1850 – 1940), saw a strong growth of geography in Europe and later in the United States of America (USA), resulting in the emergence of a number of geographical societies. Significant contributions to the growth of geography came from German geographers such as Alexander von Humboldt, Carl Ritter and Friedrich Ratzel. From

France came Paul Vidal de la Blanche and from the USA were Ellen Semple and Ellsworth Huntington (Sala, 2009). The latter half of the 19th century was considered to be the period of modern geography, with the German, Ratzel being credited as the first modern geographer, who built the structure of modern geography on the foundations laid down by the classical geographers (NIOS, 1989)

The last era for the growth and development of geography is *the recent period*. This is the period after the Second World War in 1945, to be precise in the 1960s. American geographer, Richard Hartshorne and other European geographers had been very instrumental in the growth of geography during this era. Hartshorne for instance, is known for his treatise on geography as a science of areal differentiation. It was during this era that geography became fully consolidated as a university discipline, particularly in Germany and France. Another significant development that took place in the second half of the 20th century was the *quantitative revolution*, a paradigm shift in the study of geography, with geography scholars focusing more on the process rather than the hitherto mere description of their objects of interest (Pidwirny, 2006).

In a related development, in 1964, William Pattison also came out with a published proposition that modern geography was now composed of four academic traditions, namely the spatial, area studies, human-land and earth science traditions. Today, the academic traditions described by Pattison are still relevant in geographical studies, and in view of the increasing human-initiated environmental problems, researchers in geography are now focusing more on issues of how humans modify the environment (Pidwirny, 2006).

Lastly, controversies generated between the different perspectives in

the 20th century (environmental determinism and possibilism, regional and general geography, quantitative and qualitative approaches), along with the rapid growth of research, have resulted in the development of many different branches of geography (Sala, 2006). Sala describes the development and growth of geographical knowledge in the 21st century as that of diversification and globalisation. Gerber (2009) corroborates Sala's assertion by suggesting that geography education in this present era should place more emphasis on skills, knowledge and values that are likely to cater for the changing job demands in the labour market.

After discussing the history of the development of geographical thought, the question is whether there is the need for the study of a subject like geography in schools – how will geography help the student to develop into a resourceful, versatile and self-confident person? The next subsection discusses the normative aims of undergraduate geography degree programmes.

Aims of honours degree programmes in geography

The discussion revolves around aims of undergraduate geography programmes as recommended by the United Kingdom (UK) Quality Assurance Agency (QAA) for Higher Education (2014) and inputs from some geography departments across the globe. The four aims of an honours degree programme in geography as prescribed by the QAA (2014) are;

- (a) Geography training should equip students in the skills of fieldwork and other forms of experiential learning;
- (b) Students should possess a substantive depth of knowledge by being trained in a specified specialised area of geography underpinned by an awareness of relevant philosophies, data collection procedures, data display,

analysis and interpretation, the roles of space, scale and time in shaping relationships, differences and change;

- (c) Students should be trained to acquire a range of academic and generic skills; and
- (d) Students should be trained to acquire personal attributes relevant to the world beyond higher education.

Per the spatial orientation of geography, fieldwork and other forms of experiential learning should form an integral part of the training of students. Fieldwork and other experiential forms of learning should be based on knowledge of and skills in the theoretical and methodological approaches that inform their conduct. In other words, these practical courses of study should be theory-based, which will illuminate students' understanding of the real world issues that they may encounter in the field (International Geographical Union, 1992). Since experiential learning contributes significantly to curiosity and enquiry about real world issues, students should be encouraged to adopt a questioning or enquiry approach in their learning. This orientation will lead them towards learning how to formulate generalisations and principles, and more importantly, apply them in appropriate contexts.

It appears some geography departments and other analogous geographical associations are abreast of this aim. For instance, in the 2013-2014 newsletter of the department of geography at the University of Newcastle in the United Kingdom, the department required students to acquire skills in fieldwork in both the UK and abroad. Fieldwork is a particular focus for the geography undergraduate programme, which integrates experiential learning (i.e. learning by doing) at every level of the programme. Students

visit both proximal and distal places such as Copenhagen, Berlin, Singapore, Hong Kong and Australia as part of their fieldwork training modules (www.ncl.ac.uk/endergraduate). Similarly, the International Geographical Union's (IGU) Commission on Geographical Education (2009) has recognised the importance of fieldwork in geography training when it included methods as field observation and mapping, and interviewing people, among others as one of the skills sets for geography education and training.

The second aim of honours degree programmes in geography is to help students develop a depth of geographical knowledge through a specialisation in any of the major divisions in geography. In human geography, students can specialise in branches such as geography of development (i.e. development studies), social/cultural geography, economic geography, gender studies, etc. In physical geography, they can specialise in areas such as climatology, geomorphology, hydrology, soil geography, biogeography, etc. In environmental geography, there are opportunities for students to specialise in environmental and resource management, hazard studies, regional geography, rural geography, sustainable development, transport geography, etc. Lastly, in technical geography (i.e. techniques and methods of geography), students can hone their skills in cartography, Geographical Information (GIS), Systems Geographical fieldwork, Information Science (GISc), quantitative methods and analysis, spatial analysis, programme modelling, etc. (UK QAA, 2014).

The aim of preparing students to specialise in any of the major divisions of geography (i.e. human, physical, environmental and technical geography) is one major aim in the undergraduate programmes of the

department of geography at Frostburg University, USA. The department provides high quality instruction in geography programmes, leading to majors in geography, earth science, environmental analysis and planning, urban and regional planning, with the aim of preparing students to think like geographers, earth scientists and planners (www.frostburg.edu/fsuassets/File/College/cl). The IGU (2009) affirms the importance of specialisation in geography programmes, but cautions that whichever approach in geography that is emphasised (regional or systematic studies), institutions must encourage students to engage in questioning and enquiry, so as to develop the geographical skills of seeking solutions to current and future problems in the organisation of space.

The third aim in honours degree programmes in geography states that students are to acquire a suite of academic and generic skills. These include learning how to interpret and analyse information and to tackle geographical issues through the deployment of skills specific to the geographer and professional researcher, including the use of appropriate information and communication technologies (ICT). This aim seems to be a key feature of many undergraduate geography curricula. For instance, in the department of history and geography at the Georgia College, Milledgeville, USA, the geography programme provides students a broad-based liberal arts and science experience that requires students to acquire knowledge, synthesise information, and cultivate critical thinking in a holistic, cross-disciplinary context (www.gcsu.edu.org/department-of-history-and-geography). Similarly, the German Geographical Society (GGS) (2014) affirms the importance of academic and generic skills in geography training by recommending that

geography education should encourage students to develop multi-perspective, systematic and problem-solving thinking skills, which will give them insights into the connections between natural and social activities in different parts of the world.

The last aim in honours geography degree programmes states that students are to develop a range of personal attributes relevant to their private, public and vocational lives. This suite of personal attributes, if developed will help geography graduates to engage in lifelong learning, to consider ethics and values, to contribute to the wider community and above all, to gain employment (UK QAA, 2014). Lastly, with training in these personal attributes, geography graduates are prepared to compete for a wide variety of employment in this era of competition and globalisation. This aim is receiving a big boost in the geography department at the University of Newcastle, where an employability skills development initiative called *NCT* is on-going. This initiative is to help students develop personal, employability and enterprise skills, aimed at giving them the edge in the employment market after graduation(www.ncl.ac.uk/undergraduate/).

From the above discussions on the aims of geography education and training at the undergraduate level, it is clear that geography is a powerful medium for promoting both human and social development. The development of knowledge and understanding, skills and values in geography education makes the discipline a key partner in all aspects of development, particularly spatial development. It suffices to say that the multi-perspective nature of geography has given the subject a foothold on issues of development such as human resource development, sustainable development (i.e. the balance use of

environmental, social and economic resources) and international cooperation on economic, political, cultural and environmental issues.

Content of geography as an academic discipline

The content of geography comprises perspectives, knowledge and skills (National Council for Geographic Education, 2012). In curriculum studies, these components are called organising elements. By using certain curriculum principles, curriculum designers or developers integrate or fashion these curriculum elements into a sequence of educational activities aimed to achieve pre-determined learning objectives over a sustained period, called educational/training programmes (UNESCO-UIS, 2011). The major goal of any educational or training programme is to aid students/participants (through experience, practice, study and instruction) to master these areas of achievement, in order to be declared as having successfully gone through the educational programme. The performance of geography students may be expressed with reference to the areas of achievement identified in the programme: knowledge and understanding, intellectual, subject-specific and generic skills (UK QAA, 2014).

Perspectives in geography

Geographical perspectives are one of the three competencies that may qualify a person as geographically literate. The other two are knowledge, understanding, and skills. A perspective, according to the Free Dictionary is a way of regarding situations, events, facts, etc. and judging their relative importance(Free Dictionary, n.d.). In other words, having a perspective in geography means looking at the world through a lens shaped by personal experience, selective information and subjective evaluation. A perspective in

geography is therefore, a framework or model that is used to interpret the meanings of experiences, events, places, persons, cultures and physical environment (National Council for Geographic Education, 2012). A multiperspective understanding of the world enhances students' knowledge and skills.

Though geographers have different perspectives to analyse, evaluate and solve a problem, according to the National Council for Geographic Education (2012), there are primarily two geographical perspectives. These two perspectives, *spatial* and *ecological*, are used by geographers to frame their understanding of regions, places and environments Other perspectives alongside the two main geographic perspectives that may be used by geographers to assist in formulating and informing their investigations include historical, economic, civic and cultural perspectives.

Spatial perspective: Geography is a spatial science because of its connection with the spatial dimensions of human activities (space and place). The spatial perspective provides a framework for geographers to ask and answer questions bordering on spatial issues such as (a) where is the phenomenon or event located? (b) what is it like? (c) why is it there? (d) how did it happen?, and (e) what impacts does it have? (IGU,1992). In finding answers to these questions the geographer identifies, analyses and interprets spatial patterns and processes resulting from the location, situation, interaction, spatial distribution and differentiation of phenomena on earth. In order for one to appreciate how people live on earth, then they need to understand how these spatial patterns and processes occur on the earth's surface.

The spatial perspective aids geographers in explaining certain key concepts in geography. For instance, knowledge of the twin concept, location and distribution helps people to understand the interdependence of places at varying scales, from the local to the global level.

Ecological perspective: It is an approach that looks at the world as a big ecosystem where living and non-living elements interact in complex webs of ecological relationships at multiple spatial levels (NCGE, 2012). Since humans are among the species that constitute the living part of the world's ecosystems, their actions tend to modify the natural environments, creating what may be referred to as a humanised environment or simply put a cultural landscape. Geographers with an ecological perspective know how humans survive on earth by depending on ecosystems of varying sizes such as forests, rivers, oceans, etc. for their food, water, shelter and other resources. Geographers who therefore, consistently enquire about the networks, connections and relationships among the different life forms, ecosystems and human societies are described as being ecologically savvy (i.e. they have an idea as to what the ecological perspective is all about). The ecological perspective also helps geographers to investigate concerns for sustainable development through the study of the integration of human and natural systems within an ecosystem (IGU, 1992). In this investigation, geographers tend to ask and find answers to questions such as (a) what impact does a phenomenon have in an area? (b) how should it be managed for the mutual benefit of humanity and the natural environment?

The ecological perspective also helps geographers to explain one of the key concepts in geographical studies. This concept, people-environment

relationship, explains how people, through different patterns of activities, create varied cultural landscapes. In some places and at certain periods, people are influenced by the natural environment (i.e. they are 'naturalised'), but at other times and places, people are able to transform their physical settings into different culturally created environments (i.e. the natural environment is humanised!). This is how an anonymous author has poetically put it "nature (God) created the soil, but humans have created bowls and cups out of it; nature (God) created the night, but humans have created lamps; nature (God) created the wilderness and deserts, but humans have created flower beds and gardens". Lastly, the ecological perspective enables geographers to understand the complex interactions between humans and the physical environment within the spatial realm. This serves as a major boost for development through responsible environmental planning, management and protection (IGU, 1992).

From the above discussions, it suffices to surmise that, geographers' understanding and use of the spatial and ecological perspectives, helps them to understand how to analyse and interpret the interactions between nature and societies on earth. A fully-developed geographic perspective which can serve as a frame of reference, for understanding knowledge and skill-related issues in geographical studies, must involve the integration of both spatial and ecological perspectives, as well as a consideration of the other related perspectives (economics, civil, political, cultural, historical) that may be useful in understanding and interpreting the world (NCGE, 2012).

Knowledge component of honours degree programmes in geography

The knowledge component of the honours degree programmes or curricula in geography is recognised as providing a holistic perspective on the natural and human environments, spatial interactions and processes, and an understanding of the complex relationships between the natural and human aspects of environments and landscapes. As students go through the various levels of the programme, they develop a deeper knowledge and understanding of their programme's contribution to knowledge generation, preservation and dissemination.

This subsection presents the views of various authors and geographical societies on what should constitute the basis for the knowledge aspect of an honours degree programme in geography. The authors include the UK QAA (2014), the IGU (1992), the School of Global Studies, Geography and Development Studies at the University of Sussex, UK., Kneale (2014), Talbot (2000), University of Sussex (2010), University of Manitoba (2009), Simon Fraser University (2009) and the Australian Geography Teachers' Association (2009). Table 1 shows the types of knowledge students acquire from their honours geography degree programmes.

Table 1 - Nature of Knowledge Component in Honours Geography Degree

Programmes

Author's	Description of Type of Knowledge and Understanding in
Name	Geography
1. UK, QAA	Geography contributes to a holistic perspective on the
(2014)	natural and human worlds, interactions, and processes; it highlights the complex relationships between natural and human aspects of environments and landscapes; • Geography graduates are expected to demonstrate knowledge and explanations of spatial distributions in both physical and human phenomena; they are able to recognise the ways in which spatial relations are an inherent and important feature of economic, social, cultural and political activity, and how they reflect,

- reproduce and remake social relations;
- Geographers understand the dynamics and rates of change at different temporal and social scales and can evaluate the processes shaping the geographies of the past, present and future; they also get to know how change is necessary across all aspects of the subject – historical geography, environmental and climate change, quaternary science, etc.;
- Geographers also understand the way in which the distinctiveness of a particular place is constituted and remade by physical and human processes; they also demonstrate an awareness of the constitution of places outside their own immediate everyday experience and are aware of the global context of their learning;
- Geographers are able to use critically a systems
 framework to conceptualise patterns, processes,
 interactions and changes in the physical world; they
 know how to incorporate into this framework (a)
 natural environmental impacts on human activity
 (e.g. natural hazards); (b) human impacts on
 biophysical systems (e.g. air pollution, deforestation,
 desertification);
- Geographers demonstrate knowledge of the main dimensions and scales of economic, social, political and environmental inequality and difference, are familiar with a range of interpretations of these processes, and are aware that scale itself can be contested and politicised; a critical evaluation of the concepts underlying development and sustainability needs to be an integral part of the knowledge base of the student;
- Geographers have a critical understanding of the history of the subject and are aware of how changes in the subject portrays it as a dynamic, plural and contested intellectual subject; this requires an appreciation of the eclectic approaches to geographical investigation and of the subject's changing relationships with related fields of inquiry in the natural and social sciences, the arts and humanities;
- Maps are important tools in geography, which have an important historical role as representations of the

- world, and geographers are conversant with their modern forms and dimensions; geographers also have a depth of knowledge and understanding of other representational forms such as texts, visual images or photos, and digital technologies (e.g. GIS, GPS, remote sensing, etc.);
- Geographers are trained to have a firm grasp of the principles of research design, encompassing strategies used to analyse and interpret geographical information, and to show a critical understanding of the appropriate contexts for their use; geography programmes should develop a range of research methodologies, including data collection and analysis (e.g. quantitative & qualitative) and laboratory work and process modelling; programming, ethnography; focus groups; interviewing; archival work; discourse and textual analysis and participant observation; and
- Geography is intrinsically a field-based subject. Field experience is an essential part of geographical studies, and all geographers require the opportunity to plan, undertake and report significant fieldwork during their programme. Students are familiar with, and practise, methods and strategies of field research in human and/or physical geography (UK QAA, 2014: 8-11).

Commission on Geographical Education, IGU (1992)

Students are trained to acquire knowledge and understanding of

- locations and places in order to set national and international events within a geographical framework and to understand basic spatial relationships;
- major natural systems of the Earth (landforms, soils, water bodies, climate, vegetation) in order to understand the interaction within and between ecosystems;
- major socio-economic systems of the Earth (agriculture, settlement, transport, industry, trade, energy, population and others) in order to achieve a sense of place. This involves understanding the impact of natural conditions on human activities, on one hand, and the different ways of creating environments according to differing cultural values, religious beliefs, technical, economic and political

systems;

- diversity of peoples and societies on Earth to appreciate the cultural richness of humanity;
- structure and processes of the home region and country as daily action space; and
- challenges and opportunities for global interdependence (IGU, 1992:4).

A student who has successfully completed the geography programme will:

- School of
 Global
 Studies,
 Geography &
 Development
 Studies,
 University of
 Sussex (2010)
- understand (a) the nature of the relationships and processes, both contemporary and historical, that shape the human characteristics of places (e.g. demographic, economic, social, cultural, political), and (b) how places become differentiated from one another as reflected, for example, in patterns of wealth inequality at the international and sub-national scales;
- demonstrate the ability to apply this knowledge and understanding to contemporary problems such as those of the third world underdevelopment, inter-and intra-national ethnic conflict, and urban social exclusion, and to the evaluation of policies designed to solve these problems;
- be able to explain the characteristics of specific places through reference to a body of locational and ecological concepts and theories using either (a) locational analysis which focuses on the explanation of the spatial patterns of the phenomena being studied, or (b) ecological analysis which focuses on the explanation of in situ relationships between phenomena located at the same place;
- possess sufficient experience of the inter-relatedness of the phenomena in geographical space to be able to visualise those phenomena as elements of either socio-spatial or socio-environmental systems; and
- have achieved а critical and self-reflective understanding of human geography incorporates an awareness of the situated-ness of knowledge and the provisional status of accepted (b) recognises the significance of theory: representations of people and places an understanding of social and spatial behaviour; and yet

(c) develops the bases upon which competing ideas and theories about the nature of places can be evaluated so that judgements about their strengths and weaknesses can be made (Sussex University, 2010:2).

Source: Field survey, Ababio (2015)

Skills component of honours degree programme in geography

Geography programmes furnish students with subject-specific or technical skills and wider intellectual and generic skills that collectively provide the basis for employability and lifelong learning.

Table 2 - Skill Types in Geography Honours Degree Programmes

Table 2 - Ball Types in Geography Honours Degree Trogrammes		
Author's Name	Skill Types in Honours Degree Programme in Geography	
UK,QAA	(a) Intellectual and subject-specific/technical skills	
(2014)	Geography enhances a range of intellectual skills and abilities that are acquired through the use of its learning resources, frequent practise of its methods and immersion in appropriate research contexts. Though some of these skills are peculiar to geography, they are relevant and transferable to other intellectual contexts. The range of intellectual and subject-specific skills developed through a geographical education generally includes • spatial awareness; • abstraction and synthesis of information;	
	 developing reasoned arguments; 	
	 conducting fieldwork and data collection; 	
	 assessing the merits of contrasting theories and explanations; 	
	 preparing effective maps, diagrams and visualisations; 	
	 primary data generation, collection and recording, and the use of secondary data sets (both quantitative 	

- and qualitative)
- critically evaluating, interpreting and combining different types of geographical evidence (for example texts, imagery, archival data, maps, digitised and laboratory data);
- planning, designing and executing a piece of rigorous research or enquiry, both independently and in groups, including the production of a final report;
- employing a variety of interpretative methods (e.g. participant observation, ethnographic interviews, and auto-ethnography);
- employing a variety of social survey methods (e.g. questionnaire surveys and structured interviews)
- employing a variety of science laboratory skills and methods (e.g. soil, water and plant sample preparation, microscopy, particle size analysis, soil and water chemical analysis);
- methods for the collection and analysis of spatial and environmental information (e.g. GIS, remote sensing, statistical and mathematical modelling);
- taking responsibility for learning;
- recognising the moral, ethical and safety issues involved in all aspects of geographical enquiry (UK QAA, 2014: 11-12).
- (b) Generic skills

Additionally, as a result of studying a degree programme in geography, students develop generic skills in the following areas:

- learning and studying, developing autonomous learning and meta-cognition;
- decision making and prioritising tasks;
- record keeping and archiving;
- synthesising, contextualising and critically evaluating information of different styles;
- oral, written and graphical communication
- information and data handling and retrieval;
- an understanding of intellectual property and copyright communication informatics appropriate to the audience;
- the ability to work in groups and teams and to recognise and respect the viewpoints of others (UK QAA. 2014: 12).
- (c) Personal attributes and social skills
 In addition, geography fosters the development of a range of

personal attribute, including;

- motivation:
- ability to work responsibly, autonomously and with others;
- self-awareness and self-management;
- self-confidence;
- empathy and insight;
- intellectual integrity;
- awareness of responsibility as a local, national and international citizen with a global perspective;
- the skills to engage in lifelong learning; and
- flexibility and adaptability, a creative approach to problem solving (UK QAA (2014: 12)

Technical and generic skills

IGU (1992)

Through their studies in geography, students are encouraged to explore and develop skills in

- using verbal, quantitative and symbolic data forms such as text, pictures, graphs, tables, diagrams and maps;
- practising such methods as field observation and mapping, interviewing people, interpreting secondary resources and applying statistics;
- using communication, thinking, practical and social skills to explore geographical topics at a range of scales from local to international. Such a process of inquiry will encourage students to;
 - Identify questions and issues
 - Collect and structure information
 - Process data
 - Interpret data
 - Evaluate data
 - Develop generalisations
 - Make judgements
 - Solve problems
 - Work cooperatively in team situations, and
 - Behave consistently with declared attitudes
 - Lastly, geographical education also aids the development of personal and social competence, particularly with regard to the spatial dimension of daily life and to international understanding (IGU, 1992: 4).

Sussex University (a) Intellectual skills

When students complete the geography course of study, they

(2010)

will command a number of intellectual skills. These include:

- Interpretation of data/text
- the ability to abstract and synthesise material from different sources;
- to reason clearly, critically and logically;
- to analyse problems and provide solutions for them;
- to judge evidence for and against particular ways of understanding an issue;
- to evaluate theories;
- to demonstrate and exercise independent thinking;
 and
- engage in self-learning and critical reflection
- (b) Practical skills

A student who has successfully completed the geography programme, will have the following practical skills;

- cartographic skills good knowledge on how to read, interpret and make maps and use them;
- GIS (geographical information systems) ability to connect the skills of the cartographer with those of the computer scientist, specifically to relate spatially-referenced data with place-attribute data, in some depth for those specialising in Level 2, but in overall terms for the non-specialist;
- field investigation skills in both environmental and human geography (e.g. historical and contemporary human landscape evolution, land-use and built-form mapping and questionnaire surveys;
- Individual research and report-writing skills (geography project) (Sussex University, 2010: 4)

(c) Generic skills

Geography training helps students to develop the following employability skills:

- communication written and oral skills; technological skills
- teamwork skills- developed through fieldwork and small group work which may hone students' decision-making skills;
- flexibility a skill necessitated by the complexities of working with a variety of individuals and groups, and at differing scales of activity;
- self-management students acquire this skill when given the opportunity to undertake a project or assign by following a sequence of activities such as planning, collection of data, data interpretation and

Talbot (2000)

writing up the report by meeting timelines;

- powers of analysis developed when students are given the opportunity to answer questions (both oral and written) such as 'describe' and to 'explain' phenomena, events or processes;
- problem-solving By allowing students to use their powers of analysis, they may be tasked by setting up and testing a hypothesis, or explaining spatial patterns;
- decision-making When students are given the opportunity to analyse the nature of a problem and decide which course of action is most appropriate (Talbot, 2000: 9-10)

Clark & Wareham (2000)

Generic skills

For geography students to stand a chance of being employed after graduation, they will need to;

- Be able to solve problems;
- Apply ideas and skills to new areas;
- Be able to work with others (to argue, negotiate, cooperate, compromise and win);
- Be self-reliant;
- Be able to master a wide range of complex topics;
- Be able to cope with uncertainty and change;
- Be self-confident; and
- Be self-reflective (able to improve him/herself without the instructor/boss always having to be present to correct him/her); (Clark & Wareham, 2000: 21).

Simon Fraser University (2009)

Generic skills

The university recognises the fact that the academic knowledge students acquire at the institution may only be applicable to some careers, but that there are certain general skills that students gain with their geography degrees that are most valuable to employers. These include the following:

- communication skills ability to communicate ideas clearly and efficiently in a variety of mediums (oral, visually and electronically)
- information management ability to locate, gather and organise information using appropriate technology and information systems; use research skills to access, analyse, and apply knowledge;
- problem-solving ability to use critical thinking skills to evaluate and solve problems; demonstrate

the ability to be creative and innovative in identifying solutions:

- teamwork skills be able to work effectively within a group; demonstrate the ability to lead or support the group while monitoring the success of a project and identifying ways to improve it;
- personal management skills be able to work effectively and independently under deadlines; plan, design, and carry out projects from start to finish, with well-defined objectives and outcomes

Subject-specific and Generic skills

Many employers are interested in the skills that geography major graduates tend to have. These include:

- Knowledge of the earth's physical environments and their interrelationships;
- Understanding of the interrelationship of social, economic, political, and cultural factors;
- Skills in the analysis and use of standard statistical methods:
- Skills in writing carefully reasoned reports and academic essays
- Good visualisation skills;
- Skills in operating computer equipment
- Skills in the spatial analysis of socio-economic patterns, problems and forces; and
- Ability to use land use data

Transferable skills in geography

- communication skills written, numerical, graphical, cartographic and oral
- observation
- collection and analysis of diverse range of information
- working collaboratively with others
- to think critically
- be open to a wide range of causes and consequences of phenomena

Kneale (2014)

Australian

Geography

Association

Teachers'

(2007)

University of Manitoba

(2009)

(a) Intellectual skills

- Ability to conduct research
- Ability to reason critically
- Be able to create imaginative solutions
- Being able to synthesize diverse materials
- Having evaluative skills
- Ability to reflect over issues
- Being original in thought and action
- Having flexible thinking

- Ability to analyse
- (b) Geography-based (technical) skills
- Being able to recognise inter- and intra-subject relationships
- Understanding the conceptual bases of geography
- Understanding methods for geographical investigations and their limitations
- Recognising the 'limits' of geographical knowledge
- Understanding and interpreting geographical information

(c) Interpersonal skills

- Negotiation
- Ethical and professional behaviour
- Networking
- Teamwork
- Oral and written communication
- Empathy
- Listening

(d) Practical skills

- Information technology and GIS data bases skills
- Field investigation
- Computer-based analysis
- Laboratory investigations
- Data analysis
- Being able to criticise analytical approaches
- Being able to manage meetings
- Ability to devise imaginative research methodologies
- Ability to make professional presentations

(e) Personal skills

- Possessing career management skills
- Having self-motivation
- Ability to prioritise activities
- Being innovative
- Having self-criticism skills
- Time planning and management skills
- Ability to do independent work
- Being enterprising
- Being adaptable

Society of South African Geographers (2003) Skills training and application in the undergraduate geography curricula include,

• Practical skills - cartography, remote sensing, airphoto analysis and interpretation, statistical and quantitative methods and techniques, GIS, fieldwork,

- application of field techniques and ability to apply graphical skills;
- Personal & key skills preparation of a mini-thesis or project, application of recording skills, ability to find or extract information, undertake library research, record & report on results, prepare a final document, define strategic alternatives, ability to respond to societal problems, ability to acquire technical skills and use of problem-oriented presentations via short projects; and
- Intellectual skills application of appropriate analytical skills, mastering and processing thought and complex ideas, ability to contrast ideas, aligning one's views to a wider school of thought, and test evidence.

NOTE: Skill courses now constitute 17% of the undergraduate curriculum in South Africa's universities.

Field Survey, Ababio (2015)

Per their training, geographers have the ability to work on a wide range of research. Students are trained to learn 'through' geography, in addition to learning 'about' geography. The priority and focus given to skills development facilitates students' academic performance, their career prospects and contributes to national development (UK, QAA, 2014). Table 2 contains the views of some authors as to what types of skills should be incorporated into undergraduate programmes in geography.

Implications of learning outcomes for geography students training and development

The above-mentioned learning outcomes (knowledge, understanding, attitudes, values, skills, competencies or behaviours) that geography students are expected to demonstrate as having successfully completed their undergraduate education, show clearly that the training of geography students cannot be limited only to the subjective-specific or technical skills domain. In other words, any honours degree programme in geography (BA or B.Sc.) that

must provide holistic training to students, must incorporate not only the knowledge domain, but also the transferable and personal attributes domains. This conclusion on what should constitute holistic education and training by this study is in agreement with what an anonymous author once stated: "the aim of education is not the acquisition of knowledge, though important, nor the acquisition of subject-specific skills, though essential in a modern society, but that *bent* of mind, that *attitude* of reason, and that *spirit* of democracy that make us responsible citizens".

A synthesis of the views of the various authors in Tables 1 and 2 shows that a honours geography degree programme has two main learning outcomes domains or elements. These according to Kneale (2004), are the geographical knowledge domain and the skills and personal attributes domain. The first includes all issues bordering on theories and concepts from all the main divisions of geography (human, physical, environmental & technical) and issues-based themes such as climate change, sustainable development, globalisation, deforestation, global warming, society-environment relationships, etc. The scope is global, because of the broad-based and interdisciplinary nature of geography as an academic discipline. In Tables 1 and 2, the knowledge domain of the geography programme has variously been described by the authors. The headings that have been adopted by the authors include knowledge and understanding, subject-specific skills, geographybased skills and practical skills (IGU, 1992; Kneale, 2014; Sussex University, 2010; UK QAA, 2014; University of Manitoba, 2009).

A critical look at the composition of the knowledge-based component of the undergraduate geography programme as described by the above sources

shows that, geographical studies will always include certain key themes and issues. A summary of the often referred to themes in the two tables includes the following:

- (a) The Inter- and intra-subject nature of geography
- (b) The theoretical and conceptual bases of geography
- (c) The earth's physical and social systems
- (d) The interdependence of physical, social, cultural and political factors across the globe
- (e) Field investigations of both physical and human phenomena
- (f) Research projects and report writing in geography
- (g) Exploring geographical phenomena, events and processes at multiscale levels
- (h) Spatial, ecological and regional dimensions of geographical study
- (i) Spatial analysis of economic activities and natural processes
- (j) The description and use of maps and other forms of visual representations to depict spatial features across the earth.

Again, by juxtaposing the aims of honours geography degree programmes (UK QAA, 2014) with the descriptions of the knowledge-based learning outcomes provided by the various authors in Tables 1 and 2, one can say that there is a strong connection between those aims and the content aspect of the geography curriculum. For example, one major aim is for geography departments to make fieldwork an integral part of the training. This aim has indeed been operationalized by almost all the universities and geography associations cited in the literature. Another knowledge-based aim which has been given much attention by the cited academic institutions and geography

associations is the study of the distinctiveness of spatial patterns and processes at varying scales, resulting from interaction of physical, social, economic and political factors. A breakdown of this aim is seen in themes such as the study of the spatial, ecological and regional dimensions of geography; study of different geographical phenomena at multi-scale levels, and studies of the changing dynamics of the earth's physical and cultural systems, etc. If one is to go along with a definition of development being activities that lead to the organisation of new knowledge and skills for the purpose of personal growth (Aquinis & Kraiger, 2009), then it can be inferred that geography education and training is contributing its quota to development. This is because the overarching aim of the knowledge-based learning outcomes in the undergraduate geography curriculum is to improve the geographic literacy of geography graduates and for that matter, help them upon successful graduation, make competitive claims to employment opportunities that are geography-related.

The second major component of the content of geography undergraduate programmes, has variously, been described as transferable, generic, core, employability or general skills. These skills are the personal, key and transferable learning outcomes, which allow geographers to be efficient professionals and have long-term benefits in the work place. From the descriptions of the transferable skills given by the authors in tables 1 and 2 (AGTA, 2007; Clark & Wareham, 2000; IGU, 1992; Kneale, 2014; Talbot, 2000; UK QAA, 2014), one can summarise a few key generic skills, which when incorporated in geography programmes can aid the personal growth of

students, and better their chances of getting employment after graduation.

These include

- Intellectual skills such as critical thinking, problem solving, analytical and evaluative skills;
- 2. Communication skills such as oral, visual, written and electronic-based skills
- Lifelong learning skills having the motivation and readiness to learn new knowledge
- Teamwork/collaborative skills being a team player, a leader, follower, organiser, planner, etc. around whom the organisation or institution revolves
- 5. Personal attributes such as empathy, independence, flexibility, adaptability, personal management and information management
- 6. Ethical considerations respect for participants' rights of voluntary participation, non-disclosure of participants' identify, maintaining participant confidentiality, etc.

From literature, it seems that the major orientation of learning outcomes in geography programmes have been the acquisition of subject-specific or technical skills. This may be one of the factors that have given geography graduates limited opportunities for getting employment, aside factors such as the labour market's inability to keep pace with the rate of graduation of geography students.

Now that this study has established the indispensability of generic skills in the personal growth of geography graduates and their search for employment, it behaves that more attention should be given to this domain of learning outcomes in geography education. Suggested activities or exercises which can be embedded within geography programmes to engender these generic skills include fieldwork, research projects, role plays and simulation exercises, learning contracts, self-guided study, action planning, case studies, work placements, interviews, decision-making, group work, oral presentations, practical work, self-evaluation and reviews of student work and personal development planning (Kneale, 2014).

Availability and Quality of Resources in Geography Programmes

In the preceding section, this study discussed the history, aims and the content of geography education. In a way, these components of the geography programme are among the resources utilised by geography departments for the training of students. In this section, the study discusses other types of resources that are integral to any training and development programme. The apparent indispensability of resources in education and training programmes is because they are finite and limited in nature. In this light, for an effective evaluation of geography programmes, there is the need to consider the availability, adequacy and quality of resources.

Aguinis and Kraiger (2009) define human development as activities aimed to equip learners or students with new knowledge and skills for purposes of enhancing their personal growth. To make the activities achieve the goals of the training programme, resources serve as facilitative agents in the process. Resources, in the context of learning and development, are materials, tools and personal contacts, which when deployed, aid in the acquisition or improvement of competencies, (i.e. set of cognitive abilities and skills) with the aim of engendering the individual's or organisation's

sustenance, performance or well-being. For geography departments to have the capacity to develop students' employability skills, they need adequate amounts of resources. In this section, the study discusses how human, material, intra-and inter-organisational resources influence the capacity of geography departments in developing the employability skills of geography students.

Effective leadership as a resource

Effective leadership is that resources used to influence both the Departments of Geography staff and students and external stakeholders towards the attainment of their goals (Lusthaus, Adrien, Anderson, Carden & Montalvan, 2002). This type of resource is used by a department to continuously change, adapt and follow a path that has been approved by its members and external stakeholders towards the actualisation of its mandate and objectives. Similarly, in Newmann, King and Young's (2000) study, they likened the effective leader to a school principal whose main legal duty is to affect the other four capacity resources (as used in this study), for better or worse, depending on the quality of leadership. They contended that, in view of his/her legal authority, the school principal is a critical force in a school's capacity to enhance student achievement. Newmann et al. (2000) also argued that other teachers may also exert informal authority – positive or negative, due to the special role that such teachers play in the school.

In apparent support of leadership's influential role in a department, De Vita and Fleming (2001) have argued that a strategic and transformative leadership has multiplier effects on other types of institutional resources, functions and structures of a department. Leadership can expedite the

acquisition and development of resources, provide direction to select from among the constraints and opportunities offered by its environment and enhance the department's outreach or extension services by establishing linkages through partnerships, collaborations and other networks that advance the goals of the department.

Effective leaders in educational institutions are those transformational leaders who through their initiatives lead the schools to transform students' lives, motivating and inspiring them to do things which on their own, they could not do (Ecker, Dufour & Dufour, 2002). However, one should not lose sight of the fact that, leadership alone is not a sufficient condition for effecting changes in the performance of an academic department. Other factors such as the internal environment (i.e. departmental culture, rewards, incentives and management style) and the external environment (administrative and legal systems and the political, social and cultural context) come into play.

After observing several schools, Brighouse (1991), Carr (1990) and Bayne-Jardin and Hannam (1972), all cited in Ashley (1996), have identified certain school leadership qualities, which among others include, the head of department/school principal

- (i) being cheerful and optimistic e.g. to have a clear vision, be able to show humour in a crisis;
- (ii) celebrating others and blaming themselves;
- (iii) having the ability to make and manage change;
- (iv) having the willingness to learn, searching for and analysing facts;
- (v) be welcoming and enthusiastic to support the training and development of subordinates;

- (vi) being ready to face problems and deal with them;
- (vii) being able to manage resources efficiently;
- (viii) being willing to delegate authority within the department or school;
- (ix) being observant and a good listener; and
- (x) having a clear educational philosophy and setting a personal example (pp. 154-155).

Human resources capacity

This capacity is the ability of a department to identify and deploy the kinds of human resources (i.e. knowledge, skills, abilities, motivation and competences, and behaviours of individuals in the organisation) that it needs to perform well (Hall et al. 2003; McNernay, 1995). It is purported to be the key element that influences directly all other types of resources. Nonetheless, before the human resource of an academic department could influence positively the other types of resources, it ought to be of high quality as affirmed by Newmann et al. (2000). In a study of some elementary schools in the USA, Newmann et al. contended that the teaching staff must be professionally competent in instructional and assessment strategies and must have high expectations for student learning. In support of Newmann et al.'s contention, Beaver and Weinbaum (2012) assert that a high human-resourced school is one in which the teachers have high subject matter knowledge, are committed to school goals and are deployed effectively by the school. They however, added that, for human capital to create an effective school capacity, it must be nurtured in concert with other types of capacity resources such as inter-staff collaborations (i.e. social capital).

Shulman (1987) has conceptualised a list of competences teachers need to have to ensure high student learning outcomes in schools. These are knowledge of the curriculum, knowledge of subject matter and subject-specific pedagogy (i.e. teacher craft knowledge). O'Day et al. (1995), however, see the possession of these three kinds of knowledge a necessary, but not sufficient condition for ensuring the effective training of students. They contended that in addition to these kinds of knowledge, the highly resourced teacher must show certain kinds of disposition as (a) being accountable to improvement in student learning (b) having high expectations and beliefs for student achievement, (c) having an unwavering attitude towards change and commitment to student learning, and (d) having positive views and beliefs of themselves and their roles in the classroom.

In highlighting the importance of teacher disposition towards high student achievement, Anderson (2004) has noted some elements of disposition highly resourced teachers should possess. These are

- (a) Commitment doing everything possible for each student to succeed in his/her academic work
- (b) Confidence belief in one's ability to be effective and to take on challenges
- (c) Trustworthiness being confident, fair and keeping one's word
- (d) Respect belief that all your students matter and deserve respect
- (e) Drive for improvement showing relentless energy for setting and meeting challenging targets for students and for the school
- (f) Information seeking having the drive to find out more and get to the heart of things (i.e. intellectual curiosity)

(g) Initiative – having the drive to act now and to anticipate and pre-empt events.

From the above discussions on the role of human resource in the training of students, the conclusion is that human resource is a critical factor for ensuring the holistic development of students, if one can use the knowledge, skills and dispositions that teachers must have as a proxy for student development. Educational institutions must endeavour to train or recruit high calibre staff who would ensure the effective and efficient training of their students. Aside the issue of professional competence, the staff of such institutions should be well motivated to be favourably disposed towards the developmental needs of their students as pointed out by Anderson (2004) and O'Day et al. (1995).

In examining the impact of human resource capacity on the employability skills development of geography students, this study found from both staff and students, their perceptions on the quality (academic and professional competence) and quantity (number) of human resources (academic and technical staff) that the geography departments deploy in training their students in employability skills. In the methodology section of this study, their perceptions have been rated as high, medium or low, which accordingly informed the nature of the data analysis for that variable.

Material resources

Various authors have given this type of resource different names. Newmann et al. (2000) call it technical resources, and contend that any school desirous of improvement should endeavour to procure such resources as high quality curriculum and other teaching learning materials, such as books, assessment instruments, laboratory equipment, computers and adequate workspace. Fowler and Ubels (2010) emphasise the importance of material resources such as finances, equipment, office space, etc. to ensure that no organisation is incapacitated. They have put material and financial resources in the category of visible capacity, that is, those conspicuous capacities that give meaning to less observable capacities like the vision, strategy and culture of an institution. These resources are utilised by the human resource team for the department to translate its vision into reality through its strategic plan. De Vita and Fleming (2001) add that material resources help a department to carry out its mission, attract competent leadership, and do some public relations job for its products and services. They mentioned in particular, the significant influence of finance on the recruitment of human resources and acquisition of physical resources such as buildings, equipment, etc.

High quality technologies such as information, communication and telecommunication (ICT) equipment and library and information systems, including internet facilities broaden and facilitate a department's ability to collaborate with people in the external environment as these communication media help generate new ideas and increase public participation and networking opportunities for the department (De Vita & Fleming, 2001). To Lusthaus et al. (2002), the amount and quality of these resources, however, depends on the department's institutional and policy environment. If such environment is favourable, then it is likely that the department will get adequate amount of these resources to improve its capacity. If on the other hand, the external environment does not facilitate the acquisition of adequate

material resources, then it behoves the department to make judicious use of the available material resources to ensure some modicum of capacity.

Beaver and Weinbaum (2012:4) when highlighting the role that material resources play in improving school capacity, noted that "material resources can only improve school capacity only if they are used in combination with other resources; material resource being inanimate objects can only be of benefit to an organisation if it is deployed in support of other forms of resources that allow the school to improve".

In the methodology section of this study, precisely the part that quizzed respondents on the impact of material resources on the employability skills development of geography students, this study found from both staff and students, their perceptions on the quality and quantity of material resources that the geography departments deployed in training their students. Their perceptions were rated as high, medium or low, which also informed the nature of analysis for that variable.

Inter-staff collaboration

Some researchers on institutional resources have labelled this resource type in different ways. Newmann et al. (2000) called it professional community, while Beaver and Weinbaum (2012) called it social capital. Newmann et al. contend that a strong inter-staff collaboration is characterised by

- (a) collaboration and collective responsibility among the teachers to achieve common goals; (b) the staff sharing clear goals for student learning;
- (c) joint professional inquiry by the staff to address challenges faced by them (e.g. curriculum alignment); and

(d) opportunities for staff to influence school policies (p. 263).

Beaver and Weinbaum also view inter-staff collaboration as "the intangible network of relationships that fosters unity and trust within a school's staff" (p. 3). Beaver and Weinbaum add that though a high quality human capital is a necessary condition for strong school capacity, it must sufficiently be encouraged and developed in concert with other components of resource capacity, particularly the social capital. When the skills and expertise of staff are not shared, and for that matter, remain with individual staff members, such kind of human capital cannot be engendered for improved performance. When inter-staff collaboration is weak, it has a corresponding spill over effect on the other types of institutional resources; when there is little communication and animosity among factions of the staff, it becomes extremely difficult for the staff to build coordinated and integrated curricula, thus reducing the department's capacity to attain its goals.

Programme coherence has other names such as integration, articulation or organization (Buchmann & Floden, 1990). Buchmann and Floden contend that programme coherence denotes connectedness, which in turn suggests consistency and accord among the elements of a programme. They argue that programme coherence, is needed because haphazard, isolated experiences are unlikely to ensure intended student learning. They further posit that desirable programme coherence enables students to build connections among various suites of knowledge and skills, thus increasing school capacity for student performance. On the other hand, citing O'Day et al. (1995), Chen (1995) and Hill and Cello (1998), contend that unrelated and episodic programmes or curricula that address only a limited number of staff and students, or are

terminated after a short period of time, tend to weaken staff and student learning, thus undermining the school's capacity to boost student achievement. In a similar vein, Wilson and Bertenthal (2005) argue that a curriculum which is coherent should have all its key elements properly aligned to one another—its statement of objectives, instructional strategies and its modes of assessment, all geared towards the same institutional goal.

In summarising the discussion on the effect of inter-staff collaboration on the employability skills development of students, it should be noted that, a high quality staff cannot alone bring about effective training of students, unless the efforts of all the teachers are mobilised and coordinated into group efforts for the total success of that educational institution. When staff members are accountable to one another and their students, it brings about not only the holistic development of that institution, but also their students, thus affirming Schmoker and Marzano's (2000) contention that the very nature of institutions makes it imperative for them to succeed when all parties in it are rowing in the same direction.

To gauge the impact of the inter-staff collaboration resource on the performance of academic departments, and their ability to train students in employability skills, this study looked at the number and types of inter-staff collaborations and how these collaborations, had helped in the employability skills training of students. For instance, how it fostered staff stability and engendered an environment characterised by collegiality, trust and collaboration. In the methodology section of this study, the perceptions of staff and students on the inter-staff collaborations are rated as *high, medium or low*

capacity, which accordingly informed the nature of the analysis on this variable.

Inter-organisational linkages resource

Misener and Doherty (2008) refer to this resource as the ability of the institution to draw on relationships with clients, members, partners, funding agencies, government and the media. In highlighting the nature of interorganisational linkages, De Vita and Fleming (2001) have noted the various forms that such linkages can take – collaborations, alliances and partnerships, networking, etc. The main significance of inter-organisational linkages is to leverage the social capital of institutions. By identifying themselves with likeminded institutions, they expose their products and services to the public. Such linkages also have multiplier effects – they can increase the resources available to the institution as postulated by the resource dependency theory. Conversely, empirical research has shown that isolated institutions are the ones most likely to struggle and eventually go into oblivion (Galaskiewicz & Bielefeld, 1998 as cited in De Vita & Fleming, 2001).

Grandori (1997) describes inter-organisational resource as an institution's regular contact with other institutions, organisations and groups of strategic importance to the institution's work, which can result in a healthy exchange of approaches and resources (including knowledge and expertise). Further, he emphasises that these contacts may be in the form of an already existing linkage with other potential collaborators and collegial bodies, potential funders or key constituents. Similarly, Coyne and Dye (1998) note that linkages help institutions to keep up with advances in pertinent fields, and

give access to wide-ranging sources of up-to-date information within each area of the institution's work.

In relating this resource to this study and its impact on the employability skills development of students, the study examined the quality and types of collaborations, alliances, partnerships and networks that the geography departments had or hoped to involve in with academic and non-academic institutions. This study looked at for instance, the number and types of national and international staff and student exchange programmes that the geography departments had and how these engagements were contributing to the employability skills development of students.

In summarising the discussions on the impact of institutional resources on employability skills development of students in the three geography departments, this study took into account the ability of these departments to translate all resources at their disposal (visible and invisible) into expected outcomes (i.e. employable skills of students). The study's major thrust was how both internal and external policies and conditions affect the academic departments in ways that influence their capacity to make productive use of available resources to create development value for students. By taking this line of analysis, this study assumed that the staff and students of the academic departments knew the types and quality of resources needed to equip students with employable skills. The next subsection discusses some models used to evaluate the capacity of academic institutions.

Ways of Training Geography Students to acquire Employable Skills

There are those who hold the view that employability skills should be part of academic content so that students do not see them as add-ons, but fully embedded within geography curricula. De la Harpe et al.(2000) contend that skills can best be developed when they are integrated across curricula and across grade levels, thus ensuring curriculum coherence. The argument for the embedding of employability skills within the curriculum, has been strengthened by a school of thought that argues that where skills development modules are not fully integrated into the curriculum, they are likely to be trivialized and ghettoized (Knight & Yorke, 2001). It is for this reason that to them, the development of employability skills and attributes should be part of the content curriculum.

Another type of curriculum that supports employable skills development in geography is the process-based type, which ensures that students are given adequate opportunities to interact with the learning material until they have thoroughly learnt it. It de-emphasizes premium being placed on grades or results but rather emphasizes much attention being placed on how students make meaning in the teaching-learning process. Such process-based curricula ensure that students develop understandings, skills, self-theories and reflection during the instructional process, ultimately leading to good learning, with the training improving employability. Employability is therefore also about *how* teachers teach *what* they teach (Lees, 2002).

Another essential requirement for an employability-oriented curriculum in geography is the inclusion of student-centred instructional strategies. This strategy encourages students to participate actively in all forms of learning through interactive activities such as interactive lectures, seminars, tutorials, individual and group projects, experiments, fieldtrips, observations, model building, simulations, workshops, directed activities, online delivery, etc.

(Knight & Yorke, 2001). Irrespective of the instructional strategy that may be used, more programmes and activities to be designed around problem-solving issues (Bould, 1985). Such experiential curricula tend to encourage cooperation amongst students in addressing multi-disciplinary problems in the society (Ellington, 1989). This active and experiential approach to dealing with issues in the curriculum tends to encourage the exploratory instincts in students, provides them with feedback whilst spurring them on to reflection, motivation and engagement.

Again, the unpredictable nature of the world of work should be taken into consideration by the designers of geography curricula when developing them. This they can do by improvising what professionals actually do at their workplaces. Schon (1983) supports this view when he emphasizes that the industrial preparation of university students must be a reflection of "how professionals think in action". Such professionals can therefore, be invited as adjunct lecturers to speak to issues not only relating to course content, but also about the features of the workplace as a learning environment. Such professionals or employers can expose students to the principles and motivations that might have goaded them to win special awards and prizes.

Other employability-driven strategies that should be included in geography curricula are collaborative learning teams, comprising lecturers, students and professionals or practitioners from government and private establishments (Skillbeck & Connell, 2000; UNESCO, 1998). Under such collaboration, the teams can work on joint/shared projects and allow students to make oral presentations that simulate the real formats used by professionals in their work. Lecturers, on the other hand, can also be seconded to

public/private establishments for short periods to help them gain more handson experience to enable them teach effectively topics that are in their curricula.

Another requirement for employability-based curricula in geography education, according to Pawson et al. (2006), is the inclusion of problembased learning strategies in geography courses. Such strategies equip students with a suite of skills such as critical thinking skills, problem-solving skills, self-directed skills and team participation skills. These strategies challenge students to "learn how to learn", which allows students to make mistakes whilst learning and then learn from such mistakes (King, 2001). This endeavour on the part of students is educationally more valuable than the situation where students attempt to assimilate the contents of their courses ("chew, pour and pass syndrome") before entering formal employment. An additional value of the problem-based learning strategy is that students are afforded the opportunity to develop (a) positive attitudes; (b) 'can do' spirit; (c) a readiness to participate and contribute to issues, and (d) contribute openly to new ideas and have a drive to make things happen (CBI, 2011), by developing lifelong learning skills that are transferable to career situations (Pawson, et al., 2006).

An employability-oriented curriculum in geography can also consider the following instructional principles suggested by Felder (1996):

- (a) When teaching theoretical material, the instructor must first present the phenomenon and problem that relate to the theory;
- (b) During a lesson, the instructor must have a fair balance between the conceptual information and the concrete information;

- (c) The instructor must not only make use of oral and written explanations, but also sketched diagrams, computer graphics and physical demonstrations;
- (d) When organizing a lesson on magnitude of calculated quantities, the instructor must make use of physical analogies and demonstrations;
- (e) If an instructor has the intention of presenting general principles, he/she must first conduct some experiments to allow the class to see how they could infer the principle before they are even told – this exercise develops students' critical thinking skills;
- (f) Apart from allowing active student participation, the instructor must give the class ample time to reflect over the learning material; and
- (g) The instructor must not only ensure coherence among the topics in a course, but also establish the relationships among the current learning material, other relevant learning materials (either taught or yet to be taught), other courses in the same discipline, and everyday experience of human beings.

Since geography departments do not know the final workplace destination of their graduates (e.g. industry, public service, private sector, the banks, self-employment, etc.), they can introduce into their curricula, a range of learning styles that exposes students to equivalent learning styles at the various workplaces. These learning styles will assist such students to develop meta-cognitive skills to enable them choose from their repertoire of learning strategies when the need arises in their working lives (Wiafe, 2003). The

geography department, therefore, has a central role to play in providing its graduates with sufficient learning strategies that will help them adapt to any workplace situation they may find themselves. Graduates with such an adaptive capacity will be able to cope with changing needs and situations by modifying, retaining or discarding previously acquired learning strategies as conditions demand (Candy & Creberth, 1991).

Another employability skills requirement that underpins the design of geography curricula is the use of authentic assessment strategies, which are mainly formative or developmental. Creative formative strategies that can be used to develop employability skills include project work, oral and written presentations, report writing, design of posters, group work, student portfolios (including e-portfolios), work-based or work-related learning, peer assessment and self-assessment (CDELL, 2007). This modern form of student assessment puts emphasis on the meaningful application of issues in real life situations (Wiggins, 1989).

Another employability requirement that is akin to the problem-based strategy is the work-based learning strategy. Types of work-based learning strategies include integrated practice, company projects, residential activities, live projects, mentoring, apprenticeship schemes (Vinson, et al., 2010). Such a strategy makes provision for the award of academic credits to students for skills acquired during an industrial attachment or internship programme. Normally, such internship aspect of the curriculum is usually implemented before undergraduate students return to the university to complete their final year courses. If it happens this way, students bring with them a more professional and mature attitude to their studies. Such an exercise also helps

students to develop reflective skills as they are required to review their work placement experiences to help them progress successfully through their final year of study (Dearing Report, 1997). The placement experience helps students to develop skills such as time management, work management, proactiveness and confidence in seeking employment prior to completing their degree programmes.

From the afore-going discussions, one can surmise that there are many benefits that would accrue to the advantage of geography students, if employability skills were emphasised in their training. To ensure this, geography training will have to use a number of learner-based instructional strategies that would make students responsible for their own learning, and by extension training.

Review of studies on how educational institutions address employability skills implementation

There are several studies on how capacity of universities, colleges and schools affects student employability skills development. One of such studies is Wiafe (2003), who investigated bridging the gap between employers' labour needs and the supply of university graduates. His primary aim was to investigate whether there was any skills gap between the skills possessed by University of Ghana Social Science graduates and the generic skills required by the workplace. His findings showed that the graduates had cognitive and research skills that were relevant to their occupation/job profiles. However, he found that, the graduates lacked social skills, communication, teamwork, and initiative skills, which are important workplace requirements.

Other studies that influenced this research were based on insights from survey research on skills of university graduates and workplace skills requirements. Solem et al.'s (2008) study was to compare the skills of professional geographers and the needs of employer organizations in the major sectors of the United States' labour force. They investigated the perspectives of employers on how undergraduate and graduate geography programmes were producing workers with the competencies required for success in the world of work. Graduate employees' responses to the survey questions indicated that the geography graduates did not have the basic discipline specific skills and generic skills such as oral, graphic and written communication, and had limited commercial awareness knowledge (i. e. knowledge about how organizations work). Solem et al.'s study affirms the assertion that, though academic departments are in most cases, able to meet the academic skills needs of their graduates, they are unable to holistically train their students to meet the expectations of employers. This implies that, academic programmes in the social sciences (including geography), are not providing students with guidance about the suite of courses and educational experiences they need for careers in the corporate world, government and nodprofit sectors of national economies.

Review of studies on how the curricula of educational institutions address employability skills implementation

One of the studies, which examined how the curricula of schools influenced student employability skills development, is that of Anamoah-Mensah, Asare-Ameyaw and Dennis (2007). It was a large-scale nation-wide survey carried out in Ghana. The primary aim was to examine the usefulness

of the basic school curriculum and co-curricular activities in the preparation of pupils/students for employment. From this study, it emerged that the taught curricula were examination-oriented, which focused mainly on didactic instruction, instead of hands-on teaching, which could help pupils develop practical skills for the world of work. Their findings also showed that pupils' participation in co-curricular activities, such as debates and quizzes made them more literate and to 'think fast'. These perspectives from the pupils give credence to the argument that generic skills should be developed alongside academic skills.

A similar study by Mbewa (2014) revealed similar results. From the study, it emerged that though the geography curricula introduced students to some agriculture-based activities, it was doubtful as to whether such activities could actually provide employable skills for students to engage in agricultural activities after graduation. Another finding from this study showed that the scarcity of physical resources for practical work compelled some teachers not to teach that part of the official curriculum, hence denying students the opportunity to engage in hands-on employability-oriented activities.

Evans et al.'s (2009) study also provided important insights for this study. Evans et al.'s study found that some programmes had taught courses, which were largely theoretical and lecture-based. Their finding is in tandem with Eble's (1983) assertion that, bad teaching in higher education was characterized by too much talking with too much theorizing, and not enough enlightened practice. One other key finding from Evans et al.'s study was that, the major stakeholders in the graduate programmes were not meaningfully involved in curriculum reviews and practical research. Another observation

from Evans et al.'s study was that, some of the instructors had no practical experience in their areas of specialization, hence the limited student employability skills development. This was because since their own learning was primarily theory-and-lecture based, they could not do otherwise than to teach in a similar vein.

Review of studies on how capacity challenges of educational institutions affect employability skills' implementation

One key study that provided an important insight into this aspect of the current study is Evans et al. (2009). One of their findings showed a disconnection between some tertiary education programmes and the skill requirements of the world of work. Another study by Baylina and Villanneva (2011), aimed to evaluate the generic and specific subject-based competencies given to students by various geography curricula, also showed similar results. From their study, it emerged that employers' perspectives showed relatively bigger deficits in professional competencies of geography graduates than the perspectives of graduate employees, who were less critical.

Another study in Ghana, examined the factors that account for the mismatch between tertiary education and the needs of industry. Bawakyillenuo et al.'s (2013) study, showed that tertiary education institutions had a number of challenges such as limited inter-organisational linkages between the world of work and the universities, and limited resources (both human and physical) affected the training of students in employable skills.

Other studies that provided the current study great insights into the capacity challenges faced by tertiary education institutions include that of Oluyomi and Adedeji (2012). Their study showed a great skills gap between

the universities and workplace requirements skills such as IT, communication, critical thinking, interpersonal relationships, numeracy, self-directed learning and entrepreneurial skills. Another study in Nigeria by Akinyemi, Ofem and Ikuenomore (2012), also revealed similar outcome. Their study showed that Nigerian university graduates did not possess employable skills to match-up the requirements of jobs in the labour market; that most of the graduates lacked employable skills and personal attributes such as communication, analytical, entrepreneurship, teamwork, computer skills, time management, drive and flexibility.

Review of studies on kinds of capacity building support for improving performance of tertiary education institutions

To improve the capacity of tertiary education institutions for the skill training of students, a number of studies have come up with useful suggestions. Graham (2001) suggested that employers, policy makers, and educational institutions establish a strong relationship to address skill shortages and gaps to meet workplace challenges. He noted that agriculture curriculum must be tailored to adapt to new demands and challenges of agriculture industry, if the agricultural industry were to remain effective. Other research, which influenced this study include Wiafe's (2003) study on Social Science University of Ghana graduates. He suggested the need for the university to foster effective partnership with industry for an exchange of resource persons for capacity building. In such networking, students would be afforded the opportunity to see the relevance of their course study to workplace practices.

Another study by Evans et al. (2009), also suggested capacity building intervention such as development of practical curricula in all their study area tertiary education institutions, the training of faculty in employment-related skills and development of public/private partnerships and research-based programmes. Additionally, Bawakyillenuo et al.'s (2013) study recommended the recruitment of high quality instructors with both academic and professional experience, creation of enabling environment for the growth of the private sector and industry so that they could fund some tertiary education programmes and activities, and embedding entrepreneurship courses into all academic departments' programmes. Lastly, another study, which had a bearing on this study, is Akinyemi et al.'s (2012) study. It recommended that tertiary education institutions should plan their curricula in concert with their governments and stakeholders in the labour market, and that courses that are not marketable, should be replaced with market-driven courses, and communication skills should be made compulsory for all tertiary education programmes.

Comparing and contrasting this study with the afore-mentioned empirical studies

One major similarity between this study and Wiafe (2003) is that both adopted the mixed methods paradigm. The latter used key informant interviews, document analysis and questionnaire survey to collect his data. This study also used the same methods, except that it added a student focus group interview and a structured observation guide. A major difference between this study and that of Wiafe's study is that the latter focused on both the supply side (i.e. the university) and the demand side (i.e. the world of

work) of graduate training. This study, however, focused mainly on the supply side, that is, the universities since its major aim was to evaluate the capability that academic departments had in the training of students in employable skills.

Another difference between the two studies is that, this study concentrated on only geography departments in three universities, but Wiafe's study concentrated on nine social science departments in one university.

In comparing this study with Solem et al.'s (2008), it was realised that, they like Wiafe (2003) focused on both the supply and demand sides of graduate training. Another difference is that, they investigated both discipline-based skills and transferable skills of the graduates, whilst this study concentrated only on transferable or employable skills. Yet another difference is that Solem et al.'s study focused on both undergraduate and graduate programmes in geography, whilst this study focused on only undergraduate programmes in geography. The similarity between this study and that of Solem et al. is the mixed methods approach used by both studies as evidenced by the use of focus group interviews, key informant interviews, and survey questions.

Among the similarities between this study and that of Newmann et al. (2000) are the types of institutional capacity used. Both studies appeared to have used similar dimensions of capacity, with the exception of Newmann et al.'s study having used programme coherence as a key capacity dimension and this study having used inter-organisational linkages as one of the five dimensions of capacity chosen. Again, both studies had the overall aim of improving the capacity of their respective organisations; school improvement in Newmann et al.'s study and capacity building interventions in geography

departments. However, one major difference between these two studies is that whilst Newmann et al. investigated how professional development in schools affected school capacity, this study sought to find out how capacity of academic departments helped in the effective training of students in employable skills.

Other tertiary education level studies included for comparison were that of Baylina and Villanueva (2011), Evans et al. (2009), Bawakyillenuo et al. (2013) and Oluyomi and Adedeji (2012). All these four studies were large-scale survey research with sample sizes ranging between 400 and 600 respondents. This study is, however, a case study with a relatively smaller figure as the sample size. Another difference between these four studies and this study is that the former involved institutions which had graduates having been sampled from different departments (with the exception of Baylina & Villanueva), whilst this study concentrated only on geography departments.

The four studies also concentrated on both the supply and demand sides of graduate training whilst this study's focus was mainly on the supply side. One notable similarity between this study and the four afore-mentioned studies is that they all sought to investigate how the university training of the graduates had affected the potential and capability of these graduates to fit well into the labour market. Another linkage between this study and those four studies is that the findings of those studies such as lack of synergy between academia and industry, inadequate resources and theory-based training of students provided the impetus for this study to include some of these relevant issues as proxies for the dimensions of capacity used to assess the geography departments.

In a synthesis of recommended capacity building measures that the universities could put in place, Bawakyillernuo et al.'s (2013) recommended that there should be both vertical and horizontal linkages between tertiary education institutions and the world of work. This recommendation is in line with the studies done by Evans et al. (2009), Wiafe (2003) which also suggested a joint university-industry partnership to promote employability skills development. Evans et al.'s recommendation that universities should improve the use of Information technology facilities is an affirmation of Akinyemi et al.'s (2012) suggestion that information technology training be included in the curricula of every tertiary education institution.

Akinyemi et al. (2012), also recommended that non-marketable courses should be replaced by market-driven programmes in the university. This is in agreement with Evans et al.'s (2012) suggestion that universities should make their curricula more relevant to meet stakeholders' needs. Wiafe (2003) also lent further support to what Akinyemi et al. and Evans et al. recommended by suggesting that the university should conduct feasibility studies to find out the needs of the world of work to enable it redesign its curricula to meet labour market needs. Bawakyillernuo et al.'s (2013) recommendation that entrepreneurship courses be mandatory part of academic programmes is a clear support for Evans et al.'s (2009) suggestion on the development of practical curricula in all tertiary education institutions. Similarly, Bawakyillernuo et al.'s recommendation on the appointment of high quality lecturers with academic and professional qualification is in tandem with Evan's et al.'s suggestion that university faculty should be trained in employment-related skills.

In conclusion, another gap in the body of knowledge that this study attempted to fill include a population or sample gap in that all the cited studies failed to include undergraduate students and non-academic staff as part of the samples that they used. This study therefore, filled this sample gap by including final year level 400 students and the non-academic staff in the geography departments. The ensuing section is a discussion on the conceptual framework for the study.

Chapter Summary

The review has so far explored literature on how the capacity of academic departments affects their ability to equip students with employability skills outcomes. In doing this, the chapter identified the bigger picture under which one can place the concepts of capacity assessment and employability skills training. These are relevance of geography education to development and role of African Universities in national development, types of learning outcomes needed in higher education and training, the history, aims and content of higher education geography, resource adequacy and quality in geography education and ways of training geography students in employability skills.

The above-mentioned thematic areas served as the basis of the review of literature directly related to the research problem. Reasons for their inclusion in this aspect of the literature are many and varied. For instance, the attempt by the study to relate geography education to the dimensions of development is to remind the reader that, the remit of this study is to situate the research problem within an aspect of development studies – i.e. human and institutional development. The choice of themes such as African university

and national development, types of learning outcomes in higher education, the aims and contents of geography education, among others was to point the reader to the common thread that runs through them – to show how education and training could contribute to both social and economic development. That among all the resources available to a society, the human resource is the most valuable, without which the other factors are of no value. Lastly, the review of literature also included previous empirical studies related to the study's objectives.

CHAPTER THREE

THEORETICAL REVIEW AND CONCEPTUAL FRAMEWORK OF THE STUDY

Introduction

This part of the review of related literature provided the theoretical and conceptual justifications for the study. The conceptual framework was based on the theoretical and empirical reviews of the study. It was designed on the basis of the systems approach, highlighting subsystems such as the inputs, transformation and output subsystems. It appraised the extent to which the geography departments were able to deploy their capacities to train undergraduate students to acquire employable skills. It reviewed literature on the relationships among the different key constructs related to the main themes of the study. The theoretical review, on the other hand, provided the theoretical perspective through which the current investigator viewed and comprehended the problem under investigation. It provided guidelines for explaining the problem at hand and the mechanisms for connecting key variables.

The chapter is in two sections. The first section is the theoretical review, encompassing relevant theories and models of evaluation on human and institutional development. This section focuses on theories and models such as the human capital theory, systems theory, constructivist theory and competency-based model. The second section is the study's conceptual framework, highlighting the investigator's own position on the research problem, giving direction to the study. It covers issues such as explanation of

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This part of the review of related literature provided the theoretical and conceptual justifications for the study. The conceptual framework was based on the theoretical and empirical reviews of the study. It was designed on the basis of the systems approach, highlighting subsystems such as the inputs, transformation and output subsystems. It appraised the extent to which the geography departments were able to deploy their capacities to train undergraduate students to acquire employable skills. It reviewed literature on the relationships among the different key constructs related to the main themes of the study. The theoretical review, on the other hand, provided the theoretical perspective through which the current investigator viewed and comprehended the problem under investigation. It provided guidelines for explaining the problem at hand and the mechanisms for connecting key variables.

The chapter is in two sections. The first section is the theoretical review, encompassing relevant theories and models of evaluation on human and institutional development. This section focuses on theories and models such as the human capital theory, systems theory, constructivist theory and competency-based model. The second section is the study's conceptual framework, highlighting the investigator's own position on the research problem, giving direction to the study. It covers issues such as explanation of

the systems approach as the analytical tool for the study, explanation of key concepts in the conceptual framework and using the empirical studies discussed in the preceding section to illuminate the discussion of the conceptual framework. The last part is the summary of the chapter.

Theoretical Review of the Study

This section of the study presents a theoretical framework for appraising the influence of organizational capacity on employability skills development of students in geography departments in three public universities in Ghana. The theoretical review is on a strand of theories such as the systems approach, human capital theory, resource dependency theory, student involvement theory and constructivist theory.

Human capital theory

The emergence of the human capital theory dates back to the early work of some economists such as Denison (1962), Schultz (1981), Becker (1975) and Harbison and Myers (1964). These economists asserted that formal education was highly instrumental in improving the productive capacity of a population. They saw education as an agent of change and that there was a direct link between education and economic development (Acheampong, 2006).

The UNESCO Institute for Statistics (UIS) (2012) affirmed the instrumental role of education in economic development when it stated that it is through education that the accumulated information, knowledge, values, skills, attitudes and competencies of a country are transmitted across generations for that country's growth and development. In line with UNESCO's stance, the human capital theory posits that, it is the quantity and

quality of the occupational competencies possessed by a population which when deployed to mobilise and manage the other factors of production, enables that society to expedite its socio-economic development.

The Organisation for Economic Cooperation and Development (OECD) (2001) defines human capital as a suite of knowledge, skills, competencies, and attributes possessed by individuals that expedites the creation of personal, social and economic well-being of that society. Another definition closely aligned to the above is the one by Bohlander, Snell and Sherman (2001), who define human capital as the knowledge, skills, and capabilities of individuals in an organisation that have economic value to the organisation. An earlier definition by Dess and Pickens (1999), notes human capital to be the capabilities, knowledge, skills, and experiences that are inseparably, embodied in an individual. From these definitions, this study surmises that the desire by individuals to add economic and social value to their lives, with the aim of transforming their societies, serves as the main motivation for the human capital theory.

This study focuses on human capital as the knowledge, understanding, skills, competencies, experience, and personal attributes possessed by educated individuals, that enhance their chances of gaining employment, and thereby contributing to their personal development, and that of society. This study views human capital development as the deliberate process of increasing the quality of the individual to enable him/her gain employment for the socioeconomic development of society. Training is therefore, a primary mechanism by which human capital is developed. In apparent agreement with this assertion, Marimuthu, Arokiasamy, and Ismail (2009) describe human capital

as the knowledge and training required by an employee that increases his/her capability to perform activities of economic value.

The human capital theory posits that education or training transforms the cognitive and other innate abilities of the individual into productive output (Babalola, 2003). From this standpoint, the theory argues that any educational investment in people is a productive one in the sense that the educated or trained person is capable of making the optimum use of the other factors of production such as natural resources, physical and financial capital. In the current knowledge-based economies of the developed world, characterised by rapid technological innovations, the desire by many countries to facilitate their national development through investment in human resources, has become more imminent (Ukpere, 2009). Becker (1975), a human capital theorist advocates that for education or training to result in increased worker productivity and incomes, and the associated economic development, it should focus on two main types of human capital. These are (a) specific human capital that includes expertise acquired through education and training, which is context-specific or firm-specific; and (b) general human capital (generic skills), which is competence acquired through education and training valuable across different contexts (e.g., adaptability, communication, lifelong learning, independent work, innovation, etc.). Becker notes that since human capital is a means of production, the quantity and quality that an individual or a country invests, partly determines the rate of return on the human capital owned by that individual or country.

The importance of human capital to economic development has further been underlined by Psacharopoulos and Woodhall (1985) who argue that, though, it is important for a country to have natural resources or physical capital for national development, these resources in themselves, are passive factors of production, if the requisite human resource is not available to transform them into productive use. Their assertion has empirically been justified by the giant development strides made by natural resource-constrained countries like Switzerland, Singapore and Japan, which have invested heavily in human capital development by training their citizens to acquire science and technology-based skills for national development.

Implications of the human capital theory for education and development

The human capital theory underlies the immense contribution of education to national development. It postulates that education must be of good quality and in the right quantity to meet the development needs of a country. The theory emphasises the development of the appropriate competencies of people to make them more productive. The quality of education and training (one of the key components in human resource development) is assessable by the quality and quantity of the labour force that it supplies to a country (Acheampong, 2006). In other words, if the quality of education is low, the labour force is likely to be of low quality. The human capital theory postulates that for education and training to be of relevance to national development, its graduates must have the freedom or liberty to divest themselves of traditional or conservative ideas that tend to be antidevelopmental. In line with this assertion, Bloisi (2007) notes that, when education and training equips its graduates with the relevant knowledge and skills, thereby adding value to themselves and that of their societies, it then serves as a key source of socio-economic development.

Again, Babalola (2003) underscores the relevance of the human capital theory to educational development when he rationalises that for education to develop, it should give the new generation of people, appropriate parts of the knowledge past generations have already accumulated. He further opines that to make educational development relevant to national needs, the new generation of people should be given, a kind of human capital development that places premium on how existing knowledge should be used to develop new products, and lastly, the training should include the introduction of new workplace production processes and methods, and social services. He added by stating that for education and training to develop the appropriate human capital, people must be encouraged to develop entirely new ideas, products, processes and methods through creative approaches.

Another implication of the human capital theory for education and national development is the current competitive and dynamic nature of the labour market. Globally, the labour market in recent times has witnessed a fierce competition for the most qualified labour, be it in industry, academia or sports, to mention but a few. It is therefore important that educational organisations and training institutions develop effective policies and strategies to promote superior human capital development and management in the world of work in order for these training institutions to cope with these changes, and to remain relevant (Fugar, Ashiboe-Mensah & Adinyira, 2013).

In short, human capital, education and development are in a tripartite relationship in the sense that, it is the quality or capacity of human capital that serves as a gauge to determine a country's level of educational development, which in turn has a spill over effect on national development. Countries with

low levels of human capital have been associated with low levels of educational development, with a corresponding effect on national development.

Criticisms of the human capital theory relative to economic development

The perceived failure of the human capital theory to adequately explain how education and training brings about socio-economic development has variously been referred to as 'fallacies', 'shortcomings', 'criticisms', just to mention a few. This section focuses on the justifications behind these critiques and attempts to draw conclusions on the validity or otherwise of this theory in human resource development.

Acheampong (2006), states that the basic criticism against the theory stems from its assumption that in the labour market, there is perfect competition, and that the better-educated person is likely to get the better job. He sees this assumption as a fallacy in the sense that, in many countries, particularly developing countries, there is ample evidence to the contrary. Graduates with very good qualifications have either failed to make the mark at job interviews or have been side-lined and the vacant positions given to individuals with relatively inferior qualifications on the basis of social networking and other personal considerations.

Thurow (1975) also argues that productivity at the workplace is not a characteristic of individual personal traits or skills, but is largely a characteristic of jobs. What Thurow means by this assertion is that, employers use education as a screening tool to select workers, because in their perception, better-educated people can be trained for specific jobs more quickly and at a lower cost than their less-educated peers. Closely aligned with

Thurow's assertion is that of Spence's (1973) signalling model, which states that firms use education as a market signal of the potential productivity of a worker since there is hardly any other way for firms to determine the productive attributes of a potential worker.

Among the assumptions of the human capital theory is the one which states that the inequality in the labour market is due to (a) some people having more education than others, (b) some people willing to invest more in themselves, and (c) some individuals choosing to work in jobs that pay higher monetary incomes than those who like being at the lower end of the economic continuum. However, to Henry (n. d.), this mentality is one of the many shortcomings of the human capital theory. She argues that the theory does not take into account life altering variables such as racism, sexism, classism, and massive amounts of inequality in the educational systems. She further contends that in the USA, in view of these variables, minority groups such as Blacks and Latinos are more likely to live in poverty than their Caucasian neighbours. To her, the theory smacks of elements of Social Darwinism (i.e. the survival of the fittest) which emphasises the notion that the poor and the vulnerable, are biologically unfit to compete, and are to blame for their poverty stricken existence. Henry further argues that individuals who have not been able to accumulate large amounts of human capital are not failures due to their lack of intelligence, but because of discrimination and unequal education system.

Another major shortcoming of the human capital theory is the notion that education alone will end poverty. The argument is that, even if in liberalised economies every individual was provided with free education up to college level, there would not be enough jobs to accommodate the expected influx of job seekers. Currently, in view of the "massification" of higher education institutions in many parts of the world, including the developing world, the labour market is flooded with higher education graduates, all because the occupational structures in these countries are not able to provide these individuals with jobs. From these arguments, the conclusion is that in the end it is not education, which is the main factor in determining employment, but rather the labour market (Henry, n.d.).

The last shortcoming that this study would like to address is the one noted by Fagerlind and Saha (1997). They assert that even when national governments adopt educational plans that are consistent with specific national development goals and strategies, these governments can only be partially sure that the outcomes of these interventions will correspond to the original intentions. In view of this, they contend that, to view education as the panacea for the attainment of development goals is risky. In short, they surmise that in the absence of structural reforms, education in general and schooling in particular cannot by its own, achieve the desired development goals.

Notwithstanding the above criticisms of the human capital theory, there is no doubt that the theory still has some validity in the assertion that the nature of a country's human capital determines in some ways, the level of development in that country. In human resource development discourse, the theory is still resilient, and remains the principal conceptual model used in understanding human capital investment, both from the perspective of the individual and the firm (Bassi & McMurrer, 2006).

Systems approach and its application to education and training

A social system is an organization, or a set of organizations, population, groups or individuals that continuously interact with its environment through the acquisition of input, transformation of inputs into outputs, and exchange of information. It survives and grows by continuous adaptation to its environment (UNDP, 2010). The systems approach is therefore, a methodology, which describes, explains and analyses how an organization or any social unit (as interrelated set of elements functioning as an operating unit) interacts with its environment for its growth and survival. In addition, the systems approach helps to reveal omissions, redundancies, inconsistencies, both in the structure and the relations among the elements of the system, and thus helps to eliminate wasted efforts (Open University of Nigeria, undated). Different perspectives on the nature of this interaction have resulted in the emergence of other modern theories of organization.

The systems approach has its historical antecedents in the Second World War, which brought about some intractable capacity and capability challenges at the individual, team, organizational and institutional levels. The pressure for increased capacity and capability in the field of engineering, called for its application to the design of electronic, mechanical, military and space systems. After the world war, the systems approach was introduced to manufacturing industries, service and business organisations and government services, with the major aim of enhancing efficient and effective management of human and material resources (Open University of Nigeria, undated). This new paradigm of knowledge engendered important innovations in

organizational development, group dynamics, and action research (Williams, 2010).

Bastedo (2004) appositely adds that, the theory was developed after the World War Two in reaction to earlier theories of organizations, such as the human relations perspective of Elton Mayo and the administrative theories of Henri Fayal, which saw organizations as self-contained entities. The introduction of systems approach to education and training began in the late 1950s and early 1960s. Ever since, Williams (2010) claims that the systems field has expanded into a suite of over 1,000 methods or methodologies, over the past 60 years, having maintained its original orientation on capacity and capability issues despite its varied applications. Among the several systems methodologies used to address capacity and capability issues are cybernetics, soft systems, complexity/complex adaptive systems, system dynamics, viable systems modelling, systemic questioning, critical systems heuristics, social outcome mapping, cultural historical activity theory, network analysis, solution focus, scenario technique "cynefin", etc. (Williams & Hummel brunner, 2010),

This study, will however like to focus on how systems approach is used in the evaluation of educational institutions. The systems approach views education as a whole consisting of several of interdependent elements that are working in harmony to achieve common objectives. As pointed out in the preceding paragraph, the systems approach is a method and not a science. The systems approach enables the evaluator, working within a complex system such an education system, to analyse this complexity, describe it, recognise dysfunctions within the system, and make bare various levels of social and

institutional interactions (UNESCO, 1981). In analysing an open system like the education system, the systems approach focuses on four main issues. These are the objects or elements of the system, its attributes (i.e. qualities or properties of the system), the internal relationships among its objects, and its environment (University of Twente, 2015). These main issues have further been highlighted by the Open University of Nigeria (undated), who refer to the objects as sub-systems within the system, the environment as the supra-system — the bigger system which surrounds the system and the internal relationships as how inter-dependent and functionally-related the objects are to one another. However, they added other dimensions of a system such as systems having their own boundaries to make the system to be open or closed; systems can also described as relative and multi-dimensional in size.

Another essential feature of open systems is its feedback system, which the information that consumers of the product or service of the system convey to the systems after making use of the product or service. According to Edoimioya (2014), the importance of the feedback system is to inform the training institution what the employers of its graduate need and expect from the students they are producing. Such information will help the institution fashion out ways to meet the employers' needs or improve what they have been doing. In this study, the feedback was provided by the level 400 students, graduates of the geography departments and their employers.

Lewis and Smith (1994) posit that in the evaluation of educational programmes or curricula, the systems evaluator should focus on three core elements of the system, namely the input, throughput (process) and output

stages. They further illuminate what these three concepts stand for in higher education.

- (a) The inputs represent student characteristics (academic, demographic, needs and expectations), faculty characteristics (teaching experience, qualifications, etc.), financial resources, (adequacy, judicious use, etc.) facilities (classrooms, laboratories, libraries, instructional equipment, etc.), programmes, curricula, courses, teaching schedules, etc., and support services such as photocopying, internet access, transportation and food.
- (b) The transformation process include design of programmes, courses, instructional schedules, class size and inputs; instructional delivery methods (lecture, seminar, internship, etc.); measurement of students learning outcomes (number, nature and frequency of quizzes, assignments and examinations); evaluation of the academic programmes, courses and the academic staff (student surveys, alumni, parents, employers, etc.).
- (c) The outputs include the academic achievements of students such as success rates, skill development, competency; graduation rate, dropout, failure, etc.; post-graduate (pass rates on professional exams, additional education such as gaining admission into graduate schools) and employment achievements (i. e. employer satisfaction).

To use the systems approach to evaluate the input sub-system of a higher education institution, the evaluator must first consider the resources that are available to the institution. UNESCO (1981) suggests that the evaluator should include in the evaluation, the time and energy spent by the

university teacher in preparing for him/herself and the students, the time and energy expended by the students in learning (i. e. academic learning time), the quantity and quality of teaching materials, equipment and office accommodation. Student characteristics that have impact on their learning include their innate intellectual ability, their ability to function as learners, their personal development stage, their self-attitude and degree of mental health (Dunn, 2007). Dunn further adds that teacher characteristics that influence student learning include teacher expectations, qualifications and experience, and how he/she aligns his/her methods of instruction with students' preferred style of learning and motivation.

UNESCO (1981) also contends that the timely movement of the academic staff from one subject area to another depending on their area of expertise, collective choice of instructional strategies and materials, and timely allocation of funds for department's programmes, also impact positively on student learning outcomes. Other input resources that can affect the attainment of students' learning outcomes include the department's vision and mission statements, couched out of its philosophy and the social climate amongst their students, their teachers, between students and teachers, between teachers and the head of department and between the department and its external stakeholders (Dunn, 2007). The systems evaluator must therefore consider all these factors.

Lastly, the systems evaluator will have to take into consideration, the National Accreditation Board (2011) benchmarks for the assessment of the contents of academic and professional programmes. The recommended items include the (i) number and qualifications of academic staff, (ii) number of

non-teaching staff, (iii) number of classrooms, workshops, libraries and laboratories, (iv) titles of textbooks and journals, (v) number of equipment/instruments/tools, and (vi) student/staff ratio, which according to the National Council for Tertiary Education (NCTE) should be around 18:1 for the social sciences, including geography departments.

In the evaluation of the throughput sub-system, the systems evaluator will have to consider issues such as

- (a) relevant processes (e. g. curricula, instruction, student support services, etc.) by which students attain learning outcomes;
- (b) the resources (human, physical and financial) and feedback (from employers, alumni and internship supervisors;
- (c) the factors accounting for differences between learning outcomes in the official curricula and learning outcomes in the received curricula of students;
- (d) the delivery of courses, contribute individually and collectively to attainment of programme goals;
- (e) whether different curricula such as the official, the implemented, and the received curricula are coordinated to insure the attainment of the desired cognitive and non-cognitive learning outcomes;
- (f) the validity of the assessment methodologies for assessing the three main domains of learning outcome; and
- (g) constraints in the implementation of programme goals, affect successes and failures in the attainment of programmes and the training of students (Hatfield, 2001).

In addition to the above, the Inter-University Quality Assurance Committee (IQAC, undated) recommends the following process variables for evaluation of programmes:

- (a) whether hands-on experiences are part of the instructional process;
- (b) how the structure and related activities of the curriculum promote student learning and experience;
- (c) how information from tracer studies is used to design and develop curriculum;
- (d) whether instruction takes into account new research findings and current developments in specialised or professional fields;
- (e) whether instructional strategies are varied and are in consonance with students' learning styles;
- (f) whether the academic staff are oriented and trained/retrained in pedagogy and in innovative ways of instruction; and
- (g) whether instructors apply ICT to their instruction and adopt other innovative ways of instruction.

In evaluating the output subsystem of academic departments or institutions, the systems evaluator considers issues such as

(a) how the curriculum structure and assessment regimes promote critical thinking, independent learning, skills acquisition and high cognitive achievements by students (IQAC, undated);

- (b) effects of the omissions, redundancies and inconsistencies (both in the structure and inter-relationships of elements of the system) on the quality of students' learning outcomes;
- (c) identifying the nature and quality of the output/product, be it cognitive, affective or psychomotor;
- (d) whether students' learning outcomes meet social expectations of stakeholders such as employers, the government and parents (National Open University of Nigeria, undated);
- (e) analysing results of departmental or institutional self-study in such areas as programme goals, programme structure and content, administrative services, academic staff competence, etc. aimed to assisting the institution to review existing policies and helping the staff to develop; and\
- (f) analysing results of external peer review, which should have included onsite visit by the review team and interviewing of institutional heads by the peer review team (Lubinescu, Ratcliff & Gaffney, 2001).

The systems approach, like any other theoretical framework or methodology, has some limitations. Among these are

- (i) systems analysts or evaluators are not able to identify all the possible relationships of the various elements in the system;
- (ii) systems evaluators also have a challenge of not being able to conceptualise the problems of transformation (i. e. the transition between the input and the output sub-systems). In other words, not being able to define the strategy to be used in the transformation process;

- (iii) system evaluators often fail to abide by the law of requisite variety, in the sense that, the individual differences among students require a variety of resources to aid in their attainment of learning outcomes. This situation makes it difficult for the systems evaluator to consider all the abilities of students when tackling an instructional problem. In view of this, the strategy that the evaluator uses may not satisfy all the evaluation goals, thus failing to satisfy the law of variety; and
- (iv) Due to differences in social expectations between students and instructors, the systems evaluator may find it difficult deciding on which learning outcomes should be prioritised in the evaluation exercise (Open National University of Nigeria, undated).

In spite of the above-mentioned limitations in the application of the systems approach to education, a number of studies have been conducted where the researchers applied the systems approach to the evaluation of their research problems. Two of such studies (both cited by Dunn, 2007) were conducted by Summers and Wolfe (1975) and Mayer, Mullins and Moore (2001). Summers and Wolfe used the input, throughput and output approach to evaluate the factors influencing student achievement in schools of a large metropolitan area in the state of Philadelphia, in the USA. Mayers, Mullins and Moore, on the other hand, used the systems approach to review data collected by the US National Centre for Education Statistics, and assessed the factors that account for student achievement throughout the USA. These two studies showed that systems-based studies are feasible and useful.

In another case study, the OECD (2011) reported on professional teacher preparation and deployment in Singapore from a systems perspective. According to the report, in the input subsystem of teacher professional development, young people with strong academic ability were carefully selected from the top one-third cohort of the secondary school graduating class for professional training at the university level. In the throughput subsystem, these students were given rigorous training in content and teaching methodologies, coupled with student internships in some selected schools. As part of the training and as a form of motivation, the teacher trainees were given monthly stipends that were comparable to the monthly salaries of fresh graduates in other fields/professions. In the output subsystem, the newly graduated teachers signed bonds for a minimum of three years, after which they were assessed annually, giving them the opportunity to explore career paths such as becoming master (school) teachers, specialists in curriculum research, or as school leaders(heads). Every year, all teachers were awarded 100 hours of professional development at no cost to them. Poorly performing teachers were provided assistance to improve and were dismissed if they did not.

From the above case studies, this study can surmise the inherent benefits in the use of the systems approach to evaluate employability skills implementation in geography departments. These include

(i) helping to identify various elements of the departments, thus exposing hidden mechanisms and entities,

- (ii) satisfying the criterion of functional utility as it demands the choice of techniques and methods appropriate to the desired educational and training goals,
- (iii) helping in planning, organising and evaluating educational programmes and instructional processes,
- (iv) helping to focus attention on the requirements and performance of the geography departments so that they might achieve optimal efficiency, and
- (v) specifying, operationalising and implementing the objectives of the departments, thus enabling the evaluator to devise the competency to develop the goals to be achieved, and help pay attention to the requirements of any academic department.

Resource dependency theory (RDT)

The main postulate of this theory is that all organizations rely on resources from their environment. Since these resources are controlled by other organizations in the external environment, these organizations are able to exert power and control over the recipient organizations that require their resources (Fadare, 2013). Similarly, Fadare, Pfeffer and Salanchi (1978) argue that for organizations to survive, it is imperative that they acquire and maintain resources, a key postulate of the RDT. Adding to this argument, Hatch (2013) explains that an organisation's reliance on its environment is a function of its need for input resources like equipment and materials, labour, capital and sale outlets for its products and services.

From the assertions, arguments and explanations presented in the preceding paragraph, we can say that an organization cannot survive if it is

unable to guarantee unimpeded supply of resources. For organizations to be able to survive, Pfeffer and Salanchi (1978) have suggested that they should be able to manage demands imposed on them by say, interest groups upon whom the organization depends for resources and support. Some of the survival strategies that organizations can use are creating joint ventures, retaining multiple sources of supply, having vertical integration with suppliers, engaging in horizontal integration with competitors and marketing.

In applying the resource dependency theory to geography departments, we can say that these academic departments indeed depend on resources provided by the external environment. The geography departments being subsystems within a supra-system such as the university system depend on the university for their input resources. For instance, students who are the "raw materials" for the geography departments are admitted into the university through the university registrar. Again, an input resource such as staff is also recruited into the university through the registrar. Other inputs such as equipment and teaching learning materials are acquired by the university on behalf of the geography departments. In addition, the heads of department are appointed by the Vice Chancellor in consultation with the dean or provost of the faculty/school or college in which the department is located.

Aside the influence of the university on the survival of the geography departments, other organizations and associations in the external environment also influence the survival of the departments. These organizations and associations include professional associations of which the staff of the geography departments are members, alumni associations whose members are at times, invited by the geography departments to deliver lectures to both staff

and students and employers and business entities where graduates of the geography departments are likely to get employment. These employers and professionals often offer advisory and consultancy services to the geography departments and in some cases serve on the boards of some of these departments. Lastly, geography departments the world over have international collaborations with other academic and non-academic organizations. They influence one another through staff and student exchange programmes, joint research projects and funding of locally initiated programmes and projects.

Astin's (1984) student involvement theory (SIT)

Student involvement means the quantity and quality of the physical and psychological energy that students invest in the college or university experience. The involvement can be in the form of their academic work, participation in co-curricular activities, interaction with faculty and other staff members, etc. According to this theory, when students' involvement in the above activities is high, the greater is the amount of student learning and personal development. From the perspective of this theory, for any educational policy or practice to be fully maximized it must be able to increase student involvement. In other words, as far as there is no increase in student involvement in the above-mentioned areas of student academic life, then that educational policy or practice has no or little effect.

The most important aspect of this theory in the training of students is that, it encourages instructors to focus less on content and teaching techniques and more on what students are actually doing – how motivated are they and how much time and energy are they devoting to the learning process? This theory underlines the major philosophy in teaching, that is, every act of

teaching should lead to student learning(Smith, 2004). Smith contends further that learning is the responsibility of the teacher and that if students do not learn it is the fault of the teacher. When learning does not happen, then the instructor has to take a second look at his/her teaching strategies or methods. Student academic involvement include activities such as how they work hard at their studies, number of hours they spend studying, the degree of interest in their course of study and good study habits. Such students tend to isolate themselves from their peers and are less susceptible to their peers' influence (Astin, 1984).

The last postulate of the student involvement theory is that, students' ability to achieve particular developmental goals is a direct function of the time and effort that they devote to activities designed to produce those goals. For example, if increased discipline-based or technical skills is an important goal for geography students, the extent to which students reach this goal is a direct function of the time they spend at such activities as listening to lectures, talking about geography, reading books about geography, discussing geography with other students, and engaging in hands-on activities to hone their skills in geography literacy (e.g. fieldwork). The more time students spend on these activities, the more geography that they learn. Another closely related issue is that for a particular curriculum to achieve its intended effects, it must elicit sufficient student effort and investment of energy to bring about the desired learning and development.

Constructive theory and its application to education and training

The concept of constructivism can be traced to the classical antiquity era (i. e. between the early antiquity period of 8th and 7th century BC and the late antiquity period of 4th to 7th AD) (Wikipedia free Encyclopaedia). Constructivism first started with Socrates' dialogues with his followers, in which he asked directed questions that exposed the deficiencies in the thinking of his followers. Later, in the 20th century to be precise, the concept took a new meaning among the paradigms of knowledge when Jean Piaget and John Dewey proposed theories of childhood development and education, now called Progressive Education that led to the evolution of constructivism (Educational Broadcasting Corporation, 2004).

Constructivist theory explains and interprets how a learner constructs his/her own knowledge (Learning Theories, 2011). Atherton (2010) adds that in constructivism, the learner is much more actively involved in a joint enterprise with the teacher creating ("constructing") new meanings. From these two statements by Learning Theories and Atherton, one can distinguish two main types of constructivism. First is cognitive constructivism, which relates to how individuals construct knowledge, based on their developmental stages and learning styles (introduced by Jean Piaget in the late 1970s), and second, social constructivism, which explains how individuals are able to develop meanings and understandings out of social encounters (introduced by Lev Vygotsky in 1985).

In summary, constructivism is a theory based on observation and scientific study on how people learn. It holds the perspective that people have a subjective view of reality as they construct their own knowledge and

understanding of the world, by experiencing and reflecting on their experiences. It further contends that when individuals encounter something new, they have to reconcile it with their previous ideas and experience, and in the process, may change what they believe, or may even discard the new knowledge as irrelevant. Nevertheless, people are active creators of their own knowledge by asking questions, exploring and assessing what they know (Educational Broadcasting Corporation, 2004).

The ensuing paragraphs contain a synthesis of how the constructivist theory is utilised in the training of students and the instructional resources that should be utilised to ensure effective training.

First, constructivism ensures learner-centred instruction in the sense that in the training process, learners bring their previous experiences and prior knowledge to the classroom and use these to connect actively with new ideas or problems that are presented for discussion (National Open University of Nigeria, undated). In other words, the learner is trained to take in new information, which he/she turns into knowledge, by giving meaning to it when he/she uses his/her own prior attitudes, beliefs and experiences as references (Stavredes, 2011).

Second, the theory makes students responsible for their own learning as the constructivist instructor structures the instructional process in such a way as to make students connect new knowledge with prior knowledge. Students' responsibility for learning demands that they continuously ask questions to clear their misconceptions and above all, get the understanding that there is no one way of solving problems, but rather divergent means of finding answers (National Open University of Nigeria, undated). Similarly, Stavredes (2011)

asserts that constructivism is best utilised when students are given the opportunity to take control of their learning as it pertains in problem-based learning and other student-centred instructional activities such as hands-on assignments, experiments, simulations and use of equipment (Open University of Nigeria, undated). Stavredes adds that when students engage in problem-solving activities, they not only get a real understanding of the importance of the problem at hand, but also comprehend the relevance of the topic, and construct knowledge through their experiences.

Third, the constructivist instructor is not an indolent professional as some conservative or traditional educators claim. It rather modifies the instructor's role by acting as a facilitator to students to coach and help them to construct knowledge rather than reproduce a series of facts, as it pertains in the traditional transmission model of education. To help students be accountable to their own learning, the constructivist instructor creates and sustains a learning environment where students find solutions to problems and engage in inquiry-based activities, by formulating hypotheses and testing their ideas, drawing conclusions and inferences, and pooling and conveying their resources in a collaborative learning environment. As the constructivist instructor guides their students, the latter are transformed from being passive recipients of information to active participants in the learning process (Educational Broadcasting Corporation 2004). In sum, the constructivist instructor coaches, moderates, suggests, etc., but allows the student the learning space to experiment, ask questions, try things that didn't work, set their own goals and means of assessment.

Fourth, constructivism engenders a student-centred, but instructor-directed classroom environment. Constructivist instructors pose questions and problems and then guide students to find their own answers, by using techniques such as the following:

- (i) Prompting students to formulate their own questions (i.e. inquiry);
- (ii) Allowing multiple interpretations and expressions of learning (multiple intelligence); and
- (iii) Encouraging group work and the use of peers as resources (collaborative learning) (Educational Broadcasting Corporation, 2004).

Fifth, since the aim of the constructivist theory in the instructional process is to enable students construct solutions based on their personal experiences and prior knowledge, the constructivist instructor deploys a number of resources to occasion this process. These include models such as globes, proto-types of natural and cultural features, specimens, and realia (real objects). Students are to conduct experiments by using different specimens and other materials that are manipulative to attain the expected results (Open University of Nigeria, undated). For example in geography, students can demonstrate volcanic eruption by assembling materials such as baking soda, vinegar, red or yellowing colouring (optional), a small tray, a cup, paper cone and towels for the experiment. When baking soda and vinegar come together, they react and form carbonic acid, which due to its unstable nature, splits into carbon dioxide, water and sodium acetate solution. The 'volcanic' eruption occurs as the carbonic acid decomposes and produces a build-up of carbon dioxide gas.

Lastly, constructivism in classroom instruction enables the use of non-projected teaching-learning aids such as posters, charts, picture albums, and other forms of pictorial representations to tap the prior experiences of students, as well as help them to straighten up their previously held misconceptions. The use of instructional resources presupposes that students have some prior experiences, and that in the learning process, they will build on those experiences with the instructor playing a facilitating role (Open University of Nigeria, undated).

One major advantage in the use of the constructivist theory in the training of students is that it enables the use of real world examples. Students create knowledge and meaning out of the information provided by relating the information to their own experiences, beliefs and attitudes (Wiki-spaces classroom, undated). Again, constructivism promotes collaborative learning amongst students in the sense that students learn about learning not only from themselves, but also from their peers. By reviewing and reflecting on their learning processes together, students can pick up strategies and methods from one another (Education Broadcasting Corporation, 2004).

However, one weakness in the application of constructivism to instruction is that individual experiences and attitudes can vary. It will, therefore, be difficult for a specific desirable outcome to be achieved, when different people approach the problem or task at hand from different perspectives (Wiki-spaces, undated). Again, Kirschner, Swaller and Clark (2006 as cited in Taber, 2011) have denounced the use of constructivism in classroom instruction on the grounds that instructional approaches such as discovery, constructivist experiential, problem-based and inquiry-based

instruction are forms of 'minimally guided instruction' – that constructivist instructors do not deliberately teach all the content to be learnt by the student. Lastly, Taber (2001 as cited in Taber, 2011) also contends that where instruction is not designed to closely build on learners' current state of knowledge, a range of things can go wrong in the instructional process – misinterpretations, failure to make expected links and inappropriate links.

In spite of the above-mentioned inherent weaknesses in the application of the constructivist theory to school training, it is increasingly becoming a new paradigm of knowledge in many geography departments. For example, in the School of Global Geography and Development Studies at the University of Sussex in the UK, as part of the instructional strategies, workshops and seminars are organised around small student groups and fieldwork activities to provide real world experience for students. Other activities include laboratory work, which allows students to conduct experiments and do independent, research/project which allows students to think reflectively and to develop a longer piece of work, thus improving their analytical skills (University of Sussex, 2010). In this institution, student outcomes are assessed by the use of a variety of student-centred strategies such as essays/projects, fieldwork and laboratory reports, student presentations and designing of posters on thematic issues.

Similarly, in the geography department at the Oxford Brookes University in the United Kingdom (UK), their curricula or programmes include a range of courses, designed on constructivist principles such as residential fieldwork (compulsory for all geography students), debating modules, individual and group research projects, students assessing their own

work and that of their peers. The overarching goal of all these activities is to help students develop disciplinary knowledge and develop rigorous analytical skills, alongside the ability to conduct intellectual critiques that are attractive to a broad range of employers. Other skills include becoming more enthusiastic participants in their learning and above all, to acquire and develop a range of transferable skills (e.g. communication, presentation, teamwork and negotiation, numeracy and data manipulation) demanded by graduate employers (Oxford Brookes University, undated).

Another institution that has made use of constructive principles in the training of students is the College of Education and Human Development at the Bowling Green State University, Ohio in the United States of America (USA). In a study to find out the impact of the traditional lecture/textbook approach to instruction and that of active learning approach, Johnson (2011) concluded that students who were taught with the active learning approach rated the instruction significantly higher than those taught by merely listening to lectures or by the traditional lecture method. Reasons given by those taught with the active learning approach which resulted in a meaningful learning experience include, having had the opportunity to apply the content learned, being active and engaged in the use of technology as a learning tool, used interesting instructional materials, and were offered an opportunity to cooperate and collaborate.

From the afore-mentioned discussion on constructivism, it is the contention of this study that the theory is relevant to the research problem. For geography departments to be able to train students in employability outcomes such as intellectual skills, key skills, personal attributes and knowledge of the

world of work (i.e. commercial awareness), then they need to employ the principles and strategies used by constructivism. For example, constructivism can be used to develop in students, learning outcomes such as (a) critical thinking, analytical skills, innovative skills, ability to put theory into practice and, ability to synthesise (intellectual) and (b) communication (oral, visual & written), teamwork, problem solving, data gathering and numeracy skills (key skills). To do this, the geography departments would have to use instructional strategies such as individual and group projects, assignments, fieldwork, problem solving based on either hypothesised or real world issues, research seminars and presentations (oral, visual or poster).

One particular strategy that also operates on constructivist principles to develop students' intellectual and key skills is the use of personal student portfolio (a form of booklet) in which students keep records of their learning, identifying their weaknesses and strengths, and developing personal academic goals. Entries into such student portfolios include their best work in geography courses, employment records, internships and experiences, etc. All these activities are to be supervised by project or internship supervisors whose interests align with that of the students that he/she is supervising.

Constructivism is also relevant to the development of personal attributes (self-efficacy, lifelong learning, risk-taking, taking initiatives, working independently, leadership and assertive skills, self-confidence, etc.) and knowledge of employer organisations (commercial awareness) such as knowing their visions and missions, knowing types of skills required by organizations and knowing the structure of employer organizations. Instructional strategies that use constructivist principles in the training of

students to develop their personal attributes and acquire knowledge of the workings of employer organizations include work-based learning, laboratory practical, resource persons' presentations, tutorials and resource-based instruction.

The instructional strategies highlighted above if effectively deployed are likely to bring about employability learning outcomes, which may not only inure to the benefit of students, but also the geography departments and even employers. For example, they may assist students in self-reflection and self-evaluation over their studies, convince employers about skills, abilities and work ethics, assess their own progress in their career development and gain useful resume in preparing for job interviews. To the geography departments, they may have evidence of authentic students' learning outcomes presented in documents and computer files; students' personal reflective portfolios may serve as tools for potential curriculum improvement/enrichment; may lead to better alumni breakthroughs, thus improving departmental reputations; documents on employability activities may prove useful for accreditation and external evaluation of department's programmes.

Lastly, employers are likely to benefit from the student-centred training of geography departments as

- (a) student work-place or internship performance, student personal reflective portfolios and problem-based learning activities will serve as evidence of the competence areas that students have developed in their studies;
- (b) sample geographic work products will help convince employers who had not previously engaged geographers, to do so for the first time; and

(c) such a training will give insights regarding organisation, creativity and work ethic of potential employees.

Summary on theoretical perspectives

In summary, it is the contention of this study that, the above-mentioned evidence-based learning outcomes are a more authentic means of geography graduates proving to potential employers of their competence, than a piece of paper in the form of academic transcripts or degree certificates.

In summarizing the discussions on the above theories, some similarities and differences in these theories with regard to the study of geography departments as social systems are worth mentioning. For instance, two of the theories (open systems and resource dependency) use organizations or broader social systems as their units of analysis. The last theory, the student involvement theory, however, focuses on the individual student as its unit of analysis. Despite this difference, all these five theories are very appropriate to the objectives of this study in the sense that though, the focus of this study is on geography departments, a study on how academic departments deploy their capacity, cannot preclude student issues, from the discussions.

Another common strand running through the theories, with the exception of the student involvement theory, is that they all try to explain how the external environment influences organizations. For instance, geography departments being social systems are influenced by the external environment. From the perspective of the systems theory, geography departments acquire their input resources such as human and material resources from the external environment. The resource dependency theory (RDT), on the other hand, also

argues that for geography departments to survive, they need to get resources from their external environment.

The RDT postulates that for geography departments to survive, a lot depends on how they react to changing conditions in their external environment – that they must always be on the look out to take advantage of opportunities that the external environment presents, and be wary of imminent threats posed by the same environment. In sum, it can be concluded that these theories have shown that organizations do not depend solely on internal environmental factors such as organizational culture, motivation and capacity, but also on external influences to which they have to adapt for their survival.

In conclusion, the use of multiple theories in addressing the issue of how geography departments deploy their capacities to train students in employable skills is the result of the complex nature of the object of study, which to all intents and purposes defies the use of a single theory. The investigator of this research has realized how inadequate the main theory for this study, the systems approach, is in explaining fully all the dimensions of the study. He therefore decided to bring in the other theories, thus justifying Griffith's (1997) concept of "theoretical pluralism" which states that since some problems are large and complex and no single theory is capable of encompassing them, researchers, analysts or evaluators are at liberty to use more than one theoretical perspective in their study.

Models for evaluating capacity of academic departments

There are several models for evaluating the effectiveness of academic programmes and the capacity of educational institutions. The differences among these models are due to the varying perspectives of the originators of

these models. These perspectives are essentially about what the evaluation should accomplish and how the evaluation should be undertaken (Adentwi, 2005). In this section, the study gives a brief discussion of a number of models for evaluating academic programmes and academic departments or institutions. These models include the input, context, process and product model (CIPP), responsive model and the competency-based model.

The responsive model

The main proponent of this model is Stake (1991), who described it as an approach to the evaluation of educational and other programmes. This model operates on the premise that the most authentic programme evaluation thrives on a multi-perspective approach to evaluation. In other words, the evaluator must seek diverse perspectives of all stakeholders of the institution or programme (Adentwi, 2005). Due to its multi-perspective stance, this evaluation model tends to place more emphasis on qualitative methods of data gathering, analysis and interpretation, as opposed to quantitative methods. It recommends the use of data collection methods such as observation, unstructured interviews and other naturalistic and participant-oriented approaches of data collection; and the formulation of models that reflect the eclectic viewpoints of diverse groups (Adentwi, 2005).

This study intends to adopt some of the key elements in this model. For example, it intends to use structured observation guides to observe classroom interactions between instructors and students and the state and type of physical facilities in the geography departments. It will also use interview schedules and focus group discussion guide as part of its data collection instruments.

For the responsive evaluator to get the maximum shades of opinions on the object of evaluation, he/she needs to spend a considerable amount of time with the stakeholders of the institution or programme. This calls for observing programme activities as they unfold, with the aim of understanding underlying motivations, purposes and concerns, and conceptualising problems and issues from various perspectives. This role on the part of the evaluator calls for a therapeutic or empathetic attitude from the evaluator. In other words, instead of the evaluator acting as a judge on the worthiness or otherwise of a programme, he/she should rather act as a counsellor and a facilitator, helping participants clarify their own understandings and making the right decisions. The researcher of this study in order to observe some activities spent some time with the staff and students of the geography departments, though not in a participant-observer position.

The merits of this model include the fact that it is human-centred, as it projects the human element in evaluation by directing attention of the evaluators to the needs of the clients or stakeholders in a given evaluation context. Again, the model is highly sensitive to the diverse views of different individuals and groups, and has the capacity to accommodate poorly focused concerns. This advantage makes responsive evaluators to operate in situations where there are differences between the concerns of different groups because they can embody these conflicting points of view in meaningful ways.

Like any other evaluation model, the responsive model is not without some challenges. One major obstacle in this model is that in practice, it is very difficult to work with all the multiple perspectives of all stakeholders. Additionally, by virtue of its complex nature, intellectuals tend to appreciate

its use, more than practitioners whose views and attitudes really matter with regard to the implementation of evaluation recommendations. Again, critics of this model argue that it is subjective as findings from such a evaluation are based on data collection methods such as observation, participant-oriented approaches and other naturalistic methods of data collection and analysis, as well as on the overreliance of individual perspectives on the object of evaluation. Lastly, in view of its qualitative nature, the use of the responsive model in evaluation is relatively more expensive than other models. This is because of its use of labour-intensive and time-consuming methods of data collection and analysis.

In spite of the challenges in the use of the responsive model, some evaluators have used it in their studies. For example, Curran, Christopher, Lemire, Collins and Barrett (2003) used this model to evaluate a clinical skills assessment and training (CSAT) programme at the Faculty of Medicine, Memorial University of Newfoundland, Canada. The findings of that study showed that the evaluators identified the concerns and issues of programme stakeholders, which was information used for programme enhancement and improvement.

The context, input, process and product (CIPP) evaluation model

Context, Input, Process and Product (CIPP) evaluation model is a type of decision-oriented evaluation model developed by the Phi Delta Kappa Committee on Evaluation in 1971 (Smith, 1980), but was later popularised by Stufflebeam (1971a) who describes the CIPP evaluation model as a process of delineating, obtaining and providing useful information for judging decision alternatives. CIPP is an evaluation model that requires the evaluation of the

context, input, process and product in judging the development value of a programme or institution. The CIPP model is an attempt to make evaluation directly relevant to the needs of decision makers, by providing them with pertinent information during the different stages of a programme implementation (World Public Library, 2015). CIPP is the acronym for the four aspects of the Context, Inputs, Process and Product model. These four aspects of the model aid the decision maker to answer the following four basic questions:

- (i) What should we do?
- (ii) How should we do it?
- (iii) Are we doing it as planned?
- (iv) Did the programme work? (World Public Library, 2015).

The first question above encompasses the collection and analysis of needs assessment data to determine goals, priorities and objectives. For example, a context evaluation of an honours degree geography programme in the university might involve an analysis of the existing objectives of the geography programme and the concerns, perceptions or attitudes and needs of the stakeholders. These issues are relevant to the current study because the undergraduate geography programmes in Ghana's public universities have been in existence since independence, but the current researcher is of the view that there are "unmet" employability skills needs of the undergraduate students. This study, therefore sought to ascertain and make available to the leadership and management of the geography departments pertinent information on those unmet needs of the students.

The second question above, which is the input aspect of the CIPP model, involves the steps and resources needed to achieve the goals and objectives of the programme. This might call for the decision makers looking within and outside the institution to identify potential sources of resources (both material and human, including social networks) to address the unmet needs of the clients or stakeholders. According to Stufflebeam (1973), the purpose of the input aspect of the evaluation is to ascertain the best way to utilise resources in order to achieve programme or institutional objectives.

In the context of this study, resources for the undergraduate geography programmes may include both academic and non-academic staff; physical infrastructure (e.g. libraries, laboratories, reading rooms, offices, internet connectivity etc.,); vision and mission statements; norms, values and ethics; teaching and learning materials; governance and management structures; financial, and most importantly, the curricula for training students (IQAC, undated). It is clear that the role that the input evaluation aspect of the CIPP model played in this study was to identify the relevant resources and assess their relative worth in helping undergraduate geography students' training in employability skills.

The third question is about the process aspect of the CIPP model. In this evaluation, the evaluator provides decision makers with information as to how well the programme is being implemented or the institution is faring. This involves identifying challenges or setbacks that may derail the implementation of the programme, the revisions or changes that ought to be made for a successful implementation (Borich, 1991). This aspect of the evaluation also analyses how well the implementation process is following the plans and

guidelines of the programme, the strengths and weaknesses of material resources and the delivery of the programme, conflicts that arise, staff support and morale, and budgeting problems (World Public Library, 2015). This premise clearly makes a case for this study where the focus is on the role of the staff in the implementation of the employability skills aspects of undergraduate geography programmes. Other process evaluation issues that the study found out included whether

- (a) students are provided with hands-on learning experiences,
- (b) the staff use varying instructional methods to ensure skills acquisition,
- (c) the curricula and assessments strategies are amenable to generic learning outcomes, (d) there is a healthy staff-student collaboration,
- (e) there are appropriate facilities for enhancing effective instructions,
- (f) there is application of ICT and other innovative ways for instruction (IQAC, undated).

The last question concerns the product aspect of the CIPP evaluation model. The major concern here is to compare the actual demonstrable learning outcomes that students have acquired to the anticipated outcomes. Findings from this gap analysis will enable decision makers to decide if the programme should be continued, modified or dropped altogether (World Public Library, 2015). This aspect of the CIPP evaluation model is in line with the current study, in which questions on whether the geography departments have the capacity to train students in employability skills for the world of work will be raised.

The decision-focused model, of which the CIPP is an example has been criticised by other evaluators such as Borich (1991) and Cronbach

(1980). They contend that the CIPP evaluator is just an information giver to the decision maker, and not a judge in the programme planning and implementation. The implication of their contention is that the decision-oriented model of evaluation places the evaluator at the services of the decision maker by helping him/her to select from among alternative approaches for dealing with a situation and also drawing the decision maker's attention to alternatives, if he or she does not perceive those alternatives (Adentwi, 2005).

In spite of the criticisms levelled against the decision-oriented evaluation model, the CIPP model has been used in a number of contexts. For example, Sankar-Tokmak, Baturay and Fadde (2013) used the model to redesign an online Informatics fuzzy logic course in a Master's programme. They used data collection instruments such as a Likert-type questionnaire, focus group interview guide and open-ended questionnaire to redesign the course with more examples and visuals, for increased student-staff interactions, and for arranging extra meetings between students and staff before the commencement of semester examinations.

Competence-based education model

In the face of increasing pressure from students, employers and education authorities, reforms in university education have seen a gradual shift from the traditional transmission education model to a model that advocates the development of competencies with involvement of students in the instructional process (Corominas, Saurina & Villar, 2010). Competency-based education is rooted in the notion that education is all about mastering a set of skills and knowledge, with students working on specific skills and

knowledge until they can demonstrate their understanding and ability to apply them (Bill & Melinda Gates, 2011; Nellie Mae Foundation, 2012). In the ensuing paragraphs, the study discusses the rationale, content characteristics, inherent benefits, and limitations of the competency-based education model.

Scholars and educational institutions have defined competency-based education (CBE) in several ways. Perez (2011) defined CBE as a work-related type of education that provides students the opportunity to be trained both professionally and academically to enhance their chances of getting employment. Shapiro (2014), has also defined CBE as a type of education that allows students to gain credit by demonstrating academic competence through a combination of assessment and documentation of experience - in other words, students must demonstrate a defined set of proficiencies/skills and mastery of knowledge and content couched in real-world contexts. From these two definitions of CBE, it suffices to say that CBE is a hands-on form of training that ensures the adequate preparation of students for the world of work through the simulation of real-work activities. The award of degrees or any other form of recognising student learning is therefore, not based on the length of their training, but rather their ability to demonstrate certain proficiencies and mastery of subject matter that were embedded within their courses of study.

On the rationale for CBE, Sala et al. (2007 as cited in Corominas, 2010), have explained that when students are equipped with the relevant knowledge and skills for the responsibilities of prospective jobs and the anticipated changes in these jobs, it gives them enough confidence to search for the jobs that they have received orientation in their undergraduate

programmes. This eases their transition into the world of work. Furthermore, Lemistre (2007 as cited in Corominas, 2010) is of the opinion that when students are exposed to employable skills training, it exposes them to better possibilities, aside their subject-specific technical skills that they get from their single subject area/discipline studies. This in a way increases their competiveness and level of innovation.

The CBE has certain unique characteristics that cut across issues such as students' learning tasks/activities, instructional methods and practices, assessment procedures and learning outcomes. The learning tasks or activities are flexible and varied to ensure that students receive maximum benefit from their learning experiences. Some of these learning procedures and practices as captured by Bill and Melinda Gates Foundation (2011) are as follows:

- i) the establishment of flexible pacing guides, schedules, and calendars that allow students to learn at the rate that best suit them;
- ii) creation (or purchase and adaptation) of a curriculum whose organising centres and elements are competencies with recurring opportunities for students to receive feedback on their mastery;
- iii) the design of effective, transparent tool and information systems to track students' progress towards mastery; and
- iv) development of robust approaches to support students as they move through the competencies, especially those whose progress is slow.

Similarly, Priest, Rudenstine, Weisstein and Gerwin (2012) have noted that CBE affords students the authentic opportunity to lead, make decisions, manage their own learning, and facilitate the learning of others. This assertion is premised on a study they conducted at Casco High School in the U.S. where

the students came to the conclusion that CBE was not just a theory promulgated by adults, but a powerful factor in student learning experiences, one in which they are deeply involved and invested.

Teachers in CBE are to employ various modes of teaching in order to cater to the differing needs of students, as these students are to progress at their own pace instead of being dictated to by time-bound learning regimes. Such instructional strategies should be informed by the critical skills, knowledge, theories and abilities required to master the subject matter in a particular course of study; the needs of students' future professions and where those professions are headed next. Furthermore, highly interactive discussions are held between teachers and their students and among the students, with students receiving on-going feedback about their progress (Capella University, n.d.). This study intends to investigate whether the geography departments use different modes of delivery, especially student-centred strategies to train students in employability skills. It also intends finding out whether there is any form of intra-departmental collaborative discussions, especially between the academic staff and students.

Learning outcomes associated with CBE, and which students are mandated to acquire upon successful completion of their courses of study include:

- (a) a demonstration of mastery of a comprehensive list of competencies aligned with national educational standards;
- (b) "credit" being awarded upon mastery of competencies associated with a course or smaller module, based on summative evaluation;

- (c) summative evaluation may be taken whenever a student is ready to demonstrate mastery of some skill; and
- (d) each competency is assessed on a rating scale such as "highly competent", "competent", "not competent", "exceed", "meets or does not meet" the standard). Where effort or habits of work are reported, they are maintained as separate grade (Sturgis, 2012).

The unique nature of CBE curricula or programmes is yet another characteristic feature of this model. These programmes are designed and developed in a way that incorporates practices and policies that help students to take up their own responsibility for learning. The curriculum/programme challenges all students to reach the same level of proficiency, but allows them to move in different learning paths and timeframes to achieve the same goal (Priest et al., 2012). Priest et al. in a study at Casco Bay High School in the U.S.A. noted this characteristic when they observed that a more able student, Charissa was instructed to write a 2-page description of some key themes in a text, whilst her less able peer, Antoine was asked to write half a page of the same assignment. The inference here is that the programme ensured equity in attaining learning goals by the fact that both students were tasked to stretch themselves as they worked towards the same learning target.

The other key features of the CBE curriculum are:

- (a) the shift from curricula emphasis on students knowing that there exists some knowledge to students knowing how to use that knowledge to solve problems;
- (b) de-emphasising disciplinary skills at the expense of transferable skills;

- (c) moving from problem-making to problem-solving teaching and learning modes;
- (d) a shift from knowledge-based education to task-based education as demanded by the changing trends in the world of work;
- (e) placing less emphasis on pure knowledge whilst emphasising applied knowledge and lastly; and
- (f) moving from proposition-based education to experiential type of education where students are exposed to real life settings (Gale, 2008).

The above six emphases in the CBE model are relevant to this study. The study will find out from students whether the training they are receiving (i.e. the level 400 students and the staff) or have received (i.e. the geography graduates and their employers) have any of these features of the CBE model. In this study, geography departments are supposed to use various modes of instruction to meet different learning styles of students if students are to be equipped with employable skills. In the training of students, the departments are to emphasise (a) intra-unit collaboration, (b) how students are to use knowledge and not only how they are to look for knowledge, (c) transferable or soft skills, (d) problem-solving tasks, (e) task-based training, instead of knowledge-based training, instead of academic training, (h) students' demonstration of certain personal attributes, and (h) active student involvement, use of theories or principles to solve problems, etc.

The assertion that CBE is highly recommended by employers is simply because of its inherent benefits. Every employer aims to have a competitive edge over other competitors. For this reason, they spare no

resource in recruiting highly skilled workforce because they know that the success of their business hinges on the capabilities of such a workforce. They therefore recognise the value of a competency-based education because they see the real impact it has on employee performance (Capella University, n.d.). Villars (2008) confirms this by observing that CBE affords students the opportunity to develop some level of professional skills required by the labour market or to meet the changing demands of jobs within an enterprise. One of the objectives of this study is in line with these key features of the CBE model. It was therefore, necessary to do a documentary analysis on the curricula contents of the geography departments to find out whether they had any of the above-mentioned examples of employability skills.

CBE also provides avenues for students to develop generic skills such as the ability to self-manage professional career including, self-awareness, development of a positive professional identity, the ability to find information on chosen careers and the workplace, the ability to get a job, and how to do well at the professional level (Bridgestock, 2009). Aside the generic skills that students acquire, CBE programmes also help students to gain in-demand technical expertise as they aim to uncover the most desired skills and knowledge of top performers in a particular field or discipline. Such an exposure makes students confident that their degree will translate into indemand expertise or technical knowhow. Students not only understand critical concepts, but also are able to demonstrate mastery of these skills.

Despite the inherent benefits in the use of the CBE model, it has certain setbacks. Shiparo (2014) argues that higher-level intellectual development is not easily incorporated into competency education because it

is exceedingly hard to assess. For example, in synthesizing information, students are to consider others' viewpoints, provide conflicting information and are forced to reconcile, set priorities and choose. Such an intellectual exercise in the best of cases engenders a growth of intellectual curiosity that is not easily definable in a hands-on learning environment. Shiparo further highlights another limitation of the CBE model by noting that it can only be as good as the assessment mechanism it employs and unfortunately, no assessment can be a perfect proxy for deep and meaningful learning. Another limitation of the CBE model that may make its implementation not quite feasible in many university settings is the current high student- lecturer ratios. Lecturers may feel less motivated to monitor the work of individual students if they have a large class to teach.

In conclusion, in an attempt to introduce CBE programmes to the university system, one should bear in mind that it comes with its own challenges and that steps are taken to address them in order not to defeat the very purpose for its introduction.

The Conceptual Framework for the Study

This study presents a conceptual framework for appraising the capacity of geography departments in the training of students in employable skills in three Ghanaian public universities (See Fig. 1). This framework comprises a strand of activities involving:

(i) A comprehensive review of the literature showing relationships of the different key constructs that the researcher would want to investigate; and

(ii) A review of theoretical models and empirical studies on how dimensions of capacity of organisations produce results or performance in the area of employability skills development.

Explanation of the conceptual framework

There are several methods of evaluating the capacity of organizations and networks. One popular method for assessing the capacity of organizations is the open system approach. Every educational institution is a dynamic system that is identified by its own uniqueness and totality for quality management (Mukhopadhyay, 2005). Educational institutions as social systems have the following important features: (a) they consist of people, (b) they are goal-oriented in nature, (c) they attain their goals through some form of coordinated effort, and (d) they interact with their environment (Lunenburg, 2010). The systems approach serves as a framework used by systems analysts to assess the present capacity of organizations and the dynamics that explain this capacity and output levels.

As presented in Figure 1, the conceptual framework for this study suggests that academic departments consist of inter-related set of elements functioning as operating unit. The conceptual framework suggests that an academic department's capacity can be improved or limited by a variety of measures put in place by the department and by external agencies such as the university (of which it is an integral part), stakeholder organizations and associations, professional organizations and government policies. As open systems, these departments consist of five basic elements. These are the inputs, a transformation process, outputs, feedback and the environment (Scott, 2008). Referring to William's (2010) systems concept of boundary, the

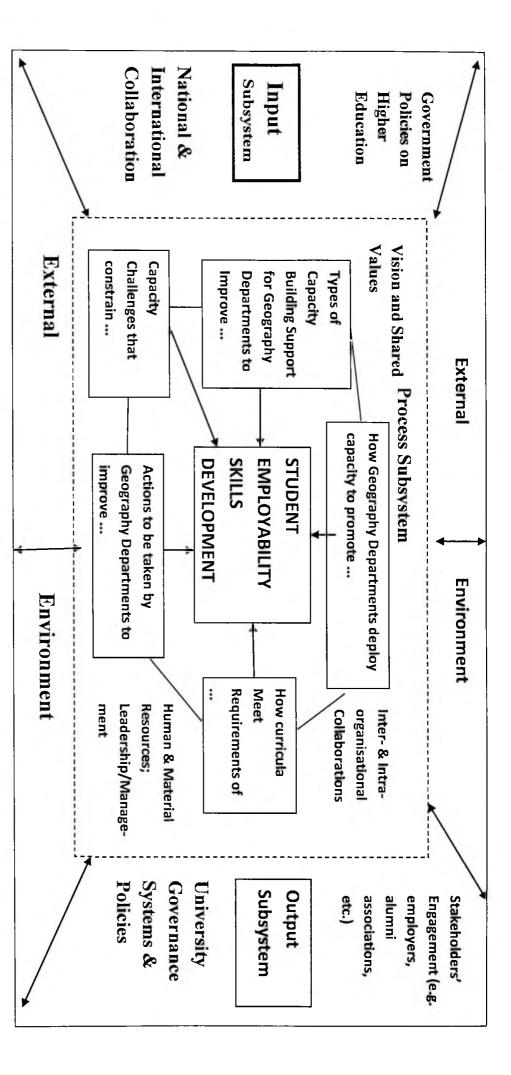


Fig. 1: Conceptual Framework showing Employability Skills Implementation in Geography Departments (A modified adaptation of the General Systems Theory by Ludwig Von Bertalanffy (1951)

'feedback' element in Scott's description of open systems will not be included in the discussion of the framework, since this investigator does not see its relevance to his study. Nonetheless, graduate employees, employers and students' responses to questions on employability skills, may be taken as a form of feedback to the geography departments, and shall form the basis for making recommendations to the geography departments.

Open systems such as academic departments use some kinds of inputs or resources from the environment for the training of students. These include human resources, physical or material resources, financial resources and information resources. In this study, the human resources are the human capital (i.e. the academic staff, students and administrators) that these departments deploy for training students. The attributes of the human resource 'element' in the departments include their knowledge, skills, dispositions, experience and interpersonal relationships. Financial resources are the capital these academic departments use to finance their operations. These include the academic facility user fees provided by their universities; their own internally generated funds; donations from the staff, students, the university, alumni associations, the public or national/international organizations; and research grants. The physical resources comprise capital assets such as teaching learning materials, library and laboratory facilities, tools and equipment, office space and vehicles for fieldwork. The information resources are in the form of expertise knowledge, curricula, data, and other kinds of information made use of by these departments (Lunenburg, 2010).

The amount and quality of available resources (human and physical) depends on the institutional and policy environments (i.e. rules and

regulations, statutes, norms, etc.) that govern these departments (Lusthaus, Adrien, Anderson, Carden & Montalvan, 2002). Academic departments need good physical and human resources to improve their capacity to perform or produce development-oriented results. The use of these physical resources as listed above is dependent on the 'attitude' of the academic departments. In situations where resources are inadequate, their judicious use will capacitate the departments. However, in institutions where the staff of these departments complain of inadequate material resources, but fail to rise above this challenge, those departments are likely to be incapacitated (Deuren, 2013).

Inadequate and inappropriate material resources such as financial capital, infrastructure and teaching learning materials tend to incapacitate academic departments in their quest to train students in employable skills. Studies to this effect have shown that in educational institutions where:

- (a) such resources were inadequate affected the training of students in employable skills (Mbewa, 2014; Evans et al., 2009);
- (b) the school curricula have not been designed to prepare and train students in employable skills, such students find it difficult getting employment after graduation (Addai-Mensah, 2006);
- (c) there is lack of material resources such as inadequate funds, poor infrastructure, etc., students tend to be poorly trained for the world of work (Bawakyillerno, 2013). Conversely, in relatively well-endowed schools with adequate amount of material resources, Mbewa (2014) found that their students had a greater chance to acquire and apply employable skills after graduation.

Another input factor that affects academic departments' capacity to give proper training to students is the quality of students that they admit into their programmes. In a study in the USA, Lum (2001) found that the Law School at the Texas Southern University admitted academically unqualified students whose test score for admission was 142 as against the national average of 150. The relatively poor calibre of students at the law school had a negative effect on their studies. At the end of their studies, the median Grade Point Average (GPA) for these students ranged from 267 to 276 as compared to the national average of between 306 and 310. Due to their poor GPAs, the Texas Southern University's (TSU) law graduates had an attrition rate of 40% at the Texas State Bar Examinations, compared to the national average of 9%. This is a clear case of garbage in, garbage-out(GIGO) training syndrome. In Ghana, Ms Gloria Akuffo, the then Attorney-General and Justice Ministerdesignate has bemoaned the current situation where the mushrooming of law faculties, especially in private university colleges, has led to the lowering of standards thus making it difficult for many graduates of these law faculties to qualify for the Ghana School of Law (Jafaru, 2017).

The input subsystem aspect of the conceptual framework is, further explained by the systems approach and resource dependency theory. The boundary concept in William's (2010) systems approach shows how relevant the curricula/programmes of the geography departments are to the training of students in employable skills. This concept also explains the amount and quality of both human and material resources available to the geography departments and how they contribute to the development of employable skills in students. The concept of boundary aims to find an answer to a question like

"what type of expertise is regarded as relevant to the training of students in employable skills, and who should have that expertise?"

To the resource dependency theory, academic departments depend on resources provided by the environment, particularly the university. For instance, these departments depend on the university, for the admission of students and the appointment of staff. In addition, input resources such as equipment (e.g. office equipment, ICT and GIS equipment, electrical and electronic equipment, workshop equipment, etc.); vehicles, laboratory materials and chemicals; stationery, textbooks, etc. are acquired by the academic departments through the university procurement unit/section. This shows how the supra-system, within which the academic departments are located, influences what happens in the subsystems.

In the analytical framework shown in Figure 1, the transformation process is depicted by factors and measures influencing student employability skills development. These are (a) deployment of the capacity of geography departments; (b) nature of curricula contents; (c) actions taken by geography departments to address student employability skills development; (d) capacity challenges in student employability skills development; and (e) actions that should be taken by the geography departments to address the capacity challenges.

Another key concept in the systems approach is inter-relationship (William, 2010), where an academic department with a strong inter-unit or section linkages is likely to maximize the use of technical resources and integrate the curricula across various year levels to increase the capacity of the department to train employable students. It is also possible that the

deployment of high quality technical resources, including developmentoriented curricula could engender increased cooperation, collaboration and consensus among the staff, thus enhancing strong professional community or inter-staff collaboration, leading to increased capacity for employability skills training for students. In Figure 1, this concept aids in answering research question one, because it is one of the capacity resources that geography departments deploy to train students in employability skills.

Again, Figure 1 suggests that institutional capacity for developing student employability skills is influenced by both internal and external factors as shown by the double head arrows linking the process subsystem and the external environment. In effect, in addressing the issues raised by the five research questions in the process subsystem box, the geography departments need to look at internal factors such as the quality and style of leadership, human and material resources, their vision and shared values and their intraand inter-linkages. The external influences on the deployment of capacity may be in the form of university governance systems and policies, stakeholder engagements, government policies on higher education, and labour market dynamics.

An analysis of the process subsystem in Figure 1 assisted the study to find answers to the following research questions:

- (a) How should the geography departments deploy their capacity to promote student employability skills development?
- (b) In what ways do the contents of the curricula of the geography departments meet the employability skills requirements of the world of work?

- (c) What actions do the geography departments intend to take to improve the current state of employability skills development?
- (d) What capacity challenges account for the current state of employability skills development in the geography departments?
- (e) What types of capacity building support are available to geography departments to improve the current state of student employability skills development?

The output subsystem considers mainly the number and quality of graduates produced by the geography departments in terms of their acquisition of employability skills By employability skills is meant graduates having the capability to gain initial employment, maintain employment and obtain new employment if required (Hillage & Pollard, 1998). From Figure 1, the systems approach suggests that both the output subsystem and the external environment influence each other as the output subsystem is located within the supra-system, called the external environment. In other words, employable graduates of the geography departments enter the external environment ostensibly to use their training to contribute to the socio-economic development of the country. Within the first to sixth year after graduation, these graduates are presumed to be employed and therefore, use the knowledge, skills and dispositions gained from their university training at the workplace.

The external environment on the other hand, influences the training of geography graduates through environmental conditions and factors such as institutional policies, rules and regulations, stakeholders' goodwill, interorganisational collaborations and employment avenues. Recent studies have

however shown that the external environment has not been able to absorb these graduates by way of gainful employment due to the limited employable skills given to them by higher education institutions. In studies by Oluyomi and Adedeji (2013) and Akinyemi and Ikuenomore (2012), it emerged that university graduates in Nigeria did not have employable skills to match up demands from the world of work. Notable among these skills were communication, IT, entrepreneurship, analytical and investigative skills, interpersonal, teamwork, decision-making, critical thinking, self-directed learning, time and personal management skills.

After reviewing the literature on employability skills and with particular reference to the systems approach, the study decided to focus on four employability skills areas as suggested by Coopers and Lybrand (1998). The choice is also in line with the US Joint Committee on Standards for Educational Evaluation (1981) and Braskamp's (1980) contention that a reliable and valid evaluation should be based on standards, guidelines and criteria that will promote improvement and betterment of education.

- A. Intellectual skills critical thinking, problem solving, analytical ability, logical argument, reflective thinking, creative thinking, innovative abilities, multi-intelligence, putting theory into practice, ability to evaluate evidence, ability to synthesise (Harvey & Green, 1994).
- B. Key skills communication, numeracy, information technology
 and learning how to learn (Dearing Report, 1997)
- C. Personal Attributes There are two broad categories of selfefficacy beliefs: (a) an immutable/fixed belief that one has set

something, intelligence; amount of e.g. and (b) an incremental/malleable belief that development is possible and even probable (Dweck, 1999; Bandura, 1997). Other personal qualities self-awareness, that were included are self-confidence, adaptability, initiative, willingness independence, learn, emotional intelligence, reflectiveness, personal management, etc. (LTSN Generic Centre, 2002).

D. Knowledge of organizations and how they work (i.e. commercial awareness) – their vision, mission, history, culture, incentives and rewards system, resources, management structure and style; participation in work-based programmes; design of project work and student portfolios; organising open day activities; simulating workplace practices, etc. (Solem et al., 2008).

An analysis of the Output subsystem aided the study to answer the research question, "What types of capacity building support should be given to the geography departments to improve their current provision of skills development in the three universities?".

In summarizing the discussion on this conceptual framework, it can be said that many internal and external factors not mentioned in the conceptual framework also influence the training of students in employability skills. These include institutional culture and structure, the motivation levels of the staff and students, the learning environment, level of support from stakeholder organizations as well as bureaucracy from the university and elsewhere, etc.

Summary of Chapter

To address comprehensively, the concepts of capacity evaluation and student employability skills development in academic departments, the review established the conceptual and empirical bases of the research problem. In discussing the conceptual/theoretical issues, the study used a variant of the systems approach to discuss a suite of relevant concepts and theories on academic departments' capacity for student employability skills development. The conceptual review established the premise that in view of the complex nature of the research problem at hand, no single theory was adequate to comprehensively analyse the subject on capacity and student employability skills development, hence the use of theoretical triangulation.

Another strong argument raised by the review is that there is overwhelming empirical and theoretical evidence to show that it is high time the traditional ways of training university students where they sit passively for long hours in lecturer-dominated instructional sessions were discouraged. The literature has therefore, shown the need for a more experiential form of training that brings out the authentic abilities of students, through learning by doing activities.

The empirical review has also shown that the major research paradigm employed in educational evaluation studies is the mixed methods approach where the previous studies used both quantitative and qualitative data collection methods such as structured observations, interviews and questionnaire survey. These provided the bases for the data collection strategies that supported this study. The literature review has further shown that whereas substantial studies on universities' use of their institutional

capacities for employability skills development has been done in the USA, Europe and some African countries, not much work has been done in Ghana on how academic departments deploy their capacities in the employability skills development of students. This gave credence to this study, which sought to assess the perceptions of staff and students on the capacity of geography departments to train students in employability skills.

It must be pointed out that most of the empirical studies reviewed focused on what stakeholders on the supply side of the training of university students need to do in order for students to be properly trained for national development. The present study therefore looks at the nature of institutional capacity and its deployment from the perspectives of both staff and students in three geography departments in Ghana.

CHAPTER FOUR

RESEARCH METHODS

Introduction

The general purpose of this study is to evaluate how geography departments deploy their capacities for the effective training of students in employable skills. This chapter focuses on the methods and procedures used in the study. Specifically, it deals with the choice of the main research paradigms, choice of institutions, the research design, study design, sample and sampling procedures, data collection instruments and procedures, reliability and validity issues, ethical considerations and methods of data analysis.

Research Paradigm

In social science research, two broad research philosophies have dominated the work of researchers; these are the positivist-quantitative and constructivist-interpretive-qualitative paradigms. There is, however, a third philosophical paradigm, called eclectic-mixed methods-pragmatic (Philips, Bain, McNaught & Rice, 2001). Johnson and Christensen (2008) define a paradigm as a perspective based on a set of assumptions, concepts, and values held and practised by a community of researchers. In other words, a paradigm is a worldview that dictates what members of a research tradition should study, how they should study it, and even how they should interpret their results.

The eclectic-mixed methods pragmatic paradigm emerged as a third epistemological movement in research in the late 1950s where both quantitative and qualitative researchers started using different methods depending on the research issue they were dealing with (Martins, 2009). Pragmatic philosophy rests on the principle that empowers researchers to mix the research components in the way they believe to work for the given research problem and context. The pragmatic philosophy holds the view that the 'best used" techniques and procedures should be employed for specific research problems. To the pragmatist researcher, the truth of a proposition is established by its correspondence with experimental results, and by its practical outcomes (Columbia, 2001, cited in Withum, 2006). This research philosophy enables the researcher to choose methods, techniques, and procedures that maximize the credibility of experimental findings of the study (Creswell, 2003). Its logic of inquiry includes the use of induction (i.e. the discovery of patterns), deduction (testing of theories and hypotheses), and abduction (uncovering and relying on the best of a set of explanations for understanding one's results) (Johnson, Onwuegbuzie & Turner, 2007). The strength of this paradigm in evaluative research is the acknowledgement of the current state of the art of evaluation; there are no 'right' approaches and maintaining an open mind approach is essential (Philips, Bain, McNaught & Rice, 2001).

A cursory review of the preconditions for the pragmatic research paradigm draws on immediate and strong inclination towards this study. Since pragmatism supports the simultaneous use of qualitative and quantitative methods of inquiry to generate evidence to support best practice, this study made use of different data collection methods such as randomly selected samples of students, instructors and support staff to inform the quantitative aspect of the study. The qualitative aspect of the study was also advanced by the use of qualitative methods such as focus group discussion with students, interview schedule for instructors (supply side), graduate employees and employers of graduates (demand side) and a structured observation guide.

In the analysis of the quantitative and qualitative data, the pragmatic paradigm helped the researcher to corroborate the findings across all the above-mentioned methods, which led to a greater confidence being held in the conclusions drawn on the analyses. On the other hand, in situations where the quantitative and qualitative findings conflicted, this gave the researcher a greater knowledge and helped modify the interpretations and conclusions accordingly.

Another way by which pragmatism informed this study was how the inclusion of the quantitative data helped to compensate for the fact that the qualitative data could not be typically generalised. Similarly, the inclusion of the qualitative data helped explain the relationships discovered by the quantitative aspect of the study. For example, the quantitative findings indicated the extent to which the 33 employable skills were variously developed by the five dimensions of capacity deployed by the geography departments. From this, one could infer the relative impact of the capacity dimensions on student employability skills development.

Another pragmatic-related benefit that inured to this study was that combining both quantitative and qualitative aspects of the study helped the researcher to validate quantitative findings by referring to information extracted from the qualitative aspect. For example, in situations where the quantitative findings reported that, out of 33 employable skills, about 28 were developed moderately by a particular capacity dimension, the qualitative finding was able to give specific examples of those skills as mentioned by the participants.

Lastly, both the quantitative and qualitative aspects of the study helped the researcher to delve further into his data set to understand its meaning and to use one method to verify findings from the other method. For example, convergence and corroboration of quantitative and qualitative findings on how well a set of skills had been developed by a particular capacity dimension, was evident by the statistical findings being in alignment with participants' perspectives on that issue. The converse was also true.

Choice of Institutions

This section provides an outline of each of the three geography departments. These are the Department of Geography and Resource Development(UG), Department of Geography & Rural Development(KNUST) and the Department of Geography and Regional Planning(UCC).

Department of Geography and Resource Development

This department which is situated in Accra, the national capital of Ghana, was originally established as the Department of Geography in 1948 when the then University College of the Gold Coast was established by the last British colonial government in Ghana. Its first Head of Department was W.J. Varley whose tenure of office ended in 1957. It was not until 1988 when the department was renamed the Department of Geography & Resource Development to accommodate the expanded mandate of the department. Prof.

K.B. Dickson had the longest tenure of office (from 1969 to 1980) followed by Prof. George Benneh (from 1982 to 1992). The vision of the department is teaching and research in the development and innovative transfer of knowledge acquired through rigorous scientific investigations of the biophysical and human environments. The department runs a three-tier programme, namely, B.A.(Geography), M.Phil.(Geography) and Ph.D. (Geography).

The current academic staff strength is as follows: eight professors, three associate professors, six senior lecturers, five lecturers and two assistant lecturers. The non-academic staff members include two administrative assistants, one librarian, one technician, six teaching assistants, three graduate assistants and two messenger/cleaners (Field survey, 2015; Dept. factsheet, 2015). Figure 2 shows a profile of the intra-academic units of the department and other schools and academic departments in the College of Humanities.

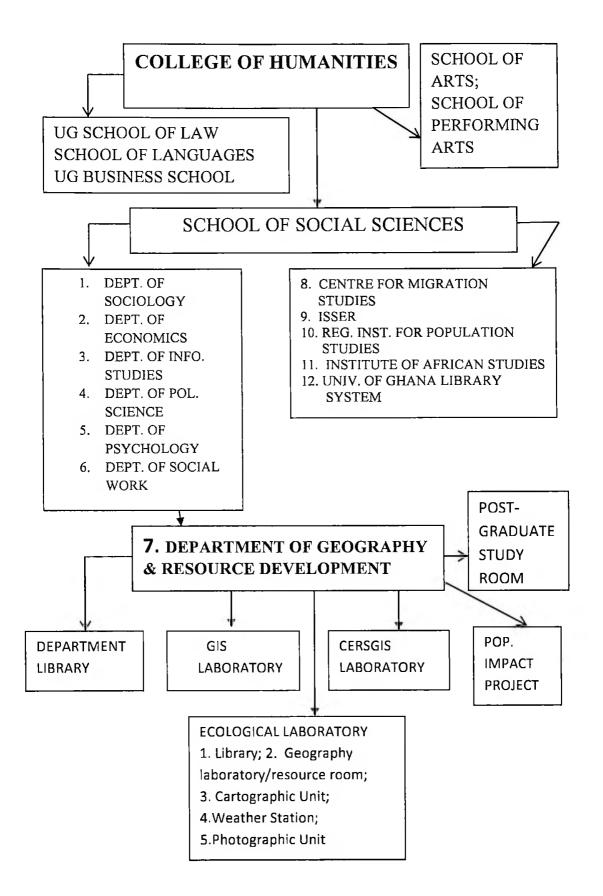


Fig. 2 - Profile of Intra-academic units of the Dept. of Geography and

Resource Development, other Academic Departments and Schools

Source: Author's construct

Department of Geography and Rural Development

This department which is situated in Kumasi, the regional capital of the Ashanti Region of Ghana, was originally established as the Department of Geography when the then Kumasi College of Technology was established in 1951 under the premiership of Dr Kwame Nkrumah. The Kumasi College of Technology became the University of Science and Technology by an Act of Parliament in 1961 and in 1998 was renamed Kwame Nkrumah University of Science and Technology. It was not until 4th January, 2005 when the faculty of social sciences, established in 1971 together with three other faculties (i.e. law, business & arts) were brought together to form the College of Arts and Social Sciences (CASS). This decision was in line with the University's objective to achieve good governance and academic excellence through the restructuring of academic and administrative units into colleges.

Currently, the Department of Geography and Rural Development runs a three-tier programme in geography and rural development at the undergraduate, graduate and doctoral levels. The objectives of the department include, (1) to develop students not only academically, but also socially by developing a friendly relationship with the environment; (2) to help students understand the reason why various nations take certain decisions in the running of their nations; (3) to assist in determining how to develop (or not to develop) the land in order to meet particular criteria such as safety, beauty, economic opportunities, the preservation of the built or natural heritage. The planning of towns, cities and rural areas is part of settlement geography.

The senior members (academic) include one professor, four senior lecturers, 11 lecturers and two assistant lecturers (Field survey, 2015; Dept.

factsheet, 2015). Fig.3 shows the profile of the intra-academic units of the department and other academic departments and faculties in the College of Humanities and Social Sciences.

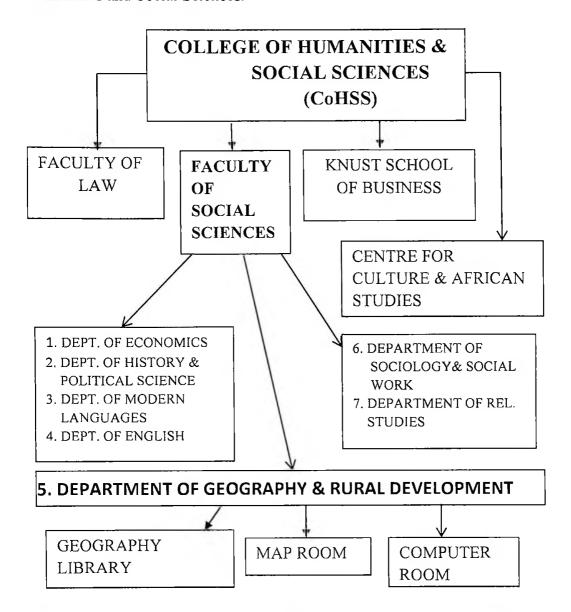


Fig. 3 - Profile of Intra-academic units of the Department of Geography and Rural Development, other academic departments and schools in the College of Humanities and Social Sciences

Source: Author's construct

Department of Geography and Regional Planning

This Department of Geography and Regional Planning, which is situated in Cape Coast, the regional capital of the Central Region of Ghana,

was established in 1962 as the Department of Geography in the same year when the University of Cape Coast was established as a university college for science education. In the 1996/97 academic year, the department was restructured to include Tourism and Family Life programmes, hence the change in name to the Department of Geography & Tourism. Between 1996 and 2009, the department offered three separate programmes namely B.Sc. (Tourism), B.A. (Social Sciences with specialization in Geography) and B.A. (Population & Family Life Education). In order to meet current national goals and global challenges, the department was split into three different departments, each with its own head of department: Department of Population & Health, Department of Hospitality & Tourism Management and Department of Geography & Regional Planning. The Department of Geography and Regional Planning runs a three-tier programme including B.A. (Social Sciences, with geography as major) and B.Sc. (Geography & Regional Planning), M.Phil./M.Sc. (Geography) and Ph.D. (Geography). Its main goal is to train students with critical/intellectual thinking, practical, personal interpersonal skills coupled with strong ethics and commitment to society. Fig. 4 shows a profile of the intra-academic units of the department and other academic departments and schools/faculties in the College of Humanities and Legal Studies.

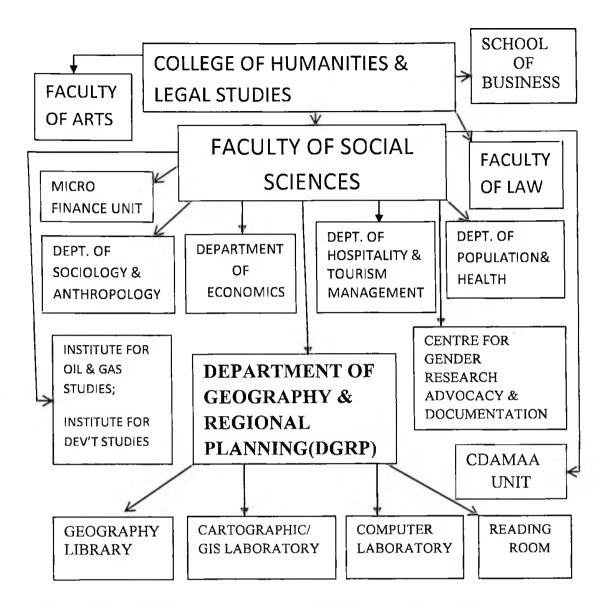


Fig. 4 - Profile of Intra-academic units of the DGRP, other Academic

Departments and Schools/Faculties in the College of Humanities and

Legal Studies

Source: Author's construct

Among the academic staff are one professor, three associate professors, five senior lecturers, seven lecturers and two assistant lecturers. The non-academic staff comprises eight principal research/administrative assistants, three research/administrative assistants, two technician assistants, two grad two clerks and two messengers (New 2012 Department brochure; Field survey, 2015).

Research Design

This study adopted the mixed methods approach. The choice of this design was due to the dictates of the pragmatic research paradigm. This paradigm allows for the mixing of both quantitative and qualitative data at any or multiple points in the research project - from the statement of the problem, research questions, to data collection and management, to data analysis and to drawing inferences from the interpretation of findings (Rocco, Bliss, Gallgher & Perez-Prado, 2003).

Out of a variety of mixed methods designs such as explanatory sequential, exploratory sequential, embedded design and convergent parallel, the investigator chose the convergent parallel design as its use enabled the investigator to collect and analyse both qualitative and quantitative data concurrently (Creswell & Plano-Clark, 2011). It was only at the interpretation phase that the investigator compared and contrasted both the qualitative and quantitative data in order to draw conclusions. One other advantage inuring to the use of this type of design was that the study gave equal priority to each strand. For instance, in the design of the five research questions, the first two were qualitative-oriented questions, whilst the remaining three research questions were quantitative-oriented questions. Again, in the design of the data collection instruments, the quantitative phase had two instruments namely, a questionnaire with Likert-type responses for students and a structured observation guide, using a rating scale. The qualitative phase on the other hand, had three data collection instruments - document mapping guide, focus group interview protocol for students and structured interview guide for Heads of Department, geography graduates and their employers.

Other indicators of the use of the convergent parallel mixed method design include the choice of sampling techniques. For the qualitative phase, the study used purposive and census to select the university teachers, the Heads of Departments and the non-teaching staff, and snowball sampling for the selection of the geography graduates and their employers. The quantitative phase also made use of simple random to select student respondents for the questionnaire survey. For presentation of results and data analysis, the study made use of qualitative methods such as the thematic analysis of open-ended questionnaire items and focus group interview transcripts. For the analysis of data from the survey, use was made of tables depicting descriptive statistics such as means and standard deviations, to depict the numerical perspectives of the respondents on the characteristics and differences in the capacities of the three geography departments in their mission of training students in employability skills. The qualitative perspectives on the other hand, helped to explain meanings behind the processes, activities and actions used by the three geography departments in the training of students in employability skills.

In summary, the decision to use a mixed methods approach to evaluate the capacity of geography departments in their efforts to train students with employability skills was justified because this study sought to find from different perspectives, the programmes of study, activities, processes and actions employed by the management and staff in the three geography departments. The rationale for the choice was to arrive at common institutional processes, programmes, activities and actions that could become an overall training scheme for use in other academic departments with similar

circumstances and characteristics. The mixed methods approach is therefore, seen as being the most appropriate to facilitate this process of inquiry.

Study Design - Descriptive study

Based on the research objectives that sought to solicit views or opinions on the capacity assets and needs of geography departments so as to recommend capacity building support for the effective training of students in employable skills, the descriptive strategy was adopted. The management (i.e. the HOD and other office holders), staff (academic and technical/administrative/auxiliary), students of the geography departments, geography graduates and employers of these graduates constituted the sampling units and units of analysis. The aim of including the different respondents was to describe, compare, contrast, classify, analyse and interpret their perceptions concerning students' employability skills development. According to Best and Khan (1995), descriptive research is at times concerned with current conditions or existing relations

The descriptive design, according to Leedy and Ormrod (2005) involves studying and gathering information from or about groups of people in order to state their answers or responses, with the overall goal of making a generalisation to the entire population. Sidhu (2002) posits that descriptive research is concerned with current conditions or existing relationships; practices that prevail; beliefs, points of view or attitudes that are held; processes that are going on' effects that are being felt; or trends that are developing.

The reason for using a descriptive design is to describe, explain and document an aspect of a situation as it naturally occurs. Another reason for the

use of this study design is that it ensured a high level of objectivity in the study. This is affirmed by Amedahe's (2002) assertion that, in descriptive research, accurate description of activities, processes and persons is the objective. The design was used to find out how geography departments deploy their capacity resources to train undergraduate students in employable skills.

Study Population

The population in this study refers to all members of the target groups in the study per the study's purpose and objectives. The population for this study comprised the head of department, staff (academic and other staff) and students of the selected three geography departments: University of Ghana (UG), Kwame Nkrumah University of Science and Technology (KNUST) and University of Cape Coast (UCC) and to a lesser extent, some employed geography graduates and their employers. The target population comprised all the academic and other auxiliary staff, the head of department and all undergraduate students (i.e. levels 100 to 400). The accessible population, however, comprised the academic staff who taught level 400 students, the auxiliary staff, who in one way or the other, assisted in the training of the students, the head of department and all level 400 geography major and combined students.

The three departments were selected purposively because according to Paul, Kleinhammer-Tramil and Fowler (2009), purposive sampling logic could be used if the phenomenon being studied is a good example and could provide the relevant data that the investigator is looking for. These departments are the only autonomous geography departments in the public universities in Ghana. Geography programmes at the University of Education, Winneba Campus and

the University for Development Studies, Navrongo Campus are run as integrative programmes, thus denying the discipline of any autonomy. In the former, it is part of the Department of Social Studies, but now there is a nascent department called the Department of Geography Education and in the latter, the geography programme is still part of the Department of Environment and Resources Studies.

Sample and Sampling Procedures

The sample

The breakdown of the total sample size for each of the three Geography Departments is shown in Table 3.

Table 3 - Distribution of Respondents by Academic Departments

Name of	Academic	Non-Academic	Level 400	Head of
Department	Staff	Staff	Students	Department
		_		
Dept. of	11	11	91	1
Geog. &				
Res. Dev't				
Dept. of	10	6	96	1
Geog. &				
Reg. Dev't				
Dept. of	8	2	109	0
Geog&				
Rural Dev't				
Total	29	19	296	2

Source: Field survey, Ababio (2015)

In addition to the respondents in Table 3, the study included four employers and 19 geography graduates who had been working with these employers for

more than two years preceding the field survey. The reason for the relatively small number of employers was basically because of the snowball sampling technique used in contacting the employers. Another reason was that the employers for the graduates from the Department of Geography and Rural Development failed to respond to the structured interview schedule sent to them. Since participation in the study was voluntary, the investigator could not compel them to respond to the interview schedule. In view of this shortcoming, the investigator ensured the validity of the study's findings by using other sets of respondents (e.g. students, instructors, heads of departments and geography graduates) to interrogate similar issues. In other words, the investigator used respondents' triangulation.

Although the non-academic staff members were not directly responsible for the training of students, per the dictates of the systems theory, the overarching theory used to underpin the study's conceptual framework, all elements in a system work collectively to help in the attainment of the goals of the system. In this vein, the non-academic staff assist the instructors in the training of students, hence their inclusion.

Sampling procedures/techniques

Purposive sampling considered by Welman and Kruger (1999) as the most important kind of non-probability sampling was used by the investigator to identify the heads of department, the academic and non-academic staff. The selection was based on the investigator's judgment and the purpose of the study, seeking those who have had the experiences relating to the phenomenon to be researched (Kruger, 1994). Census was used to select the heads of department, the academic, non-academic staff and female students. However,

the study used simple random sampling (the lottery method) to select the level 400 male student respondents. The study assumed that these student respondents, having been in the department for a relatively longer period, had enough insight into the capacities of their departments to serve as authenticators of the information provided by their heads of department and staff.

Convenience sampling was used for the focus group discussions in the sense that 36 students who had not taken part in the survey, were readily available and were prepared to participate in the focus group discussion were those who were used for the discussions. The idea of using a different group of students was to broaden the sphere of participant participation and bring different perspectives to bear on the research problem. As Kane (1990) explained, convenience sampling technique is the simplest kind of non-probability sampling in which one simply asks anyone who happens to be around and available; the people in your office or class or everyone who happens to pass by a street corner.

In selecting the students for the questionnaire administration, the investigator first requested for the sampling frame for all level 400 geography major and combined students in each department. It was out of these sampling frames that, he selected the student respondents through the lottery method, giving each student any equal opportunity of being selected. By using Krejcie and Morgan's table for determining sample size, the sample size for each level 400 student group was pre-determined before the selection of the students. The selection process began when the serial numbers for all the registered level 400 students were written on pieces of ballot papers. All the ballot papers for

the male students were placed in two receptacles and shuffled a few times. The ballot papers were then randomly picked in turns, until the quota for the male respondents was reached. Shortly after, the research team contacted the selected students and the questionnaires were then administered to them. The investigators had varying figures for each category of respondents due primarily to the differences in the number of students and staff for each department. For instance, at the Department of Geography and Resource Development, out of about 18 questionnaires given to lecturers teaching undergraduate students, 11 were retrieved showing a response rate of about 61%. For the non-academic staff, out of 15 questionnaires distributed, 11 were retrieved, showing a response rate of about 73%. For the level 400 students, about 130 questionnaires were distributed, but only 91 were retrieved, showing a response rate of about 70%. The geography graduates and their employers had about 90% response rate since almost all the structured interview schedules distributed were retrieved.

At the Department of Geography and Rural Development, out of about 14 questionnaires distributed to the academic staff, nine (64%) were retrieved. Six questionnaires were distributed to the non-academic staff out of which four (67%) were returned. In addition, 120 questionnaires were administered to level 400 students, with 93(78%) having been retrieved. The geography graduates and their employers had a response rate of 75% and 0% respectively.

At the Department of Geography and Regional Planning, out of 14 questionnaires administered to the academic staff, eight (57%) were retrieved. For the non-academic staff, two questionnaires were retrieved out of four,

showing a 50% response rate. For the level 400 students, 100 questionnaires were retrieved out of 120 administered giving a response rate of about 83%. For the geography graduates, four out of six structured interview schedules were returned whilst out of two interview schedules administered to their employers, one was returned.

Krejcie and Morgan's (1970) table was used to determine the sample sizes for the survey. For instance, for the Department of Geography and Resource Development, the sample size of 91 out of a population of 130 was very close to Krejcie and Morgan's recommended figure of 97 out of 130. For the Department of Geography and Rural Development, the sample size of 93 was slightly bigger than the suggested figure of 92 for the student respondents. For the Department of Geography and Regional Planning, the sample size of 100 was again, bigger than the recommended figure of 92.

The investigator used census to select the sample for the female students, academic and non-academic staff, because per Krejcie and Morgan's sample size formula, in sampling a population of less than 25 respondents, all except of them should be included. In all the three departments, none of them had a female cohort, or an academic staff or non-academic staff of more than 25.

With the selection of student respondents, geography minor students (i. e. those whose major subject area was not geography) and those in levels 100, 200 and 300 were excluded from the study because the investigator presumed that they had not been in the geography departments long enough for them to have received much training in employability skills. The investigator, therefore, used those who were in their final year and would be joining the

labour market in the not too distant future. With regard to the selection of academic and non-academic staff respondents, the study included only those who were either teaching or assisting with the teaching of level 400 courses and were available and willing to participate in the study.

Lastly, all the geography graduates who were included in the survey had been working for two to five years after successfully completing their courses of study, irrespective of whether their current jobs were geography-related or not. The rationale for the inclusion of this cohort of geography graduates is that the two to five years working experience should be long enough for the graduates to make an informed assessment of the relevance of their undergraduate training to their current job profiles.

In all, the investigator used simple random sampling to select 154 male students for the survey, census to select a total of 170 respondents (comprising 106 female students, 2 heads of department, 29 instructors and 19 support staff), convenience sampling to select 22 male students and 14 female students for the focus group discussions, and snowball sampling to select 23 respondents (comprising 19 graduates and 4 employers), making a total sample size of 369.

Research Instruments

The mixed methods nature of the study predisposed this investigator to the use of a variety of research instruments. This is what Patton (2002) refers to as instrument triangulation, that is, the use of multiple research methods and instruments to study a phenomenon. The instruments used for the study include the following:

Structured interview schedule

The investigator designed this instrument for the three heads of departments. The interview schedule had 11 open-ended items, distributed over the five dimensions of capacity of the geography departments. The study also used a 13-item structured interview schedule for employers of geography graduates (see Appendix H) and a 12-item structured interview schedule for geography graduate employees (see Appendix I). The systems approach informed the contents of these instruments. See Appendix B for the structured interview schedule for the heads of department.

Focus group discussion (FGD) guide

This instrument served to elicit information from a sample of level 400 Geography Major and Combined students. It contained 12 open-ended items covering the study's five thematic areas of capacity. Postulates of the constructivist theory informed the construction of this instrument. See Appendix E for the FGD Protocol for students.

Questionnaire

For the academic staff and student respondents, a questionnaire - consisting of a five-point Likert-type responses named Capacity for Employability Skills Development Survey CESDS), was constructed according to the postulates of the systems approach, to enable the respondents select from pre-determined optional responses. Issues included in the questionnaire are the five capacity areas identified by this study for the training of students in employability skills. Each set of questionnaire for the academic staff and students contained 171 items (Appendix A). This

instrument was christened Capacity for Employability Skills Development Survey (CESDS).

The investigator constructed another set of questionnaire for the non-academic staff. It comprised 25 items, including five open-ended items. The investigator designed this instrument around three broad themes, namely personal background information, professional development and building staff capacity. The design of this instrument was also informed by the postulates of the systems approach. Refer to Appendix (C) for the administrative/auxiliary staff questionnaire and Appendix (D) for the students' questionnaire. The last sets of questionnaire were those for the geography graduates and their employers. For the geography graduates, the investigator constructed a 12-item self-administered interview schedule and a 13-item self-administered interview schedule for their employers. The design of both sets of interview schedules was based on the systems approach. See Appendices H and I for the graduate and employer interview schedules respectively.

Observation guide

The investigator used this instrument to collect qualitative data. The systems approach was used to design the observation guide, which had two sections. The first section consists of a checklist with seven items covering various capacity-related issues, each with ratings of high, moderate and low in descending order of weight. The second section is a 5-item checklist for observing a class in session (See Appendix F).

Documents checklist

This instrument was used to map the staff profile and curricula/programmes of the geography departments.

Table 4 - Research Questions and related Research Instruments for Data

Collection

Research Questions	Instruments used to collect data		
How have the geography departments deployed their capacity to meet employability skills needs of undergraduate students? How are the contents of the geography curricula meeting the employability skills requirements of the workplace?	 Student and academic staff questionnaire; HOD structured interview guide; Non-academic questionnaire; Student *FGD guide; Observation checklist; Document checklist; Geography graduates & employers' interview schedule; Document checklist; HOD open-ended questionnaire; Geography graduates & employers' interview schedule Academic staff & student questionnaires; Student FGD protocol 		
What actions do the geography departments intend to take to improve the current state of student employability skills development?	 Student FGD protocol; Support staff questionnaire; Geography graduates & employers' interview schedule; HOD interview schedule 		
What capacity challenges account for the current state of student employability skills development in the geography departments? What types of capacity	 interview schedule; HOD interview schedule; Academic staff & student questionnaire 		
building support are available to the geography departments to improve their current state of student employability skills development?	employability issues;HOD interview schedule;Student FGD protocol;		

*HOD - Head of Department; *FGD - Focus Group Discussion

Source: Field Survey, Ababio (2015)

Information and documents 'mapped' include profile of the staff and students, department factsheets on academic programmes and projects, course outlines and related quizzes and examinations papers. This instrument was also used to map institutional capacity building measures from the literature on employability skills development (Appendix G). Table 3 shows a summary of the research instruments used for data collection to answer the study's six research questions.

Reliability of Instruments

The study achieved data reliability through detailed field notes, review of field notes by participants, use of tape recorders and photographs, team of research assistants schooled in both qualitative and quantitative research, use of participant quotation, literal description, etc. Another way to ensure data reliability was to conduct a pre-testing of the instruments in an analogous department or institution. This investigator therefore, conducted one of the pre-tests surveys at the Cape Coast Polytechnic (now Cape Coast Technical University), precisely at the Department of Tourism and Department of Secretarial and Management Studies. The other pre-testing survey was conducted at the University of Cape Coast, involving the Department of Arts & Social Sciences Education, the Department of Vocational and Technical Education and the Department of Hospitality and Tourism Management.

The instruments that were pretested are the staff and students' survey questionnaire. The reasons for the pre-testing are to:

(a) provide opportunity to examine individual as well as the whole interview protocols and questionnaires;

- (b) find out whether the respondents understood all the words, especially the technical ones;
- (c) find out whether the questionnaires created a positive impression one that motivated the respondents to answer them;
- (d) investigate whether all or most of the questions were interpreted similarly by all the respondents; and
- (e) to find out whether any part of the data collection instruments suggested bias on the part of the researcher (See also Salant & Dillman, 1994).

The exercise enabled this investigator to check the instruments against the original purposes, goals and objectives to make sure non-essential data were not included. During the pre-testing, the anomalies that were identified were subsequently modified. For example, the initial questionnaire for both the students and instructors had only 40 Likert type items in each case, but after the pilot testing, the number was increased to 171 for each set of questionnaire. This was to give the respondents ample latitude to tick specific items that reflected their perception of the issue at stake.

Validity of Instruments

The study obtained data validity through the following strategies suggested by Johnson (1997):

Methods triangulation

Use was made of multiple data collecting methods to study the research problem — field notes, direct observation, use of structured interviews, questionnaire administration, documents mapping, focus group discussions, etc.;

- (b) find out whether the respondents understood all the words, especially the technical ones;
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Peer and institutional review

Discussion of the instrument with other people, including the investigator's thesis supervisors was done. Discussion with peers who were familiar with the research problem also provided useful insight for the study. The seminar system also allowed staff and fellow graduate students to assess the validity of the instrument. The investigator's research proposal, which included the research instruments, was successfully reviewed by the University of Cape Coast Institutional Review Board, which resulted in the investigator being given a letter of ethical clearance to collect his field data.

Investigator triangulation

The use of multiple investigators in collecting, analysing and interpreting the data also ensured data validity. The study employed the services of a supervisor and two field assistants for data collection in each of the three universities. They participated in an orientation exercise before the commencement of the field survey. Feedback and discussion of the interpretations and conclusions with all the interviewees were ensured.

Data Collection Procedures

To understand the interaction of the capacity of geography departments and the employability skills training of students from the perspective of university teachers, auxiliary staff and students, a mixed method research design was used. This provided the way for the investigator to examine this interaction through the collection and analysis of both quantitative and qualitative data. A discussion of how qualitative and quantitative data were collected is presented in the ensuing paragraphs.

Survey

After getting a letter of introduction from the University of Cape Coast, the investigator contacted each head of department to inform them about the purpose of the research. All the heads of departments then sent memoranda to their staff and student representatives informing them about the purpose of this research and the roles that they were expected to play in the research. In the memoranda, they were also informed that, all responses would be anonymous and combined, analysed and presented as a department profile only; thus, their responses would not be linked to them individually or by course or level taught.

The investigator emphasized how their participation was voluntary, but formed an extremely important component of the study and that the success of the study depended on the respondents completing and returning the survey instrument, which would provide data on each geography department's capacity in training students in employable skills.

One week prior to the administration of the survey questionnaire, reminder emails were sent to the heads of department concerning the period for the administration of the instruments. From October to December 2015, the investigator together with his team of supervisors and field assistants stationed at the three geography departments administered the survey questionnaires to the academic staff, auxiliary staff and students. The response rate for the return of survey questionnaires varied from one department to another.

Key informant interviews

The investigator sent emails to the three heads of department between October and December 2015, informing them of his intention of having a face-to-face interview with them. Unfortunately, time did not permit the heads of department to make themselves available for the interviews, each time the investigator visited those departments. The investigator therefore, directed his two supervisors at the University of Ghana and Kwame Nkrumah University of Science and Technology to assist in administering the structured interview schedule to the three heads of department. Two of the three heads of department completed the self-administered interview schedules, but the third, failed to do likewise after several reminders. The self-administered interview schedule focused on all the five dimensions of capacity of the geography departments as captured in the analytical framework for the study.

Focus group discussion

For the effective use of the focus group discussion in the collection of data, this researcher was guided by the following five steps as suggested by Archer and Layman (n.d.):

- (1) Developing a questioning route: This was developed out of the objectives of the study. This step consists of main questions and some questioning probes. To get the questioning route right, the researcher brainstormed with colleagues and other people who were well informed about the research problem.
- (2) Recruiting the participants: Here, 30 level 400 undergraduate and six level 300 students were recruited. These cohorts of student participants were selected purposively, on the bases of gender equity,

their knowledge of happenings in the geography departments, ability to discuss issues freely in a group and interest in academic issues at the level of their programmes of study. Convenience sampling was adopted to contact them personally.

- (3) Planning resources: A timetable was developed for the sequence of steps involved as well as the fiscal plan for the interview. Prior to the interview session, rooms to conduct the interview were secured. A tape recorder for recording the interview was procured.
- (4) Moderating Interviews: Moderation of the focus group discussion sessions was done by the investigator with the aid of his two supervisors at the other universities.

In all, 36 students took part in four focus group discussions. The investigator moderated one focus group discussions at the University of Cape Coast, one was moderated at the University of Ghana, with the other two being moderated at the Kwame Nkrumah University of Science and Technology. Before the focus group discussions, an orientation on how the discussions ought to be conducted was given to all the moderators and their assistants. The size of the focus groups ranged from seven to twelve, with the male students being in the majority. This number is in line with Landford, Schoenfeld and Izzo's (cited in Onwwuebuzie & Collins, 2007).

The duration for administering the 13-item structured focus group discussion protocol lasted between 60 and 80 minutes. All the four focus group discussions were audio-taped, with the consent of the participants. Photographs of the moderators and student participants were taken during the discussions. The focus group discussion protocol focused on all the five

dimensions of capacity of the geography departments as contained in the modified version of Florian, Hange, Copeland (2000) framework for understanding capacity.

The investigator did not include the instructors in the focus group discussions because firstly, they were not readily available for the discussions, and secondly, they were given the opportunity to complete a structured interview schedule in addition to the completion of a close-ended questionnaire, which was the main instrument meant for the instructors. Even retrieving the completed questionnaires from the instructors took several weeks, so engaging them in a focus group discussion would have been extremely difficult!

Data Processing and Analysis

The purpose of this section is for the investigator to determine and test for the extent of convergence, commonality or divergence among data collected during the study, and hence the relationships among variables which these data represent (Nenty, 2009). The data processing and analysis, was executed in accordance with the first five research questions in the study. Per the canons of the mixed methods research design, the investigator conducted data analysis under each of the five research questions using quantitative and qualitative analytical tools.

Qualitative data analysis

Data collected in the form of interview transcripts, from open-ended items in structured interview schedules and textual data from document checklist were analysed qualitatively by the investigator. The qualitative data used in this study was a synthesis of participants' views and opinions of their

experiences regarding the research problem. The data also enabled this investigator to appreciate the behaviour, actions and attitudes of the participants in the study. For effective data analysis and interpretation, the investigator had to go through a series of steps.

First, the investigator reviewed the interview transcripts or textual material to get a general understanding of their contents. Second, there was the need to organise the data to make them more manageable and easy to handle. At this stage, the nature of the research question determined ways of grouping the data, either by data collection type (focus group or interview) or by questions asked. This investigator decided to organise the qualitative data by the research questions asked. Third, the data were coded by identifying and labelling themes within the data that corresponded with each research question that he wants to answer. The themes are common trends or ideas that appear repeatedly throughout the data. The investigator thematically coded the data.

The final stage was data interpretation, where the investigator had to attach meaning and significance to the data. The investigator did the thematic interpretation by first making a list of key themes. Each theme that arose during the coding process was reviewed with the aim of identifying similarities and differences in responses from the participants with different traits or perspectives to the research problem. At this stage, the investigator considered the relationship among the themes to determine how they were connected. New lessons or insights were earned about the geography programmes and student employability skills development. How those lessons were to be applied to different cohorts of students and programmes was also considered.

The second aspect of the qualitative analysis was a content analysis of the course outline, examination and quiz papers of the departments. The researcher used the following procedures in the content analysis of the curricula:

- (a) Defining the universe undergraduate curricula/programmes run by the three geography departments;
- (b) Picking a sample use of a convenient sample comprising any available curriculum/programme;
- (c) Defining a unit of analysis used 18 course outlines, 14 examination papers and 5 quiz papers, from level 100 to 400;
- (d) Criteria for assessing elements of employability skills in the curriculum (i) intellectual skills domain; (ii) personal and key skills domain; (iii) personal attributes domain and (iv) commercial awareness domain.

Quantitative data analysis and interpretation

Quantitative data analysis allows the investigator to attach numerical values to observable relationships between data. In other words, the quantitative data analysis process involves the quantification of concepts by allocating numerical values (Walliman, 2005 as cited in Shumba, 2013). The background data collected from the various categories of respondents in this study were of the nominal and ordinal type, thus making the variables to be qualitative and categorical. To analyse these nominal and ordinal variables, the investigator assigned values to each category. For example, for gender, the value 1 was assigned to males, whilst the value 2 was assigned to females. The investigator used the same process to quantify other qualitative and nominal variables such as age of respondents, academic and professional qualification,

teaching experiences, job type, teaching experience, programme read by students, subject combination, professional rank, etc. To explore the patterns of data among these variables, the investigator summarised and organised them in the form of either tables or charts. He then described the tabular or figural data and interpreted the indices to show overall group data tendency towards the centre by way of averages.

With regard to ordinal variables from the Likert-type questionnaire for instructors and students, the investigator assigned numerical values to the ranked data. For example, in the students' questionnaire, the optional responses were ranked from 4 to 1, reflecting their perceptions on the various employability skills indicators. The Investigator then computed the means for all the 171 items in both the lecturers and students' questionnaires. The use of means is justified by the general principle that in using statistical tests, there should be large quantities of data to work with and when the values in the data set are not skewed (Mhlanga & Shumba, 2013).

Another general principle for the use of means as a statistical tool is that, it is not enough for the investigator to calculate the mean, but also to calculate how the individual scores deviate from the mean, that is the standard deviation (Shumba, 2013). The investigator therefore computed the standard deviation for all the means in order to make the understanding of the distribution more complete. To ensure clarity and better explanation, the investigator displayed the means in various tables under the five main domains of employability skills development used by the study.

Ethical Considerations

In every empirical research, ethical issues concerning the right and confidentiality of the prospective participants need to be addressed by the investigator, so as not to be accused of infringing upon the rights and privacy of the participants. It is for this reason that the current investigator abided by the following ethical considerations:

- 1. The informed consent of prospective respondents was sought to participate in the field study and provide them with an explanation of the purposes of the study and expected duration of their participation.
- 2. Steps were taken to protect or prevent risk or harm to participants. For instance, issues of embarrassment were prevented by not disclosing their identities or not informing a third party of the discussions.
- 3. Confidentiality that is, withholding real names and other identifying characteristics of respondents. The right of the respondents to veto the research results was upheld (in other words, the respondents were informed about the purpose for which data were collected).
- 4. Respect was accorded participants as subjects and not as research objects to be used and then discarded.
- 5. Soft copies of the research report were sent to all the three geography departments.
- 6. Participants were given a statement that participation is voluntary, refusal to participate involved no penalty or loss of benefits to which the participants was otherwise entitled, and the participant may discontinue at any time without penalty or loss of benefits to which the participant was otherwise entitled.

Summary of Chapter

As has already been explained, the purpose of this study was to evaluate how geography departments use their capacities to train undergraduate students to acquire employable skills. The researcher has discussed the methodology he chose to follow and have justified this choice. He has also explained how coding was done for the quantitative and qualitative data, and the software package used to do the analyses. The choice of the sample and the data collection procedures have all been justified by the researcher. The next chapter presents a discussion of the findings relating to how the capacity of geography departments has affected student employability skills' development.

CHAPTER FIVE

HOW GEOGRAPHY DEPARTMENTS DEPLOY CAPACITY FOR EMPLOYABILITY SKILLS' IMPLEMENTATION

Introduction

This study explored the capacity of geography departments to train undergraduate students to acquire employable skills. More specifically, it examined stakeholders' perceptions about the capacity of geography departments to train undergraduate students to acquire employable skills in four domains: intellectual skills, personal and key skills, personal attributes, and commercial awareness. The study's focus was on geography departments in three public universities in Accra, Kumasi and Cape Coast. By focusing on these three pioneering departments, the researcher aimed to gain much insight into their capacity assets and needs and capacity building measures recommended to overcome the capacity needs. While the body of research on building the capacity of academic departments in employability skills development is growing, it remains scarce, especially in geography departments at the tertiary education level.

This chapter presents and discusses findings that emerged from the investigation of the following research objective:

 To investigate how the geography departments have deployed their capacity to meet the employability skills needs of undergraduate students. In this chapter the findings were presented and discussed in two sections in accordance with the mixed methods convergent parallel design. The first section presents findings from questionnaires administered to the staff and students. The other section presents and discusses qualitative data that emerged from the analysis of the structured interview schedules administered to the heads of department, geography graduates and employers, focus group discussions with students and analysis of curricula materials. The data that emerged from the analysis of the structured interview schedules and focus group discussions were presented in themes and the survey data were presented in descriptive statistics.

Quantitative Analysis of Views of Students and Instructors on Geography Departments' Capacity to meet the Employability Skills Needs of Undergraduate Students

This section sought to find out the perceptions of students and instructors on the capacity of geography departments to meet the training needs of students in four employability skills' domains. The section first presents the background characteristics of the students and instructors who took part in the study. This is followed by other subsections, which focused on the extent to which student employability skills' development was influenced by the following five capacity dimensions: human resource, leadership, intraorganisational collaboration, physical resource and inter-organisational linkages.

Personal characteristics and profile of students and instructors

The survey first sought to find the bio-data of the student respondents.

The student respondents who participated in the survey included 165 level 400

male students and 106 level 400 female students. The modal age was 23 years, whilst the average age was 22.5 years. The number of students who completed fully the Likert-type questionnaire was 94, 89 and 88 for the Department of Geography and Resource Development, Department of Geography and Regional Planning and Department of Geography and Rural Development respectively. Thirteen partially completed questionnaires were rejected. Information on the personal characteristics and professional responsibilities of the instructors was also sought. Table 4 presents the demographic and academic profile of the instructors. In this study, the lecturers in the geography departments are referred to as 'instructors' all because the study is about the training of students in employable skills. The use of the term 'lecturer' presupposes professionals who use teacher-centred instruction, a teaching paradigm which cannot engender the implementation of employable skills.

Table 5-Demographic and Academic Profile of Instructors

Geog. Depts.	Gender	Age Range (Years.)	Academic Qual.	Prof. Qual. in Educ.	Prof. Design.	Job Type	Length of Service (Yrs.)	Core Size	Core Class Size
				•		I.			
DGRP (UCC)	Male - 8;	Eelow 30 - 1;	M.Phil 6;	(4)	AL-1		Below 5yrs-2;	اس :	Below
	Female - 2	30-34 :(0); 55-59: (0)	Ph.D 4	PGCE-1	SI-3	FT-7 PT-0	6-10:4;	1 2	100-1;
		40-44: (2);		Dip Ed-2	AP-I		16+-1	200	200-299:2;
		45-49: ((3) 50-54: ((2);		M.Ed 1	P-0			300+5	ជំ
DGRD(UG)	Male-10; Female-1	Below 30 - 1; 30-34 :(1) : `55-59: (0)	M.Phil. – 4; Ph.D 7	0	AL -1 L-2	FT-10 PT-0	Below 5yrs-2; 6-10:6;	Below 100-1;	ow -I;
		35-39: (2); 60+: (2)			SL-4 AP-1		11-15: 2; 16+-0	200	100-199:2; 200-299:5;
		45-49: ((1)			P-1			300	300+:3
DGRIJD(KNIJST)	Male -7	Relow 30 – (0)	M Phil - 3:	o	AI. — I	FT _ 7	Below 5vrs-3:	Below	W
b Charles (Co.)	Female-1	30-34 :(1) : `55-59: (0)	Ph.D 5	1	L- 6	PT-1	6-10:5;	100	100-2;
	1 cilium 1	35-30-(2), 60+-(0)			SL-0		11-15: 0;	10	100-199:2;
		33-39: (2); 60+: (0)			AP-I		16+-1	20	200-299:2
		40-44: (2); 45-49: ((2) 50-54: ((1);			P- 0		,	30	300+:1

NB: AL - Assistant lecturer; L- Lecturer; SL - Senior Lecturer; AP- Associate Professor; P- Professor; FT - Full Time; PT- Part Time

Source: Field survey, Ababio (2015)

Data on instructors and students' views were analysed and presented in Tables 6 to 10. The means for each of the 33 employable skills variables were calculated. The mean range is from 1.00 to 4.00. The interpretation for the various mean ranges is as follows:

- 1) A mean of 1.00 to 1.49 means no implementation of the variable concerned
- 2) A mean of 1.50 to 2.49 means low implementation of the variable concerned
- 3) A mean of 2.50 to 3.49 means a moderate implementation of the variable concerned
- 4) A mean of 3.50 to 4.00 means a high implementation of the variable concerned.

Quantitative Analysis of Role of human resource in employability skills' implementation from the perspective of students and instructors

The human resource in any organisation is considered to be one of the key (if not the most important) resources that the organisation can depend on towards the realisation of its goals. The human resource capacity in the context of this study, is the aggregate capability of the geography departments to deploy their personnel (i. e. instructors and other staff) to train students by using competencies such as knowledge, skills, attitudes, motivation, experiences and behaviours (Misener & Doherty, 2008). Table 6 presents findings on students' and instructors' (in parentheses) views on the extent to which the human resource capacity of the three departments influenced employability skills' implementation.

Table 6- Students' and Instructors' views on how Human Resource Capacity
of Geography Departments Influences Employability Skills
Implementation

Type of	Low Level	Moderate Level	High Level	Total
Employable	Imp.	Imp.	Imp.	
Skills Domain	1.50-2.49	2.50-3.49	3.50-4.00	
Intellectual	1(0)	9(10)	-	10(10)
Key Skills	1(0)	7(8)	-	8(8)
Personal Attributes	0(0)	8(8)	.=	8(8)
Commercial Awareness	5(4)	2(3)	-	7(7)
Frequency	7(4)	26(29)	0(0)	33(33)

Source: Field survey, Ababio (2015)

NB: Imp. – Implementation

Table 6 shows that, out of the 33 employable skills variables, the students indicated that 26 employable skills were moderately implemented. In other words, the mean values for those 26 items fell within the range of 2.50 and 3.49. The remaining seven employable skills were scantily implemented. With regard to the 26 employable skills that were implemented to a moderate level, nine were in the intellectual domain, seven were in the key skills domain, eight in the personal attributes domain and only two in the commercial awareness domain.

A further breakdown of the student responses showed that, out of the seven employable skills that were scantily implemented, five were in the commercial awareness (i.e. knowledge of employer organisations) domain and one each for the intellectual skills and key skills domain. This meant that majority of the

employable skills that had low level implementation were commercial awareness skills. We can conclude that, though the role of human resource in the training of students was moderate, this resource failed to train students adequately in knowledge of employer organisations (i.e. commercial awareness skills). This finding is contrary to Awiah's (2013) call to tertiary education institutions to offer their students more practical work place experience supported by proper training and mentoring, instead of the current focus on theoretical teaching methods and completion certificates.

The figures in parentheses in Table 6 show views of instructors on how the human resource (instructors and other staff) of the geography departments contributed to the training of students in employable skills. Out of the 33 employable skills that were analysed, four commercial awareness (i. e. knowledge of employer organisations) skills had low level of implementation by the instructors, since their mean values were within the range of 1.50 and 2.49. The remaining 29 employable skills received a moderate level implementation from the human resource (i.e. instructors and other staff). What this means is that the geography departments were not able to deploy fully their human resource capacity to train students in all the four employable skills domains. This finding is not much different from that of the perspective of the students, which showed that they received moderate training in 26 employable skills, as compared to the 29 indicated by their instructors.

From the analyses of the views from students and instructors, we can conclude that the geography departments were able to deploy their human resources capacity to train students to acquire employable skills at a moderate level. This finding appears to support Wiafe's (2003) study on some Ghanaian

social science graduate employees (geography graduates inclusive), who bemoaned the fact that they lacked workplace skills and for that matter, their employers had to give them on-the-job-training. It must be noted that, one major purpose of geography undergraduate programmes is to prepare professionals who are competent and can exhibit leadership skills and attributes including decision-making, problem-solving, independent thinking, self-management and teamwork (Simon Fraser University, 2009; Talbot, 2000). It therefore behoves geography instructors to prepare graduates for generalist occupations by helping them acquire employable skills that transcend different workplace settings and practices. Aside the role played by instructors in the training of students, the leadership of academic departments is also expected to play facilitative roles in the training of students. The next section focuses on the impact that the heads of department had on the employability skills training of the students.

Role of leadership capacity on student employability skills development

The leadership of an organisation revolves around an individual or a group of people in the organisation, recognised as having a dominant position, and is able to exercise a high degree of control or influence over the other members in the organisation. The main mandate of leaders in an organisation is to carve a clear vision for the organisation; share the vision with others so that they will follow willingly; provide information, knowledge and methods to realise that vision, and coordinate and balance the conflicting interests of all members and stakeholders. Table 7 illustrates students' and instructors' (in parentheses) views on how the leadership of the geography departments helped in the implementation of employable skills.

Table 7- Students' and instructors' views on how Leadership Capacity of
Geography Departments Influences Employability Skills
Implementation

Type of	Low Level	Moderate Level	High Level	Total
Employable	Imp.	Imp.	Imp.	
Skills Domain	1.50-2.49	2.50-3.49	3.50-4.00	
Intellectual	0(0)	10(7)	0(3)	10
Key Skills	0(0)	8(5)	0(3)	8
Personal	0(0)	8(5)	0(3)	8
Attributes				
Commercial	4(4)	3(3)	0(0)	7
Awareness				
Frequency	4(4)	29(20)	0(9)	33(33)

Source: Field survey, Ababio (2015)

NB: Imp. – Implementation

Figures outside the parentheses in Table 7illustrate the views of students on how the leadership of geography departments contributed to their acquisition of 33 employability skills. It is clear from the table that the leadership/management of the geography departments was able to implement 29 of the employability skills to a moderate level. In other words, the mean values of 29 employable skills were within the range of 2.50 and 3.49. All the remaining four employable skills that had low level implementation were in the Knowledge of employer organisations (i. e. commercial awareness) domain. Out of the 29 employable skills that had moderate level implementation, 10 were in the intellectual skills domain, eight in each of the key skills domain and the personal attributes domain. The remaining three were in commercial awareness domain.

The analysis of students' perspective on how leadership capacity influenced the development of employable skills showed that the leadership of the geography departments deployed moderate capacity in developing students' employable skills. The employable skill domain that had the most moderate level implementation was the intellectual domain, with the knowledge of employer organisations (commercial awareness) domain, having had the least level implementation. What this means is that the geography departments are not doing enough to train their students to acquire knowledge on workplace practices before they graduate.

The figures in parentheses in Table 7 show instructors' views on how the heads of department influenced employability skills implementation. Out of the 33 employable skills analysed, 20 had moderate level implementation through the instrumentality of the heads of department. Nine of the employable skills had a high level implementation, with four commercial awareness skills receiving low level implementation. This finding is in contradiction to the views expressed by the students, who indicated that, of the 33 employable skills, 29 had moderate level implementation, with four having low level implementation. One possible reason for these two parallel findings is that the heads of department might at a point in time, have delegated some decision-making power to the instructors, making the instructors not having the courage to be too critical of the leadership of the departments. The students on the other hand had nothing to hide, a stance that might have emboldened them to give the responses that they gave.

Incidentally, from the perspectives of the students and instructors, majority of the employable skills that had low level implementation were in the knowledge of employer organisations (commercial awareness) domain. What this means is

that the heads of department might not have done much to help their departments align the training of students to workplace practices. This unfortunate development is contrary to a call by Dr. Samuel Ankrah, the Chief Executive Officer of GamAnk Group, on Ghanaian universities to establish closer collaboration with the world of work to ensure that graduates would have a positive mental attitude and values required to succeed in the world of work (Ankrah, 2016).

Role of Intra-organisational collaboration in employability skill implementation

This resource, sometimes referred to as inter-staff collaboration or professional learning community, is the ability of an organisation to draw on relationships among all the stakeholders in the organisation to enable it have access to shared resources, knowledge and experience (Hall et al., 2003). To analyse the role of intra-organisational collaboration in employability skills' implementation, students and instructors were instructed to use a designated decision rule format to rate how the geography departments deployed their intra-organisational collaboration capacity to develop employable skills in students

Table 8 shows the perceived views of students and instructors (in parentheses) on the role of intra-organisational collaboration in the development of employable skills in students.

Table 8 – Students' and Instructors' views on how Intra-organisational Capacity of Geography Departments Influences Employability Skills
Implementation

Type of Employable	Low Level Imp.	Moderate Level Imp.	High Level Imp.	Total
Skills Domain	1.50-2.49	2.50-3.49	3.50-4.00	
Intellectual	4(0)	6(10)	0(0)	10(10)
Key Skills	2(0)	6(8)	0(0)	8(8)
Personal Attributes	0(0)	8(8)	0(0)	8(8)
Commercial Awareness	6(2)	1(5)	0(0)	7(7)
Frequency	12(2)	21(31)	0(0)	33(33)

Source: Field survey, Ababio (2015) NB: Imp. – Implementation

From Table 8, out of the 33 employable skills, the students indicated 21 to have been moderately implemented, whilst 12 had low level of implementation. For the 12 lowly implemented employable skills, six were in the commercial awareness domain; four were in the intellectual skills domain and two in the key skills domain. From the 21 moderately implemented employable skills, six were in the intellectual skills, six in the key skills domains, eight in the personal attributes domain and one in the commercial awareness domain. Analysis of students' perspective on the role of this resource showed moderate implementation of the employable skills. The domain that received the most moderate implementation from this resource was personal attributes, with commercial awareness receiving

the least level of implementation. In sum, the students were of the consensus that the intra-organisational collaboration in the departments was not enough to train them to acquire commercial awareness skills. Aside the views given by the students on the role of intra-organisational collaboration in employability skills' implementation, the instructors were also to give their perceptions on how the various stakeholders in the departments collaborated to enhance students' acquisition of employable skills.

From the figures in parentheses in Table 8, out of the 33 employable skills that were analysed, the instructors indicated that there was a moderate level of training in 31 of these skills. By comparing this finding to that of the students, it is inferred that the role of geography departments' intra-organisational collaboration in employability skills implementation was relatively better than that of leadership capacity. However, both the instructors and students unanimously agreed that intra-organisational collaboration aimed at training students in employable skills was not the best. These findings appear to be in alignment with the findings by Newmann et al. (2000) that in schools where there was less capacity for improvement, professional development interventions were few. The opposite is true. The question now is, were the geography departments not well motivated to use their intra-organisational collaboration capacity to train students in employable skills? The current researcher is of the view that the outcome of this quantitative data analysis has been elaborated by the qualitative data analysis covered elsewhere, thus creating the space for determining the degree to which these two components of this mixed methods study converged or diverged (Bregoli, 2013).

Role of physical resource capacity in the implementation of employability skills

This capacity dimension is also known as technical or material resource. It is the ability of an organisation to develop and deploy its financial capital and other physical assets (infrastructure, tools & equipment, technology, etc.) for the attainment of its goals (Misener & Doherty, 2008). Table 9 shows students and instructors' (in parentheses) views on how the deployment of physical resources contributed to the implementation of 34 employable skills. Eight were in each of the following domains: intellectual skills, key skills and personal attributes. Four of the employable skills were however in the commercial awareness domain. For the six employable skills that had low level implementation, three, two and one were in the commercial awareness, intellectual skills and key skills domains respectively. In sum, of the four skill domains, it is clear that the geography departments failed to attach much importance to students' acquisition of workplace knowledge and skills. From Table 9, out of 33 employable skills analysed, the students indicated 28 to have been moderately implemented through the application of physical resources, with the remaining six skills recording low level of implementation. Out of the 28 moderately implemented employable skills, each of the following employable skills domains had eight of their skills being implemented, according to the students: intellectual, key and personal attributes. The domain with the least implemented skills was commercial awareness, with only four skills being implemented.

Table 9 - Students' and instructors' views on how Physical Resource Capacity of Geography Departments Influences Employability Skills
Implementation

Type of	Low Level	Moderate Level	High Level	Total
Employable	Imp.	Imp.	Imp.	
Skills Domain	1.50-2.49	2.50-3.49	3.50-4.00	
Intellectual	2(0)	8(10)	0(0)	10(10)
Key Skills	1(0)	8(7)	0(2)	9(9)
Personal	0(0)	8(8)	0(0)	8(8)
Attributes				
Commercial	3(2)	4(4)	0(0)	7(6)
Awareness				
Frequency	6(2)	28(29)	0(2)	33(33)

Source: Field survey, Ababio (2015) NB: Imp. – Implementation

From the figures in parentheses in Table 9 as indicated by the instructors, of the 33 skills analysed, 29 had moderate level implementation, two had low level implementation and two received high level implementation. This finding is slightly different from the analysis of students' perspective that showed a relatively lower number of employable skills implementation. What this means is that the instructors had a relatively better perception of the positive role of physical resources in employability skills implementation.

Coincidentally, according to the students and their instructors, most of the employable skills that had low level implementation were in the commercial awareness domain. That is, three out of the six skills (for students) and two (for instructors) were in the commercial awareness domain. What this implies is that, the geography departments could not adequately deploy their physical resources in the training of their students to acquire workplace ethos.

De Vita and Fleming (2001) contend that for physical resources to have a positive impact on the training of students, it behoves organisations to mobilise their human resource teams to utilise physical resources such as finances, equipment and infrastructure for the translation of their visions into reality. To De Vita and Fleming, a physical resource like finance when deployed judiciously is likely to attract quality human resource, and other types of physical resources to the organisation. On the contrary, in situations of physical resource constraints, students are less likely to acquire employable skills according to Mbewa's (2014) study where she found that in schools where there were few technical resources for practical work (e.g. computers), it limited the opportunity for developing employable skills in students.

Roles of inter-organisational linkages in employability skills implementation

This resource which others refer to as relationship and network capacity is the ability of an institution to collaborate with clients, funding agencies, partners, government, media, corporation and the public (Hall et al., 2003). Table 10 shows views of instructors (in parentheses) and students on how inter-organisational linkages contributed to the implementation of employable skills.

Table 10 - Students' and Instructors views on how Inter-organisational

Linkages Capacity Influences Employability Skills Implementation

Type of	Low Level	Moderate Level	High Level	Total
Employable	Imp.	Imp.	Imp.	
Skills Domain	1.50-2.49	2.50-3.49	3.50-4.00	
Intellectual	3(0)	7(10)	0(0)	10(10)
Key Skills	0(0)	8(8)	0(0)	8(8)
Personal	0(0)	8(8)	0(0)	8(8)
Attributes				
Commercial	5(1)	2(6)	0(0)	7(7)
Awareness				
Frequency	8(1)	25(32)	0(0)	33(33)

Source: Field survey, Ababio (2015) NB:

Imp. – Implementation

In Table 10, out of the 33 employable skills analysed, the students indicated that 25 received moderate level implementation, with the remaining eight having received low level implementation. For the 25 employable skills that received moderate level implementation, eight were in the key skills and personal attributes domains while seven were in the intellectual skills domain with only two in the commercial awareness domain. For the eight employable skills that received low level implementation; five were in the commercial awareness domain and three in the intellectual skills domain. The returns showed that the geography departments failed to use this resource to train adequately students in employable skills.

Figures in parentheses in Table 10 show instructors' perspective on how inter-organisational collaboration aided in the training of students in the

Table 10 - Students' and Instructors views on how Inter-organisational

Linkages Capacity Influences Employability Skills Implementation

Type of	Low Level	Moderate Level	High Level	Total
Employable	Imp.	Imp.	Imp.	
Skills Domain	1.50-2.49	2.50-3.49	3.50-4.00	
Intellectual	3(0)	7(10)	0(0)	10(10)
Key Skills	0(0)	8(8)	0(0)	8(8)
Personal	0(0)	8(8)	0(0)	8(8)
Attributes				
Commercial	5(1)	2(6)	0(0)	7(7)
Awareness				
Frequency	8(1)	25(32)	0(0)	33(33)

Source: Field survey, Ababio (2015) NB:

Imp. – Implementation

In Table 10, out of the 33 employable skills analysed, the students indicated that 25 received moderate level implementation, with the remaining eight having received low level implementation. For the 25 employable skills that received moderate level implementation, eight were in the key skills and personal attributes domains while seven were in the intellectual skills domain with only two in the commercial awareness domain. For the eight employable skills that received low level implementation; five were in the commercial awareness domain and three in the intellectual skills domain. The returns showed that the geography departments failed to use this resource to train adequately students in employable skills.

Figures in parentheses in Table 10 show instructors' perspective on how inter-organisational collaboration aided in the training of students in the

33 employable skills. The instructors indicated that majority of the employable skills (i. e. 32) were moderately implemented, with the exception of only one skill in the commercial awareness domain which had a low level implementation. This finding contradicted the students' perspective that showed a relatively minimal role of inter-organisational collaboration on employability skills implementation. The instructors had a much appreciative view of the role of inter-organisational collaboration in employability skills implementation than their students. The disparity in the two findings might be the result of a current situation where most instructors are in one way or another involved in inter-organisational partnership or collaboration with their colleagues either in Ghana or abroad in the area of joint research projects or consultancy services. Since the students did not usually engage in such collaborative activities with students in other educational institutions on the same scale as their instructors, they were more likely to have rated the impact of this resource lower than their instructors.

To make inter-organisational collaboration more relevant to the training of students, Wiafe (2003) suggested that academia should foster effective partnership with the world of work to enable students and their instructors test the theories and principles that they learn in the classrooms. Wiafe's suggestion is in tandem with Babalo's (2003) recommendation that training of students should include new workplace production processes and methods.

To validate the quantitative data on the respondents' perception of the capacity of the geography departments to equip students with employable skills, qualitative data were analysed from the views of the respondents. The

next section presents the analysis and discussion of the qualitative data on respondents' perception of the impact of the departments on student employability skills' development.

Qualitative Analysis of Views of Respondents on Geography Departments' Capacity to meet Employability Skills Needs of Students

This section presents the analysis and discussion of the data collected through qualitative instruments. The data were analysed according to themes that emerged from responses (Merriam, 1998; Patton, 2002). The responses were the perceptions of six sets of participants namely, heads of geography departments, instructors, support staff, undergraduate students, graduate employees and their employers. The outcome of the analysis aided the researcher to answer the research questions raised in Chapter One.

Demographic findings

This section presents the data resulting from the focus group discussion protocol and structured interview schedule. The student participants for the focus group discussion provided details of their ages, current year of study and programme of study. For the support staff who responded to the structured interview schedule, they provided details of their age range, job type, academic and professional qualifications and length of service to the university. For the geography graduates and their employers, data were on gender, type of establishment and their current position in the establishment. The profiles of the respondents are in Table 11.

Table 11 - Demographic and Professional Profile of Respondents

Respondents	Gender	Age	Qualification OR Level(L)	Qualification OR Type of Organisation Level(L)	Position in Org.	Job Type	Length of Service (Years)
Students	Male(22) Female (14)	Modal (23) Ave.(24)	L. 400- (30) L.300 -(6)	UCC UG KNUST	Undergraduate student	N/A	N/A
Support Staff	Male(14) Female (5)	Under 30 – 6; 31-45: (7); 46-60:(6)	MSLC - 1 Cert. (1) Dip. (1) 1 ST deg.(2) Masters (12) N/R - 1	UCC UG KNUST	Headman(1) Senior H*man (1) ATRA -(8) SATRA-(2) PATRA-(5) TA/RA-(2)	F/T (14) P/T (3) OC- (1)	Under 5: (13); 6-10 :(3) 11-15:(3)
Graduates	Male- 12 Female-7	N/A	N/A	E.I – (9) GIS – (4) PC-(3) FI –(2) PO –(1)	MS;TA;SS;HOD; T;C;;S;MMITO;SM;CEO;MLM GIS(M)	N/A	N/A
Employers	Male-(4)	N/A	N/A	EI- (2);IT(1) FI- (1)	HRM Director N/R	N/A	N/A

Thematic findings

In finding appropriate evidence to validate the objectives of the study, data were analysed and categorised by themes. This was to ensure a comprehensive understanding of the phenomenon of geography departments using their capacity to develop the employability skills of students. Initial coding resulted in over 30 themes. After several reading of the data, the number of themes was reduced to eight as many themes were collapsed and incorporated into overarching general themes (see Table 12).

Table 12 - Emergent General Themes

List of General Themes

- Projects or Activities
- Student Learning Outcomes
- Instructional Strategies
- Programme Content and Relevance
- Resources for Employability Skills Development
- Challenges in Employability Skills Development
- Actions to Address Capacity Challenges
- Suggestions for Capacity Building

Source: Field survey, Ababio (2015)

Using the study's five research questions as a guide, the qualitative data were analysed into themes with the aid of Nvivo 8, qualitative data analysis software. Table 13 shows six emergent themes on employability skills after the analysis of the views of the respondents with respect to the research questions.

Table 13 - Emergent Themes Resulting from role of Geography Departments in Employability Skills' Implementation

Proxy Indicators of Employable Skills			Dimensions of Ca	of Capacity	
	Human Resource	Physical Resource	Leadership Resource	Intra-organ' Collaboration	Inter-organ' Collaboration
Projects/activities organised by department	Type of activity; Student participation	Type of activity; In-class activity	Initiatives by Heads of Department	Activities through intra- organisational capacity	Activities through inter-organisational capacity
Instructional strategies in the department	Teacher-centred; student-centred	In-class & out-of class use of physical resources	Initiatives aimed to enhance instruction	Evidence of team teaching of courses	Evidence of external support for instruction
Procurement & use of physical resources	Role of instructors	State of physical resources	Role of Heads of Department	Evidence of collaboration in the use of	Evidence of external support for acquisition
Learning outcomes due to a capacity impact	Discipline-based & generic skills	Discipline-based & generic skills	Initiatives to promote student learning outcomes	Learning outcomes developed through intra- organisational collaboration	Learning outcomes developed through interorganisational collaboration

le of projects and activities in employability skills' implementation

The constructivist theory posits that in the training of students, emphasis be t on activities such as laboratory work, workshops, project work, student sentations, fieldwork, use of IT and report writing. In this study, the students in focus group discussion reported that their participation in group work, fieldwork, all presentations and projects enabled them to acquire self-confidence, time imagement, interpersonal skills, presentation skills, research or data gathering ills, use of equipment/tools/devices, communication skills and report writing ills. The finding is in tandem with Haffar's (June, 2015) suggestion that teachers ust adopt methods that involve students in the instructional process, instead of aking them sit still throughout instructional process.

Apart from the role played by the instructors in organising projects or tivities, the heads of department also occasionally organised events such as minars and public presentations, where professionals from the corporate world are to speak on themes such as students' employment prospects and skills equirements for the job market. As one female student remarked:

On one occasion, at the initiative of our head of department, an official from a hipping company was invited to speak on graduate job prospects in the maritime ndustry". In affirmation of the student's statement, an instructor also testified that 'the head of department occasionally provided financial support for educational ours or fieldtrips within and outside the home regions of the department". The tatements by the student and instructor affirm Ecker, Dufour and Dufour's (2002) contention that effective leaders in educational institutions are those transformational who through their initiatives lead the schools to transform students' lives, motivating and inspiring them to do things which on their own, they could not do.

From the analysis of the role of human resource capacity in employable skills plementation, views from the students and the instructors show that this type of pacity helped students to acquire employable skills in three out of the study's four mains of employable skills, except that of knowledge of employer ganisations(i.e. commercial awareness). Additionally, the support staff also in a sy contributed to student acquisition of employable skills as they helped in sparing laboratories and classrooms for instruction, organising field trips and nducting tutorials for students. The role played by projects and activities in the ining of the students is in affirmation of the student involvement theory and the instructivist theory, which state that, students' participation in extra-curricular tivities such as workshops, seminars, student presentations, fieldwork and report itting, improves their academic learning time.

Another capacity dimension, physical resources, also aided students' quisition of employable skills through projects and activities. For example, udents' use of the GIS laboratory helped them acquire employable skills such as pility to use equipment and practical thinking. The GIS devices help students to inderstand classroom instruction better. A male student had this to say, "the GIS aboratory helped me to acquire technical skills such as map making". Other udents also intimated that they acquired reading skills and built up their knowledge ase when they patronised the library. Some students, however, bemoaned the tuation where sometimes, the libraries were over-crowded due to increasing student opulation. Again, they saw the malfunctioning of some equipment as a hindrance to eir quest to acquire employable skills through hands-on activities.

In affirming the positive contributions of the physical resources to the uning of students, one instructor also noted that "some facilities such as the library

enhanced students' reading skills and served as a multi-source of information for academic references and research". Another instructor, however, bemoaned the limited role of the laboratories (e.g. GIS, cartography, etc.), in the sense that students derived limited educational value from them due to factors such as limited physical space to keep laboratory materials, malfunctioning and out-dated equipment. The instructors, in spite of these inhibiting factors, admitted that, students got hands-on training in GIS and therefore acquired spatial analytical skills.

The views of other members of staff were also analysed concerning the adequacy of physical resources in the training of students in employable skills. When the views of the 19 support staff on the adequacy of physical resources for the training of students were analysed, nine of them stated that the resources such as computers and projectors were inadequate. The fact that those in this group were more than those who indicated various degrees of adequacy of the physical resources implies that there is the need for the geography departments to augment the available stock of physical resources. This position of the support staff was in alignment with those of the two heads of department who in a way admitted the inadequacy of the physical resources. However, head stated that despite the satisfactory state of the physical resources, there was the need to augment and improve upon the current stock. The inadequate amount of equipment and teaching/learning materials in the departments is contrary to one of the postulates of the constructivist theory which posits that instruction in schools should employ multi-media devices such as globes, charts, pictures, albums, models, specimens, etc.

In order to get another perspective on the state of the physical resources in the geography departments, the researcher deployed six structured observation guides aimed at assessing the quality and state of the resources. In five of the observation guides, it was indicated that, the teaching learning equipment/tools were of moderate quality. As regards the quality of library reading materials on employable skills learning outcomes, about two thirds of the observation guides indicated low quality. Lastly, the lecture halls and student study rooms were inspected. All the observers unanimously concluded that they were of moderate quality with regard to seating capacity and state of facilities in the rooms.

In summary, the analysis of the role of physical resources in employability skills implementation showed positive and minimal impact taking into account the perspectives of the respondents. For instance, an observer indicated that the physical resources such as equipment/tools were of moderate capacity for the implementation of employability skills. The students also agreed that the physical resources, though inadequate, helped them acquire some skills, a view that was in line with the perceptions of the instructors and support staff. UNESCO (1981) states that quality training in educational institutions is dependent on the quantity and quality of teaching learning materials, of equipment, office space, lecture halls and laboratories. This assertion by UNESCO is an affirmation of one key postulate of the systems theory - that in any institutional assessment, the input variables should be included.

The role of another capacity dimension, intra-departmental collaboration, was analysed with regard to the projects or activities jointly undertaken in the geography departments. The interaction with the students showed that they acquired employable skills such as teamwork, social skills, leadership skills, data gathering skills, ability to use equipment, boosting of self-confidence, presentation as well as report writing skills.

From the analyses of the perspectives of the respondents and the observation guides, it is possible to suggest that intra-departmental collaboration contributed in various ways to student employable skills development, especially in the area of intellectual and personal/key skills and personal attributes. The respondents identified some areas that the departments engaged in intra-organisational collaborative activities. In support of this, one female student intimated: "During one particular geography students' association week celebration, the leadership of the department together with the executives organised outreach programmes, seminars and orientations, which helped us a lot". A male student also opined "I remember some time ago, the CERGIS unit and the GIS unit did some joint project to train students in the use of modern technology". In agreeing to the assertions made by the students, one instructor noted that at times "lecturers collaborated with one another to undertake team teaching, supervise students' project work and saw to students' presentations".

Another source of data on the role of intra-departmental collaboration in departmental projects or activities was the heads of department. Their role was more facilitative in nature. According to one head of department, "on most occasions, I had to source for funds for the departments to organise workshops and seminars and for staff and students to undertake field trips". The other head also intimated that he had to mentor newly appointed instructors in the department.

The staff also contributed to collaborative activities in the departments in several ways. According to one instructor, "They collaborated with one another to undertake joint instructional activities, jointly supervised students' long essays and project work and assisted students in the preparation of oral and poster presentations". Similarly, the support staff contributed their quota. As one support

staff remarked, "Some of us assisted in the preparation of lecture halls and laboratories for lectures; others took students on fieldtrips or served as sounding boards (resource persons) to students in the writing of long essays, and organised tutorials for students". Majority of the 19 support staff, however, indicated that since their appointment (ranging from 1 to 5 years), there had not been any occasion in the past where the various units/sections in their departments collaborated to undertake joint projects to train students in employable skills.

Lastly, direct observations were carried out by the researcher and his field assistants in an attempt to validate the evidence garnered from the other instruments. The direct observations on departmental activities (though limited in duration) showed that intra-departmental collaboration was of low level as recorded on only four occasions. The duration for each observation ranged from 1 to 2 hours, covering a time period of between 4 to 6 weeks.

From the perspectives of the students, the instructors, heads of department, support staff and the observers, we can conclude that intra-departmental collaboration contributed in various ways to student development employable skills especially, in intellectual and personal/key skills and personal attributes. All the above assertions are in line with tenets of the competency model, which state that students acquire competencies when instructions revolve around highly interactive discussions between instructors and students, and among students. It elaborates further that for the development of competent learning outcomes, intra-unit collaborative discussions, especially between staff and students should be encouraged.

The last capacity dimension that was analysed is inter-departmental collaboration. In responding to the structured interview schedule, the instructors

indicated occasions where their departments had different types of collaboration with other academic departments and the corporate world. Through the interorganisational activities and projects, students acquired knowledge on workplace practices, teamwork skills, social skills, discipline-based skills, report-writing and presentation skills.

Another source of data for the role of inter-departmental collaboration in departmental activities aimed at training students in employable skills was the students. The knowledge and skills that they acquired from such activities include, data gathering, knowledge on workplace ethos and practices, report writing and presentation.

Lastly, when the external stakeholders were contacted to give their perceptions on the role of inter-organisation linkages in the training of students, feedback from the geography graduates and employers showed that their respective establishments had very little collaborations with the geography departments. All the four employers indicated that there had not been any form of collaboration between their establishments and the geography departments at the time of the field survey. Majority of the 19 graduate employees intimated that there had not been any form of collaboration between their establishments and their alma mater. The few examples of collaboration included joint teaching and consultancy and technical services in map making provided by the geography departments.

From the perspectives of the various stakeholders, we can infer that interorganisational collaborations were in different forms, and had both positive and minimal influence on employability skills implementation. These assertions are in line with some earlier studies where the researchers found that there was significant disconnect between academic programmes and the world of work, and that some graduates were not given the opportunity to engage in industrial attachment during their undergraduate training (Wiafe, 2003; Evans et al., 2009; Bawakyillenuo et al., 2013). The next section discusses how instructional strategies used by the instructors aid students' acquisition of employable skills.

Role of instructional strategies in employability skills implementation

Shulman (1987) identified instructional competencies teachers should possess to ensure high student learning outcomes in schools. These include knowledge of the curriculum, knowledge of subject matter, and subject specific knowledge (i. e. teacher craft knowledge). In this study, the investigator sought the views of all the respondents on the relevance of the instructional strategies used by the instructors for skills training. This is the main focus of the first subsection.

Relevance of instructional strategies to skills training

When the respondents were asked to comment on the above issue, the various views given by them showed that some of the instructional strategies adopted by the instructors had positive influence on student acquisition of employable skills. In affirmation of this statement, one female student asserted: "Some of the questions that were posed to us were not only academic, but also related to the world of work. We were also trained to acquire most of the skills in the world of work and were often motivated to apply these skills wherever possible".

As a testament to the above statement by the female student, an instructor also asserted in defence of what he and his colleague had been doing: "We train students to acquire employable skills and personal attributes, such as critical thinking and problem solving, communication, self-direction, personal and social responsibility, through class assignments, fieldwork, examinations, group

assignments and presentations, problem identification and provision of solutions, research activities, coaching, etc.".

Three of the observers who used the observation guide to collect data were unanimous in their observations. They testified that most of the instructors touched on real world situations, with key analyses drawn between theoretical issues and real world practicalities. The instructors made conscious efforts to relate the instruction to current happenings in the world and their use of local scenarios was particularly, appreciated by the students. Lastly, there was a direct relationship between the topic of instruction and real issues on the ground or in the world.

To validate the views of the internal stakeholders, views of the external stakeholders were sampled. According to one graduate employee, the training enabled him to identify problems, seek explanations and seek solutions for them. He further opined "Instruction in research methods helped me to investigate problems that arise in the job environment, acquire research and report writing skills".

From the above perspectives of the respondents, it can be concluded that some student-centred instructional strategies helped students to acquire various types of employable skills. According to the learning pyramid, when the main goal of instruction is to actively engage students in activities such as group discussion, practice by doing, and peer teaching, students tend to retain 50%, 75% and 90% of the learning material respectively (Haffar, 2016 March 19).

Minimal or negative role of instructional strategies in skills training

When the respondents were asked to state whether some of the instructional strategies did not help students in acquiring employable skills, the following were the assertions made by some of them:

Female student: "Most assignments given to students were too theoretical which precluded the acquisition of employable skills"

Another female student: "There was too much emphasis on examinations, resulting in students having the tendency to not read for understanding, but rather cram the learning materials in order to pass the examination";

Male student: "The marking/assessment did not assess understanding, but rather expected students to 'chew and pour', i. e. rote learning"; An instructor: "Students were at times not involved practically during instruction and they did not receive enough guidance from the instructors"; Graduate employee: "In my view, about 99% of the instruction was on the learning of textual material and theory with little practical work"; An observer: "Some aspects of the instruction appeared not to be applicable to real world situation".

The above views of the respondents on the role of instructional strategies on student learning outcomes show that most of the instructional strategies were theoretical or abstract thus making student participation in class passive. This sad situation might have happened probably because the geography departments failed to make maximum use of physical resources, intra- and inter-organisational collaboration in designing innovative instructional strategies to train students. Nevertheless, some of the views also supported the fact that the heads of department, instructors, support staff and students used their leadership, intra- and inter-organisational resources to undertake various forms of instructional activities that might have inured to the benefit of students.

The influence of instructional strategies on student employability skills development is contrary to the postulates of some human development-oriented theories and models. The competency-based model posits that in the training of

students, the focus should be on problem-solving tasks, task-based training instead of knowledge-based training and applied knowledge instead of pure knowledge. In apparent support of this, the systems theory also states that for the effective assessment of educational institutions, the assessment should focus on throughput variables such as the nature, number and frequency of examinations, quizzes and assignments; hands-on instruction/activities, and the use of multi-media and IT devices. Lastly, the student involvement theory also argues that, for students to gain competency, they need to actively, spend more time at lectures, reading, discussing and engaging in hands-on activities.

Role of physical resources in employable skills implementation

Fowler and Ubels (2010) stress the importance of physical resources such as ICT equipment, internet facilities and libraries, in ensuring that no organisation is incapacitated in the discharge of its functions. It is against this backdrop that the study sought the views of both internal and external stakeholders on the impact of physical resources on the skill training of students. From the analysis of these views emerged two contrasting themes: positive and minimal impact of physical resources.

Positive role of physical resources in employability skills implementation

The positive role implied that the geography departments were able to use the available physical resources to equip students with some employable skills. The observations and views of the participants on this issue are summarised as follows:

An observer: "There was a direct instructor-student interaction, with the aid of a projector- the power point presentation was visible to all students, irrespective of their seating position Female student: "Instructors' used GIS equipment which helped students to think practically"; Another female student: "Most instructors

used geographic tools and visuals to aid student learning". Head of Department I encouraged internet-based instruction in my department". Another Head of Department: "I made available to staff and students physical facilities whenever possible".

From the analysis of the above views, we can conclude that the geography departments used various types of physical resources to train students to acquire employable skills. This inference is in tandem with Beaver and Weinbaum's (2012:4) assertion that material resources can only improve school capacity only if, they are used in connection with other resources. They add that material resource being inanimate objects can only be of benefit to an organisation if they are deployed in support of other forms of resources that allow the school to improve.

The theme of the subsequent subsection shows that the geography departments failed to pay heed to the above assertion by Beaver and Weibbaum, hence the minimal impact of physical resources on the skill training of students.

Negative or minimal role of physical resources in employability skills implementation

The minimal role implied that the geography departments failed to deploy their physical resources to aid students to acquire employable skills. Observations and views of the participants are summarised as follows:

Graduate employee: "There was lack of adequate facilities for fieldwork";

Another graduate employee: "The tools for practical instruction were outmoded";

An observer: "Not all parts of the instruction did the instructor use audio visual or information technology equipment"; Male student: "Though the department had equipment, the number was grossly inadequate vis-a-vis large student numbers;

Another male student: "In some cartography instructions, there were no GIS devices to aid student understanding of the instruction"; Female student: "Physical facilities such as lecture halls and libraries were not able to contain student numbers, especially during examinations":

The above perspectives of students, graduate employee and the observer show that the role of physical resource in employable skills' implementation was both positive and negative. The negative or minimal influence was essentially about the inadequacy or absence of equipment or tools needed for teaching the practice-oriented courses, thus making the instruction more theoretical in nature. In resource incapacitated classrooms where either there are no physical resources for students to interact with or the available ones are only handled by the instructor, student learning may tend to be a passive activity of merely watching and listening, leading to a retention rate of between 20% and 30% (Haffar, 2016 March 19).

After the analysis and discussion on the role played by physical resources in the skill training of students, the next section is a discussion of the types of employability-related learning outcomes that the departments have been able to assist students to acquire.

Types of student learning outcomes relevant to student employability skills development

The World Bank Group (2013) defines leaning outcomes as the particular knowledge, skills or behaviour that students are expected to exhibit after a period of study. In other words, learning outcomes are educational experiences that inure to the benefit of students after completing a programme of study. It is against this backdrop that the study investigated the perceptions of the participants on the types

of learning outcomes that are relevant to the skill training of students. After reading the field notes on the interactions with students, heads of departments, support staff and instructors, the following student learning outcomes emerged as employable skills:

Female student: "The training given by the instructors had increased my self-confidence and my participation in impromptu quizzes has honed my analytical skills"; Head of Department: "Students were trained to develop independent research skills and problem-solving skills; An instructor: "Instructors trained students to develop the skill of meeting deadlines; operating in a team; using resources responsibly; careful and logical analysis of class assignments; oral communication in project presentations; and problem-solving" Support staff: "Students' training helped them to develop skills in writing, reading, data gathering and use equipment appropriately".

The deployment of physical resource was the next resource considered with regard to the types of student learning outcomes developed. The following findings emerged after a careful scrutiny of the field notes on the views expressed by the students, instructors and heads of department:

Male student: "Students' access to teaching learning tools/equipment enabled me to develop cartographic skills and ability to use equipment"; Female student: "The curricula have enabled students to develop a number of skills such as research skills, presentation skills, problem identification and problem-solving skills, self-confidence, teamwork skills, independent study, critical thinking skills and interpersonal skills; An instructor: "The curricular created opportunities for students to undertake industrial attachments where they acquired workplace skills; library materials also helped students to develop reading and data gathering skills";

Head of department: "The programmes/curricula in the department had enabled students to acquire independent research skills, problem-solving skills, writing skills and workplace skills through industrial attachments.

The next resource that was analysed with regard to its role in the generation of student learning outcomes was inter-departmental collaboration. After a review of the field notes on the views of the students, heads of departments, and instructors, the following findings emerged:

Male student: "Students' participation in internships equipped them with lifelong learning skills"; Another male student: "Industrial attachments gave students the opportunity to put theory into practice"; Female student: "Fieldtrips to corporate institutions exposed students to workplace practices"; Head of Department: "Geography departments entered into collaborations or partnerships with corporate entities because such arrangements exposed students to current practices and real life situations". Another Head of Department: "Since the geography departments did not have the full complement of instructional resources, collaboration with the world of work exposed students to the use of modern equipment". An instructor: "Collaboration or partnership with professional bodies helped to streamline the curricula of geography departments, thus aligning them with workplace practices"; Another instructor: "Collaboration with government agencies and corporate institutions served as avenue for the identification of problems that could lead to the design of student projects based on workplace practices".

Analysis of the above views of the instructors, students and heads of department implies that the geography departments deployed their interorganisational linkages capacity in various ways, particularly through internship programmes in the training of students. Highlighting the importance of interorganisational linkages to the skill training of students, De Vita and Fleming (2001) contend that when organisations identify themselves with like-minded institutions, they expose their products and services to the public, thus increasing the resources available to the organisation as postulated by the resource dependency theory.

The last resource that was analysed with regard to its role in the generation of student learning outcomes was intra-departmental collaboration. After a review of the field notes of students, support staff and instructors, the following key findings emerged:

An instructor: "When the instructors collaborated with one another through team teaching, supervision of students' projects and public presentations, it helped students to attain learning outcomes such as social skills, communication skills, ability to work independently and under pressure, and to meet timelines";

Another instructor: "When the staff and students collaborated with each other, especially during the department's open days, it helped students develop employable skills and attributes such as leadership, organising, self-independence, communication and teamwork skills"; Support staff: "When all stakeholders in the geography departments collaborated, it gave every stakeholder a sense of worth and belonging and served as a forum for the sharing of ideas, experiences and best practices "; Male student: "Departmental collaboration in the form of seminars, workshops, mentoring of students, served as a forum for building bridges, developing social skills and the sharing of ideas, knowledge and expertise".

The findings from the analyses of the views of the students, support staff and instructors show how intra-departmental collaboration positively affects students' attainment of learning outcomes and the creation of a professional learning community in the department. From the analyses of respondents' perspectives, one

can say that the geography departments deployed their capacities in various ways to aid students' attainment of both discipline-based and transferable skills. Concerning the impact of human resource capacity (comprising the roles of instructors and heads of departments), it was revealed that, this capacity helped students to acquire learning outcomes such as self-confidence; analytical, teamwork, communication, problem-solving, research, writing and reading skills, and the use of equipment. Similarly, the analysis of the impact of physical resources also showed that students attained discipline-based learning outcomes such as cartographic skills and generic skills, like ability to use equipment, critical thinking, inter-personal, research, teamwork, problem solving and independent study skills.

Other capacity dimensions contributed to students' attainment of learning outcomes. Intra- and inter-organisational linkages helped students to attain both discipline-based and generic skills and personal attributes such as cartographic skills, lifelong learning, putting theory into practice, workplace practices, use of equipment, social skills, leadership and organisational skills, self-independence, communication and teamwork skills.

The above analyses of the impact of the various capacity dimensions show that the undergraduate training of students in the three geography departments is in alignment with best practices in geography education the world over. The UK QAA (2014) has recommended that learning outcomes in geography honours degree programmes should include both subject-specific and generic skills as outlined above. Another reputable organisation in geography education, the International Geographical Union (1992) also recommends the inclusion of technical and generic learning outcomes such as verbal and numeracy skills, spatial techniques, data management skills, problem solving and teamwork skills in all geography education

programmes. Lastly, the Australian Geography Teachers' Association (2007) has recommended the inclusion of transferable skills such as communication, critical thinking and information management in geography education programmes. From this, we can conclude, that learning outcomes in geography education are many and varied spanning all the three main taxonomies of educational objectives - cognitive, affective and psychomotor.

Comparing quantitative and qualitative results to establish role of geography departments' capacity in employability skills' implementation

A discussion of the quantitative and qualitative results brought different insights to bear on the impact of capacity of geography departments on student employability skills development. Whilst the qualitative results allowed an elaboration of the quantitative findings, the latter also added more weight and credibility to the perspectives of the respondents in numerical terms. These are described in relation to the various capacity dimensions as follows:

Role of human resource in employability skills implementation

As regards the impact of human resource capacity on student employability skills development, the quantitative results showed that majority of the 33 employable skills had a moderate level implementation from this capacity, with the remaining five skills having had low level of development. The qualitative findings on the other hand, brought to the fore, both the strengths and weaknesses of the human resource capacity, something, which the quantitative findings did not reveal. For instance, the respondents, particularly the students highlighted challenges such as theory-based instruction, malfunctioning equipment, overcrowded classrooms, libraries and laboratories, among many others, having affected the output of the instructors.

On the issue of one employability skill domain having had low level implementation, both the quantitative and qualitative findings attested to the fact that it was the commercial awareness domain. In other words, they corroborated each other – there was convergence in these two findings. However, one advantage that the qualitative aspect of the study had over the quantitative aspect is that the former was able to reveal particular themes and activities that the human resource capacity addressed in tackling the issue of employability skills implementation. These themes and activities include projects/activities, course design and implementation, instructional strategies and student learning outcomes. The reason for divergence between the qualitative and quantitative findings is that the quantitative analysis dealt with pre-determined themes, whilst the qualitative analysis resulted in the emergence of the above themes after the analysis of respondents' perspectives.

Another advantage of the qualitative findings over the quantitative findings is that the former was able to give details of the above four themes. These include fieldwork, oral presentations, use of equipment, report writing, etc. (for projects and activities); GIS, cartography, transport geography, remote sensing, etc. (for course design and implementation); theory-based instruction, instructor-centred instruction, use of class assignments, coaching, fieldwork, etc. (for instructional strategies), and self-confidence, analytical, teamwork, communication and problem solving skills (for learning outcomes).

One last advantage that the qualitative aspect had over the quantitative aspect is that, the former's findings were able to identify the themes and activities with specific stakeholders. For example, design and implementation of courses was associated with the instructors and heads of department, whilst the deficiencies in the

human resource capacity were uncovered mostly by the students and graduate employees. This feat was something that the quantitative aspect could not achieve.

Role of leadership in employability skills implementation

On how leadership capacity influenced student employability skills development, the quantitative findings revealed that, when this capacity dimension was deployed, a mean of 25 employable skills had moderate level implementation, with six having low level of development, and having two high level of development.

The qualitative findings on the other hand revealed a similar scenario, but with more details. The qualitative findings also concluded that, the leadership of the departments helped in the moderate level implementation of most of the 33 employable skills. In addition, the qualitative aspect was able to reveal the strengths and weaknesses in this capacity dimension. Mention is made of capacity strengths such as the heads of departments helping to organise events and activities such as seminars, student presentations, fieldwork, etc. by making funds available, designing new courses, mentoring and coaching young and new instructors, and spearheading external collaborations.

Some weaknesses identified with this capacity include failing to initiate reviews in instructional strategies and not doing much to engender intraorganisational collaboration. These are issues, which emerged out of the analysis of the qualitative data gleaned from focus group discussions and open-ended questionnaires. By revealing these issues, the qualitative data allowed an elaboration of the quantitative findings on how leadership capacity influenced student employability skills development. The point of divergence between these two aspects of the study is the ability of the qualitative findings to give details of how

leadership capacity helped to equip students with employable skills, something that the quantitative aspect could not do.

Role of intra-organisational collaboration in employability skills implementation

With reference to the quantitative findings, the students and instructors thought that, out of the 33 employable skills assessed, 26 had moderate level implementation whilst seven had low level implementation. Most of the seven skills, which had low level implementation, were in the commercial awareness domain (i.e. 4). The qualitative results on the other hand, showed a mixed role of this resource in employability skills implementation. The strengths of this capacity type include staff and students coming together to organise geography students' association week celebrations, instructors collaborating with one another to undertake team teaching, coaching of students, supervising student projects, and organising seminars and student presentations.

Some of the weaknesses identified in this resource were (a) limited collaboration between staff and students in the development of commercial awareness skills; (b) limited participation of students and support staff in the review and design of courses; and (c) individual instructors collaborating with the support staff and students at the individual level instead of the departmental level in undertaking research, fieldwork, instruction and tutorials. However, one area of convergence between the quantitative and qualitative findings was that both affirmed the moderate premium placed on employability skill domains such as intellectual, personal and key skills and personal attributes, and the low attention given to commercial awareness skills.

Role of inter-organisational linkages in employability skills implementation

In the quantitative findings, majority of the 33 employable skills assessed had moderate level implementation through this resource. The findings also revealed that most of the nine skills that had low level of development were in the commercial awareness domain. Similarly, the qualitative results revealed the mixed influence of this resource on employability skills implementation. In highlighting the skills that had moderate implementation, specific mention was made of capacity strengths such as student participation in internship programmes, inter-departmental collaboration in team teaching, staff-student exchange programmes in and outside Ghana, and university-industry collaborations in the form of corporate professionals serving as resource persons at departmental seminars and educational tours to corporate entities.

With regard to weaknesses associated with this capacity dimension, though the quantitative aspect was able to reveal that majority of the skills that had low level of development were in the commercial awareness, it could not give specific details as to the factors that prevented this capacity from achieving maximum impact. Some of the weaknesses identified by the qualitative findings included the fact that most collaboration with external stakeholders was undertaken by individual instructors and there was very little inter-organisational collaboration in the design and delivery of courses. One advantage of the qualitative findings over the quantitative findings was that the former was able to identify key stakeholders that spearheaded the deployment of this capacity dimension to equip students with employable skills. Particular mention was made of the heads of department, instructors and corporate professionals. This served as a point of divergence between the quantitative and qualitative findings since the former could not achieve such a feat.

Role of physical resource in employability skills implementation

This capacity dimension on its own could not have had any influence on employability skills implementation without the intervention of the other four capacity dimensions. In the quantitative findings, it was revealed that majority of the 34 employable skills that were assessed had moderate level implementation, with only about six having low level implementation. Similarly, the qualitative findings showed that this resource had a mixed influence on employability skills implementation. The issue of majority of the employable skills having had low level implementation being in the commercial awareness domain was in line with the qualitative findings. However, the point of divergence between the qualitative and quantitative findings is that the former came out with specific strengths and weaknesses associated with this resource. For example, the qualitative findings revealed that, inter-organisational linkages helped the students to acquire skills and personal attributes such as use of modern equipment, better understanding of instruction due to the use of technological devices and the curricula equipping students with a variety of employable and technical skills.

Another advantage, which the qualitative finding had over the quantitative findings, was that it was able to reveal the identities of stakeholders who deployed this capacity dimension for the benefit of students. For example, mention was made of how instructors used power point presentations to enrich their instruction, how corporate entities donated various types of equipment to the geography departments and how students used some modern technological devices in their studies.

The qualitative finding also revealed some capacity weaknesses in this dimension. For example, some students revealed that during instructions, they at times had challenges such as:

- (a) mal-functioning equipment;
- (b) instructors' use of theory-based instructional approaches in the absence of the appropriate equipment;
- (c) passive involvement of students during practical instruction due to limited equipment; and
- (d) over-crowding in classrooms, libraries and laboratories due to increasing student numbers vis-a-vis limited physical facilities.

These above issues did not emerge in the quantitative findings. The next chapter is a presentation and discussion of how the curricula of the geography departments contributed to student employability skills development.

CHAPTER SIX

ROLE OF GEOGRAPHY CURRICULA IN ENGENDERING STUDENT EMPLOYABILITY SKILLS DEVELOPMENT

Introduction

The second objective of the study was to evaluate how the curricula or programmes in the geography departments helped to equip undergraduate students with employable skills. Quantitative and qualitative data were employed to address this objective. The purpose of this chapter is to present and discuss the findings from the analysis of these two types of data. The discussion begins with the findings on the quantitative data as presented in Table 9, followed by findings on the qualitative data. The last section compares and contrasts the findings of these two aspects of the study.

Quantitative Analysis of Role of Curricula in Employability Skills' Implementation

To address this issue, data were analysed from two sets of questionnaire administered to students and instructors. The views of both students and instructors were presented and analysed in Table 9 (see page 218).

In Table 9, out of the 10 intellectual skills that were assessed, the students stated that eight had a moderate level implementation from the deployment of physical resources (which include the curricula), with two having had low level implementation. From the figures in parentheses in Table 9, the instructors however, indicated that all the intellectual skills had moderate level implementation due to the deployment of physical resources. The disparity in the perspectives of the instructors and the students may be that the instructors were more inclined to defend their use of

physical resources in the training of students, whilst the students brought out the realities on the ground.

When the students and instructors were asked to indicate their views on the role of physical resources(including curricula), in the implementation of key skills, the students indicated that eight out of the nine key skills had moderate level implementation, with one having had low level implementation (see Table 9). The instructors on the other hand, also indicated in Table 9 that all the nine key skills had moderate level implementation. The analysis showed that the instructors had a more favourable perception of the positive role of physical resources than the students because their mean values were relatively higher than that of the students.

On how physical resources (including the curricula) affected student acquisition of personal attributes, the students in Table 9 indicated that all the eight personal attributes indicators had moderate level implementation. Similarly, the instructors in Table 9 agreed that all the eight personal attributes had moderate level implementation. However, the mean values of the instructors' views were relatively higher than that of the students.

The last employable skill domain that was assessed was knowledge of employer organisations (commercial awareness). In Table 9, the students indicated that physical resources (including the curricula) were able to help students to develop commercial awareness skills to a moderate level as four out of the seven skills had moderate level implementation, with the rest having had low level implementation. On the part of the instructors, they indicated that four out of six skills that were assessed had moderate level implementation with the rest having had low level implementation. Again, the analyses showed that the instructors had a more positive perception of the role of physical resources (including the curricula in

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student acquisition of commercial awareness skills. The next section is the qualitative analysis and discussion of the role of the curricula in employability skills' implementation.

Qualitative Analysis of Role of Curricula in Employability Skills' Implementation

To address this issue, data were analysed from focus group discussions, structured interview schedules, direct observation and document study. Table 14 presents a synthesis of the qualitative data collected through the first three methods.

Table 14 - Views of Respondents on how the Curricula of Geography Departments

Meet the Employability Skills Needs of Students

Proxy indicators of employability skills	Sub-themes on proxy indicators of employability skills		
Courses and activities on employable skills	 Specific reference to courses and their related employable skills outcomes; Examples of courses and activities that did not produce employable skills 		
Evidence and examples of employable skills in the curriculum	Respondents' views on the inclusion of employable skills in the curriculum		
No evidence of employable skills in the curriculum	Respondents' views on the non-inclusion of employable skills in the curriculum		
Student learning outcomes in the curriculum	Types of student learning outcomes: i. Discipline-based; ii. Employable skills		
Mixed views on relevance of curriculum to employability skills development	 Views of staff and students Views from graduates and their employers 		

Source: Field survey, Ababio (2015)

Role of courses and activities in employable skills implementation

In Table 14, the first theme that emerged was the role of courses and associated activities in employable skills implementation. Under this theme, some

courses and the related student learning outcomes were analysed. From the analysis emerged both positive and negative impacts of courses and activities on employability skills development. Discussion of the positive and minimal impacts is in the subsequent subsections.

Courses and activities with positive influence on employability skills' implementation

With regard to the positive influence that departmental courses had on student acquisition of employable skills, various reasons were given. Firstly, interactions with students showed how some courses taught by the instructors had helped them acquire some employable skills.

When asked to comment on the relevance of courses to their employability skills' needs, this is what they said:

Male student: "Spatial organisation has honed my ability to plan and organise things that I want to do";

Another male student: "Environmental studies and rural development had equipped me with problem-solving skills";

Female student: "The GIS course and Poverty studies had made me to be abreast of current IT and environmental issues in the corporate world";

Another female student: "Geomorphology and other physical geography courses had provided opportunities for students to put theory into practice";

The instructors, on their part indicated their unique role in the design and implementation of the courses in the departments. For example, when one instructor was asked to comment on the relevance of courses in meeting students' employable skills needs, he asserted: "Instructors designed and taught courses like GIS, remote sensing, cartography, field studies, rural and urban studies, regional planning and

environmental resource management". He went on to contend that "Students' participation in these courses equipped them with employable skills such as critical thinking, research skills, problem-solving and logical thinking". The heads of department also indicated that, in the past, they initiated the design of some courses such as GIS, remote sensing, map reading and interpretation, which equipped students with discipline-based skills such as map making, interpretation and reading skills.

The investigator in an attempt to seek external affirmation of the views of the staff and students of the geography departments contacted geography graduate employees on how the undergraduate courses that they studied were relevant to their current job prescriptions. Majority of them indicated how some general geography courses and specific courses such as GIS, remote sensing, research methods, transport geography, ICT, etc. had equipped them with research skills, problemsolving, workplace practices, communication, leadership and management and interpersonal skills. The few graduates who saw no connection between their current job responsibilities and the courses that they studied at the university were in commercial establishments such as restaurants, banks and loans and savings firms.

The above views of the various participants show that the delivery of courses and activities resulted in student acquisition of both discipline-based and generic skills. The courses which appeared to have had the greatest impact included GIS and remote sensing. The findings are in alignment with the recommendations by the UK Quality Assurance Agency (2014), which state that honours degree courses in geography should aim at training students to develop a variety of skills, including discipline-based, field-based, generic and personal attributes. In the next subsection

is discussed the minimal impact that the curricula had on student acquisition of employable skills.

Courses and activities with minimal influence on employability skills implementation

When the participants were asked to comment on the ability of the curricula to equip students with employable skills, the analyses of their views revealed that some courses and activities did not train students to attain employable skills learning outcomes. For example, one male student mentioned a course like Geographic Thought, which to him did not equip students with hands-on skills, except listening skills. This assertion is however contrary to the assertion by Johnston that geography is an academic discipline, not a profession, and one of its traditional strengths in higher education is its use as a vehicle for the development of critical intellectual skills (Johnston, 1997). From the statements made by Johnston and the male student, it can be inferred that though a course like Geographic Thought is not a professional course, it should be taught in such a way as to promote the general power of the mind through logical reasoning and critical thinking skills.

According to another student, the geography training also led to the acquisition of discipline-based knowledge on map making, environmental resource management and environmental awareness, whilst other courses merely gave information on sanitation issues, crime mapping, design of community resettlement map, cartography and surveying.

A synthesis of the above perspectives of the students, instructors, heads of department and geography graduates shows varied impact of courses and activities on student learning – that some courses and activities had minimal influence on student employable skills development.

From the findings, it can be inferred that when academic departments introduce students to information-giving or theory-based courses for a greater part of their training, there is the likelihood that such students would not acquire employable skills, which are amenable to hands-on or practice-oriented instruction. According to the learning pyramid by the National Training Laboratories at Bethel, Maine, lecture-based and reading-based courses contribute only 5% and 10% respectively to average student retention rates (Haffar, 2016 March 19). These retention rates are not good enough for building students' aptitude for employable skills.

Evidence and examples of employable skills in the curricula

Analysing data on this theme stemmed from the major aim of research objective two – to evaluate how the curricula of the geography departments have met the employable skill needs of the students. One way of meeting this goal was to undertake a content study of the course outline, examination and quiz papers administered to students. Another method was to analyse the perspectives of all the relevant stakeholders in geography education. This second option is the thrust of this section.

After analysing views of students, instructors, heads of departments, and graduate employees, the following were the key evidence and examples of employable skills in the geography curricula that emerged:

Male student: "Students were trained to acquire workplace practices and were motivated to apply what they learned to their daily lives";

Another male student: "The taught curriculum has given some students the opportunity to develop self-confidence; An instructor: "Through instructional methods such as question-and answer, assignments, oral presentations and group work, students acquire skills such as critical thinking, time management, problem-

solving and logical and analytical thinking"; Head of Department: "The curricula introduced students to courses like GIS and remote sensing, map work and field studies, which equipped students with report writing skills, problem-solving skills and research skills"; An observer: "In the implementation of the curriculum, I observed that whenever there was a lecture, both the instructor and students were punctual to class, thus giving an indication of good time management skills".

Graduate employee: "Courses such as research methods and ICT enabled me to acquire data gathering and report writing skills".

The above perspectives of the students, instructor, head of department, geography graduates and the observer amply demonstrate the extent to which the geography curricula were used to help train students in all the four domains of employable skills — intellectual, personal/key, personal attributes and commercial awareness. In addition to the employable skills, students had training in fieldwork, GIS, remote sensing and physical geography. This conclusion is validated by the four aims of undergraduate honours geography as recommended by the UK Quality Assurance Agency (QAA) (2014) which include, (a) training in fieldwork and other experiential learning, (b) specialisation in subject matter, (c) acquisition of academic and generic skills, and (d) acquisition of personal attributes.

Aspects of taught curriculum that did not equip students with employable skills

The study also identified some negative views of students, observers as well as employers on the capacity of the geography curricula to train students in employable skills. The results that emerged included the following:

Female student: "Some topics or themes that were taught to students were unrelated to current social issues, making some students not to realise their relevance to the

workplace "; Male student:" Some of the courses were information-giving in nature and as such, not much opportunity was given to students to think critically";

Employer: "Geography graduates lacked knowledge on geospatial techniques such as knowledge of GIS applications, with the exception of RS/GIS which they even seemed to know little about";

The analysis of the above theme showed that not all the taught curricula contributed to student employability skills development. When one male student was asked to state whether all the taught curricula helped him to acquire employable skills, he responded "some of the courses were information-giving in nature and as such, not much opportunity was given to us to think critically". In apparent affirmation of this assertion, one employer also claimed that the taught curricula did not equip the graduate employees with geospatial techniques such as the use of GIS software, with the exception of RS/GIS, which they even seemed to know little about. The above negative perspectives of the respondents amply demonstrate that the impact of the taught curricula on student employability skills development was a mixed one. This inference agrees with Mohammedbhai's (2008) assertion that the origin of graduate unemployment in Africa is linked to irrelevant courses read by those graduates, especially in the arts and humanities, which include geography.

Types of student learning outcomes as embedded in the curriculum

The aim of the investigator in analysing this theme was to identify the two major types of student learning outcomes in the curriculum – the discipline-based type and the generic type.

Discipline-based learning outcomes

The analysis of the perspectives of the students, heads of department and graduate employees revealed that learning outcomes in geography include themes in

four main branches in geography – techniques of geography(e.g. cartography, surveying, map work, GIS, etc.), physical geography, environmental geography and human geography. The various perspectives given by the respondents affirm this inference. One head of department cited knowledge in practical field measurement and map reading and interpretation as discipline-based learning outcomes in techniques of geography. A graduate employee cited knowledge of natural features as an example of a physical geography learning outcome. A student also cited cartographic skills as another example in techniques of geography. Another graduate employee also cited knowledge of why different locations interact as an example in environmental geography and knowledge of the diversity of people as an example of a learning outcome in human geography.

All the above examples are in tandem with the literature on higher education learning outcomes. In the literature, Nusche (2008) refers to these discipline-based learning outcomes as subject-specific knowledge as opposed to general content knowledge. Hatfield (2001) also describes subject-specific knowledge as the acquisition of knowledge in a specific discipline, which gives students the opportunity to get training in their major fields of specialisation.

Generic learning outcomes

After an analysis of the data sought from the students, instructors and graduate employees, the following generic learning outcomes emerged:

(a) Analytical skills, (b) Workplace skills, (c) Teamwork skills, (d) Use of equipment, (e) Problem-solving skills, (f) Self-confidence; (g) Data gathering skills, (h) Ability to meet deadlines; (i) Ability to use resources responsibly, (j) Communication skills, (k) Logical analysis; (l) Computer/GIS skills, (m) Working cordially with people.

The second category of learning outcomes that emerged after the analysis on student learning outcomes is the generic learning outcome. These skills were identified in all four domains of employable skills – intellectual skills, personal and key skills, personal attributes and commercial awareness. A male student mentioned knowledge on workplace practices as an example of learning outcomes in commercial awareness. A female student also intimated that individual assignments helped her to acquire a personal attribute such as self-dependence. A graduate employee cited working cordially with people as an example of personal and key skills. An instructor cited communication skills and the ability to use resources as examples of personal and key skills. Lastly, another student cited analytical skills as an example of a learning outcome in the intellectual skills domain. According to Nusche (2008), these generic skill outcomes enable students to develop competencies in a number of contextual situations, by virtue of their cross-disciplinary nature.

From the above analyses, we can conclude that geography training enables students to acquire a variety of learning outcomes, which equip them with a variety of skills for the world of work.

Perspectives of staff and students on relevance of geography curricula to employable skills' implementation

In the analysis of this theme, the researcher sought to find out stakeholders' perspectives on whether there was any relevance of the geography curriculum to the development of employable skills. Analyses of the views of the staff and students on one hand, and that of the geography graduates and their employers on the other hand, are presented in the subsequent subsections.

Perspectives of staff and students

From the analysis of this theme emerged various perspectives of staff and students on the relevance of geography curricula to student employability skills development. Their views included the following:

Male student: "The curriculum is more theoretical than practical hence there is no assurance that what was taught would be what would be needed in the job market"; Female student: "The broad nature of the geography curriculum as compared with other social science courses that are more specific makes geography students less competitive in the job market since they cannot identify themselves with particular job profiles"; Another female student: "There is too much emphasis on examination, making students not to take much interest in the contents of their courses, but rather to cram the learning material in order to pass the examination; An instructor: "Though the curriculum incorporates internship programmes for students, the department does not actively seek these opportunities for students". Another instructor: "Though it is good to incorporate employability learning outcomes in the curriculum, large student numbers discourage the use of employability-related methods such as assignments, research and fieldwork".

A synthesis of the perspectives of staff and students categorised the irrelevant nature of the geography curricula to employability skills development as follows: broad nature of the curricula, the curricula being theoretical in content, unrelated curriculum contents to workplace practices, non-marketable/career-oriented nature of some courses, and mode of curriculum implementation biased towards examinations.

Views of geography graduates and employers on relevance of curriculum to employability skills development

This section covers the views of graduate employees and their employers on how relevant curricula were to the job prescriptions of the graduate employees. The views, which emerged after the analysis of data included the following:

Graduate employee: "The geography curricula have not really helped me in my current job"; Another graduate employee: "I find no relevance of the curricula to my current job responsibilities"; Employer: "Majority of the employers (i.e. three out of four) indicated the irrelevance of what the geography graduate employees studied at the university to their current job responsibilities"; and

Another employer: "I am uncertain about the relevance of the geography curricula to the job responsibilities of the graduate employee working with me".

A synthesis of the views of the external stakeholders generally showed that the graduate employees and their employers perceived the curricula to be irrelevant to the workplace and skill-deficient in nature. A critical look at the various pieces of information clearly showed that the geography curriculum could not meet the expectations of all the stakeholders in terms of its relevance in the development of employable skills. This conclusion is in line with Solem et al.'s (2008) study in which they found that some geography graduates did not have enough preparation in fundamental geographic concepts and methods of analysis and had limited knowledge on how business organisations function. Generally therefore, the geography curricula appeared not to have had the capacity to train students sufficiently to acquire employable skills. In other words, some parts of the curricula were irrelevant to the future and current skills needs of the students. The next

section discusses an analysis of the capacity of the official curricula to equip students with employable skills.

Content analysis of course outline, examination and quiz papers

The analysis of the course outlines, examination and quiz papers was the second part of a broader evaluation of how the curricula or programmes of the three geography departments tried to equip students with employable skills. The 35 course outlines, examination and quiz papers whose contents were analysed were from 2010 to 2015.

Table 15 - Lower Order Intellectual Skills/Concepts embedded in the Undergraduate

Curricula of Geography Departments, from 2010 to 2015

Type of skill/concept to be	Portion of	curriculum w	here skill or
attained as learning outcome	concept is embedded with		
	corresponding frequency		
	Course	Exams	Quiz
	Outline	Paper	Paper
Explain how or why	6	9	4
Describe how	3	3	2
Define/what is/what are	2	5	4
List/enumerate/indicate/catalogue	7	1	2
Discuss	6	12	1
Give/provide factors or examples	-	5	4
Write brief or short notes on	3	2	•
State/name	-	9	3
Distinguish/differentiate/what is	-	2	2
the difference			•
Identify	2	1	1
Outline factors	2	1	-
Understand a concept	2	-	-
Demonstrate knowledge of	1	•	
Draw a sketch map of	1	3	1
Expose students to	1	•	
Know objectives of	1	-	

Source: Field survey, Ababio (2015)

A framework depicting four employability skills domains as suggested by (Coopers and Lybrand, 1998) was used to guide the content analysis. These are intellectual skills, personal and key skills, personal attributes, and knowledge of employer organisations (commercial awareness). Tables 19to 24 contain data on the above four domains of employable skills.

Table 15 indicates a variety of lower order intellectual skills that the curricula of the geography departments equipped students. According to Bloom's Taxonomy of Cognitive Domain (Huitt, 2011) (see Appendix N), the sample verbs or action words in the table signify less complex cognitive tasks. They are mainly information words, which instruct learners to demonstrate what they know about a subject. These lower level objectives are from levels 1 to 2 of the hierarchy of educational objectives, indicating that they perform relatively less complex tasks than those in levels 3 to 6. In the table, the most frequently used lower order intellectual skills include learning outcomes such as discuss, explain how or why, state or name, define and list in descending order of frequency. The least used lower order intellectual skills include learning outcomes such as demonstrate knowledge of, understand a concept and outline factors, in ascending order of use. A critical scrutiny of these lower order intellectual skills reveals that the geography curricula are not equipping students with the appropriate intellectual skills that will give them the right employable skills. Table 16 however presents some higher order thinking skills (HOTS) found in the geography curricula.

Table 16- Higher Order Intellectual Skills/Concepts embedded in the Undergraduate Curricula of Geography Departments, from 2010 to 2015

Type of skill/concept to be attained as learning outcome	Portion of curriculum where skill of concept is embedded with corresponding frequency		vhere skill or
	Course	Exams	Quiz
Apply a theory/conserve	Outline	Paper	Paper
Apply a theory/concept to	5	-	- aper
Write an essay/report/dissertation	2	6	-
Analyse a situation	2	1	_
Examine a procedure	3	2	-
Compare and contrast	1	-	1
Critically evaluate	2	_	-
Use a method or practice	2	_	_
Expatiate on	2	_	_
Compute/calculate, e. g. time	2	-	_
Review critically	2	-	_
Formulate a hypothesis	1	-	_
Justify a need for	1	_	_
Explain why or with examples	2	_	_
Comment on	1	-	=
Delineate a problem	1	_	-
Assess a theory/law	4	-	_
Establish relationship/linkages	2	-	-
Critique a theory	1	-	-
Design a questionnaire	1	-	-
Use a perspective	1	-	_
Determine factors	1	-	-
Develop a view	1	-	-
Predict an occurrence	1	_	-

Source: Field survey, Ababio (2015)

The table shows a variety of higher order intellectual skills embedded in the curricula of the geography departments. The learning outcomes in decreasing order of frequency of use include; write an essay or report, examine or assess. The higher order intellectual learning outcomes that were least used in the curricula include predict, develop a view, critique, comment on, justify and formulate. An analysis of the learning outcomes in the table reveals the paucity of higher order thinking skills

in the curricula as compared to the number of lower order thinking skills in Table 15 above.

Analysis of the intellectual skills embedded in the geography curricula showed a paucity of higher order intellectual skills in the geography curricula. On the contrary, the study revealed that there was a preponderance of lower order intellectual skills. Though the higher order intellectual learning outcomes cited in the curricula were 23 in number as against 16 lower order intellectual learning, the frequency of use of the latter was more than that of the former. The higher order learning outcomes appeared only 48 times in the course outlines, examination and quiz papers of the geography departments as against 120 times that the 16 lower order intellectual skills appeared in these three aspects of the geography curricula. The logical conclusion is that the curricula did not make adequate provision for meeting the employability skills needs of the students as far as the intellectual skills domain is concerned.

The above inference affirms a statement made by Michael Potter, a renowned management and development trainer. He said that one reason for the majority of graduates not getting jobs may be that the curriculum used to teach these young students or graduates is a little bit out of date or that the focus is more on theoretical teaching methods and completion certification, than practical work experience supported by proper training and mentoring (Awiah, 2013 Sept. 2). Michael Potter's call for relevant education for the youth, was later affirmed by K. B. Asante, a former Ghanaian diplomat, who surmised that "the premium that we place on any kind of education should be anchored on the assessment and evaluation of relevant knowledge and skills required by the economic and political segments of the nation" (Asante, 2015 July 6:7).

Table 17 depicts data on the types and number of key skills embedded in the curricula of the three geography departments. Coopers and Lybrand's (1998) framework for evaluating employability skills was used to evaluate the geography curricula.

Table 17 - Key Skills embedded in the Undergraduate Curricula of Geography Departments

	Portion of cu	rriculum	where skill
Type of skill/concept to be			ided with
attained as learning outcome	corresponding frequency		
		Exams	Quiz
Doing assignments	Outline	Paper	Paper
<u> </u>	5	-	-
Making individual/group presentations	6	-	-
Interact and work with others	4	-	-
Consult journals/periodicals/internet for reading	3	-	-
Work around a problem	1	_	-
Undertaking field trips	2	-	-
Use of GPS for data collection	1	-	_
Conceptualise/plan/design/execute	2	-	-
projects			
Calculate inferential statistics	1	-	-
Participate in geography students'	1	-	-
association activities and programmes			
Undertake laboratory practical	1	-	-
Develop communication skills	1		

Source: Field survey, Ababio (2015)

A careful observation of the data shows the dearth of personal and key skills in the assessment of student learning outcomes. A summary of the analysis on personal and key skills domain shows that only 12 of such learning outcomes were in the sampled curricula, with a diminished frequency of application. These 12 learning outcomes appeared only 28 times in only one aspect of the geography curricula, the course outlines. The examination and quiz papers did not show any evidence of students' assessment on how to demonstrate some personal and key skills. This is a contradiction to the analyses of the data collected through the open-

ended interview schedule and the focus group discussion, which showed students' acquisition of some personal and key skills. The low emphasis placed on personal and key skills in the curricula, creates a situation whereby it appears students are being denied access to non-cognitive learning outcomes such as problem-solving, creativity and innovation, collaboration, communication skills, life skills, technology skills, entrepreneurial skills, etc. (Haffar, 2014 Sept. 8). Haffar adds further that when these key skills are combined with basic academic skills, the former creates a complete graduate ready to enter and thrive in the workplace of the future.

Key skills that had some degree of attention from the geography curricula include making presentations, doing assignments, interacting with others and searching for information, in decreasing order of emphasis. On the other hand, the least emphasised key skills in the curricula included working around a problem, use of equipment/technology, undertaking practical activities and developing numeracy skills. What all this means is that students were not sufficiently exposed to key skills that form an integral component of the suite of employable skills needed by geography graduates. Table 18 illustrates another type of employable skills (personal attributes), which is next examined.

Table 18 - Personal attributes embedded in the Undergraduate Curricula of Geography Departments, from 2010 to 2015

Type of skill/concept to be attained as learning outcome	Portion of curriculum where skill or concept is embedded with corresponding frequency		
	Course Outline	Exams Paper	Quiz Paper
Compulsory class attendance Self and time management Active class participation	3	- -	-
	1		-
	2	•	-

Source: Field survey, Ababio (2015)

As reflected in Table 18, the curricula were quite deficient in inculcating in students, key personal attributes that play key roles in student acquisition of other employable skills and even discipline-based skills. The only personal attributes that are discernible in the table include punctuality to class, time- and self-management and student active involvement in instructional activities. This means that the geography curricula did not focus much on the training of students to acquire personal attributes, a key ingredient in employability skills development.

Table 19 illustrates the last employable skills domain that is commercial awareness, which requires students to know something about the professional and academic demands of the job market.

Table 19 - Commercial awareness learning outcomes embedded in the

Under-graduate curricula of Geography Departments, from 2010 to 2015

Type of skill/concept to be attained	Portion of curriculum where skill or concept is embedded with corresponding frequency		
as learning outcome	Course Outline	Exams Paper	Quiz Paper
Students' knowledge on the West African Gas Pipeline Project	1	-	-
Students' exposure to Ghana's and Africa's environment	1	4	-
Students' exposure to Poverty Reduction Key Institutions in Ghana	2		-

Source: Field survey, Ababio (2015)

As reflected in Table 19, the knowledge of employer organisations (commercial awareness) domain in the bouquet of employability skills appears to be among the least emphasised areas in the geography curricula. No specific example of any employer organisation is discernible in the table that could serve as a potential source of employment for geography graduates. What this means is that geography

graduates may not be abreast of the current ethos and practices at geography-orientated workplaces.

The analyses of the personal attributes and commercial awareness skills painted a gloomy picture of how the curricula woefully failed to equip students with skills in these two domains. For these two domains, only three learning outcomes for each were in the curricula, with all three having appeared in the course outlines. The examination and quiz papers did not test students' knowledge in these two domains. When universities in a country fail to train students to develop personal attributes such as personal and social skills and self-direction, and acquire knowledge on workplace practices, then the development of that country is likely to be in a serious jeopardy. This assertion by the current researcher seems to affirm the suggestion by Dr. Samuel Ankrah, the CEO of GamAnk Group, in a Speech and Prize-giving Day Home-coming event at the Opoku Ware Senior High School in Kumasi. He said that closer university-industry collaboration would ensure that graduates would have a positive mental attitude and values required to succeed in the world of work (Ankrah, 2016).

The above analyses of the role of the geography curricula in employability skills implementation clearly show that academic skills have been emphasised over generic or transferable skills, and that per the grammar-like contents of the geography curricula, students are most unlikely to acquire employable skills. This conclusion is in line with some perspectives in the literature. Anis Haffar, a regular columnist in the Daily Graphic newspaper has written extensively on why the grammar nature of Ghana's tertiary education is partly responsible for the high graduate unemployment in the country. In an article titled "Are Ghana's universities doing the best for the youth?", he lamented the anti-developmental nature of most

tertiary education curricula. He suggested that "the subject-centred fragmented curricula must be replaced by curricula objectives that draw on the affective outcomes, which emphasise experiential learning, creativity, confidence, self-determination, and self-actualisation, based on hands-on productive effort" (Haffar, 2015 Sept. 28:38).

In summary, the researcher would like to refer to Haffar's (2016, January 25) suggestions on making modern curricula more relevant and transformative. These include

- (1) They should help to create jobs;
- (2) They should add value to the nation's inputs;
- (3) They should help the youth to fill existing jobs that require the use of modern technology; and
- (4) They should help the youth to be entrepreneurs who make it by solving existing national and international problems (Daily Graphic, January 25, 2016:38).

Comparing and contrasting quantitative and qualitative results to establish influence of curricula on employability skills implementation

Per the canons of the mixed methods convergent parallel design (Creswell & Plano-Clark, 2011), after a separate presentation of the quantitative and qualitative findings, for the author to present a holistic interpretation of the findings, he/she is enjoined to compare and contrast the two types of analyses to establish points of convergence, divergence or relatedness. This is the thrust of this section

In the discussion of the quantitative findings in Table 9 (see p. 218), it emerged that the geography curricula and other physical resources accounted for

nine out of 10 intellectual skills having had moderate level implementation, with one having low level of development. This result is in line with the qualitative finding, which revealed specific intellectual skills that were developed through the taught curricula. These include logical and analytical thinking, critical thinking, subject specific and problem solving skills. This shows there was some degree of convergence between the quantitative and qualitative findings. The divergence in the two findings is attributable to the fact that the employable skills identified in the quantitative aspect were pre-determined by the current researcher, but those identified in the qualitative aspect were emergent – that is, they emerged after the qualitative data analysis.

With regard to the influence of the curricula on the training of students in personal and key skills, the quantitative finding showed that eight of the 10 skills had moderate level implementation, with two having low level implementation. This finding is elaborated by the qualitative results, which revealed specific personal skills such as student presentations, putting theory into practice, teamwork, research and report writing, use of survey equipment, and communication skills. The point of divergence in the two findings is attributable to the fact that some of the personal skills identified in the qualitative finding were not in the suite of personal and key skills included in the survey instrument.

On the issue of whether personal attributes were part of the curricula, the quantitative results showed that all the identified eight personal attributes had moderate level implementation. Contrary to this finding, the qualitative results revealed that only some few personal attributes mentioned by the respondents, were in the course outlines analysed by the researcher. These were time management, self-confidence, self-dependence and being punctual to class. The divergence here is that

whilst the quantitative findings showed that the curricula accounted for a moderate level implementation of personal attributes, the qualitative findings revealed a contrary situation. Again, some of the personal attributes identified in the qualitative findings were not in the suite of personal attributes included in the survey questionnaire. The converse is also true.

The last employability skills domain assessed was knowledge of employer organisations (commercial awareness). The quantitative findings showed that out of seven skills, four had moderate level implementation with the rest having had low level implementation. Again, the evidence from the qualitative findings was contrary to that of the quantitative findings. Only two commercial awareness skills emerged from the qualitative results – knowledge of workplace practices through internship and world of work knowledge. In spite of the difference, there was some element of convergence, as both findings showed that the curricula equipped the students with some form of commercial awareness skills.

On the issue of the geography curricula equipping students with employable skills, the qualitative findings had several advantages over the quantitative findings. The qualitative findings showed that some aspects of the curricula were not in alignment with current workplace requirements. Some of the limitations, which emerged after the analysis of the qualitative data, include information-giving courses, low input of geospatial skills, broad curricula not giving specific skills, some courses not related to current social events and the taught curricula being more theoretical than practical. The above issues were not part of the suite of employable skills in the survey questionnaire.

Another advantage of the qualitative findings over the quantitative results was that through the content analysis of the course outlines and examination/quiz

papers, certain issues emerged out of this analysis. For example, the content analysis showed the paucity of higher order thinking skills (HOTS) in the curricula, as compared to the preponderance of lower order thinking skills (LOTS) that were in the sampled course outlines and examination papers. Again, the content analysis revealed the dearth of personal attributes and commercial awareness skills in the geography curricula. Students were hardly assessed in these two employability skills domains.

Summary of the Chapter

This chapter presented and discussed findings relating to the second objective of the study. The first discussion was findings on how the respondents perceived the impact of the taught curricula on student employability skills development, followed by a discussion on a comparison between the qualitative and quantitative findings. This discussion was followed by an evaluation of the geography curricula aimed at establishing evidence of employability skills learning outcomes in the curricula. The last major discussion in this chapter was a comparison between the quantitative findings and the qualitative findings aimed at establishing issues of convergence and divergence in line with the mixed methods design adopted by this study. The next chapter is a presentation and discussion of actions by the geography departments to improve the current state of student employability skills development

CHAPTER SEVEN

SUGGESTED ACTIONS FOR GEOGRAPHY DEPARTMENTS TO IMPROVE EMPLOYABILITY SKILLS IMPLEMENTATION

Introduction

The third objective of the study was to examine the suggested actions that the geography departments should take to address the current state of employability skills implementation. To address this objective, the perspectives of both internal and external stakeholders in geography education and training, were garnered and analysed. This chapter presents and discusses emergent themes from the findings. These themes are presented in Table 20.

Table 20 - Perspectives of Respondents on Actions Geography Departments Should

Take to address Student Employable Skills' Needs

Actions that must be taken	Sub-themes on actions
Innovative training/instruction	 Improving mode of assessment Promoting entrepreneurial training/lifelong learning; Organising group work, workshops, seminars & student presentations
Engendering practice-oriented training	 More frequent use of practical approaches to instruction; Using equipment/tools to make instruction more practical
Improving inter- organisational linkages	 Industry-academia collaboration or inter-geography department collaboration; Industrial attachments/student internships Strengthening professional association collaboration Making external collaboration more transparent &participatory
Improving intra- organisational	 Staff-student collaboration; Staff-staff collaboration;

(Table 20, continued)

•		
Currio	ulum/prog	ŗa
mme	review	or
impro	vement	

collaboration

All inclusive & participatory departmental activities

- Final year students specialising in specific areas in geography;
- Final year students specialising in geography and one other social science subject area;
- Courses should be aligned with one another;
- Increase instructional time for some courses;
- Removing irrelevant courses from the curriculum;
- Course instruction should be more industry/employability skills-oriented
- Assess students' understanding of ideas, concepts, principles, etc. instead of assessing them on the reproduction of those learning outcomes

Embarking on human resource capacity building

- Expanding staff access to professional development programmes;
- Improving students' self-efficacy efforts;
- Improving intellectual training of students;
- Sacking non-performing staff or replacing aged staff with young ones

Source: Field survey, Ababio (2015)

Table 20 illustrates six suggested actions that the geography departments must take in order to improve the current state of student employability skills development. These themes are analysed in the rest of this section.

Innovative Training or Instruction

After analysing the data in the transcripts of the stakeholders, three subthemes emerged. These are (i) improving mode of instruction/assessment (ii) promoting entrepreneurial training/lifelong learning, and (iii) organising group work, workshops, seminars and student presentations.

Improving mode of instruction/assessment

On the issue of improving mode of instruction/assessment, the investigator analysed views of the students, instructors, graduate employees and heads of department. When the respondents were asked to state what the departments should

do to improve the mode of instruction and assessment, one reason the students gave was that the instructors tended to teach for the reproduction of the instructional material, instead of teaching for students' understanding of the instructional material. To the students, this mode of instruction compelled them to learn by rote, otherwise called "chew and pour" manner of learning. To overcome this challenge, a female student suggested that

"the instruction should be done in such a way that would probe students' understanding, instead of students being taught in a way that would compel them to reproduce exactly what they have been taught" (FUSFT).

Other suggestions made by the students and graduate employees to improve the mode of instruction and learning included, instruction being made practice-oriented by the adoption of internet-based teaching/learning methodologies, better laboratories and well-stocked libraries should be procured to enhance student learning and instructors using eclectic instructional approaches, since the world of work does not provide specific jobs for some specific people.

On the issue of improving the mode of assessment, there were varied suggestions from the respondents. One graduate employee suggested that students should be assessed on all the salient aspects of their courses, pen-and-paper assessment should take only 10% of the total marks with the remaining 90% allocated to practical exercises and student oral presentations should be part of the assessment procedures.

Analysis of the views expressed by the respondents means that if the geography departments were to equip students with the right employable skills, their mode of instruction should be amended to include eclectic instructional strategies

that meet the requirements of varied workplace practices, internet-based instruction, and above all, assessment of student understanding of learning material.

promoting entrepreneurial training/lifelong learning

On the need to promote entrepreneurial training, several suggestions on entrepreneurial training by the students were collected. Students suggested that the departments must shift from training students to be employees, but rather employers. In addition, students suggested the department should organise training programmes/seminars on entrepreneurship regularly every year so that they could have the experience of what was in the work environment. Lastly, students opined that there must be entrepreneurial training to make they (students) 'workable' (i. e. employable) after school.

As a clarification to the statement "students should be trained for lifelong learning", one female student suggested that instructors should teach in a way to make students learn for life, and not for grades or examinations. Similarly, a male student claimed that use of real life case studies of various employees' relations would help students to master in advance how to manage various types of employees before they take up management positions in the job environment. In support of the suggestion that students should either be given entrepreneurial training or trained for life, this is what one male student asserted:

"In a course like transport geography, students can visit people engaged in traffic light management, interact with them, ask them what and how they were going about their official duties. This real life approach to learning is better than students always sitting under the feet of an instructor to be taught (MUSFT).

From the students' perspective, it can be inferred that in order for the geography departments to train students in entrepreneurship, they need to use real life case studies, align classroom instruction with workplace practices, train students to be employers, instead of employees by using hands-on strategies in the form of workshops and seminars. This conclusion is in line with Haffar's (2016) assertion that "student apathy, unemployment and poverty do not happen by themselves; they are caused — the more people are given the opportunity to demonstrate who they really are, and how their natural inclination can be identified and trapped with skills to support the larger purposes of life, the more the nation itself progresses" (Haffar, 2016 April 25:38).

Organising group work, workshops, seminars, fora and student presentation

With regard to the above theme, suggestions were given by the students, support staff and the graduates. The students suggested the departments should organise workshops on presentations of research work done on campus; group work should be encouraged since in the work environment, graduates were likely to work in groups or teams; focus group discussion should be enacted in the lecture theatre to equip students with confidence and the ethics and skills needed at the workplace; and employers and the department should organise workshops/seminars for students. The support staff on the other hand suggested the need for the departments to organise regular retreats for both staff and students. In support of the suggestions given by the students and support, one graduate had this to say "the geography departments should organise training programmes or workshops or seminars on entrepreneurship regularly every semester so that students can have the experience of what is outside school or in the work environment"

According to the students, if they were to acquire workplace practices, then the geography departments together with other stakeholders would have to use various forums, workshops, seminars and group work as part of their instructional strategies. The analyses of the above three subthemes showed that, students could be equipped with employable skills, (i) if the departments adopted eclectic approach to instruction that meets varied workplace practices; (ii) the departments use real life case studies, adopt hands-on instructional strategies and align classroom instruction with workplace practices; and (iii) the departments use constructivist modes of instruction such as workshops, seminars, forums, group work and student presentations (Henson, 2003).

One of the above inferences agrees with Wiafe's (2003) recommendation that students must engage in real or simulated situations from the workplace in their curricula activities. The inference on eclectic instructional strategies also ties in with the competency-based model and human capital theory's postulates that the training of students should involve the use of various modes of instruction to meet different learning styles of students, and the use of new ideas, products, processes and methods. The issue of students acquiring entrepreneurial skills is also in agreement with Palanichamy and Veeramani's (2013) suggestion that one way of increasing students' competitiveness in the labour market is to incorporate industrial attachment into the educational structure. They add that during the internship, students get their first experience on the real working environment, and an understanding on working patterns within an organisation. They suggested further that entrepreneurship modules should be included in the whole curriculum and be delivered by professionals from industry instead of academicians.

As regards the above theme, the study's conclusions and that of the literature tell us that, innovative instruction that results in employability skills implementation is multi-dimensional and practice-oriented. To guarantee student acquisition of key competencies, the geography departments will have to deploy their human resources and inter-organisational linkages to engage students in different types of work-based instruction, at the departments and within the premises of employer organisations.

Engendering Practice-oriented Training

After analysing the transcripts of the stakeholders, two subthemes emerged. These are (i) more frequent use of practical approaches to instruction; and (ii) using equipment/tools to make instruction more practical.

More frequent use of practical approaches to training students

After the analysis of the data, the students and heads of department gave several suggestions on the above theme. From the perspective of the students, a male student suggested that the training of students should be more field-based since employers are now looking for practice-oriented people. In support of this suggestion, another male student and one head of department suggested that well-co-ordinated fieldwork exercises should be regular and should not be conducted only once in a year. To promote more practice-oriented training, a female student also suggested that instructors should avoid "cut and paste" and the theoretical assignments that are given to students – students need more practice-oriented assignments. In making instructions more practice-oriented, a male student suggested that about 70% of training should be practice-oriented, with the remaining 30% being classroom-based. In apparent support of this suggestion, another male student asserted that;

"skill-oriented courses should be introduced right from level 100, through

to level 400 – students should not be introduced to the practical aspect of the programmes only when they are in level 400" (MUSFT).

Analysis of the students' suggestions on practical approaches to instruction reveals that the students would prefer that the geography departments embark more on practice-oriented training aligned with workplace practices, skill-oriented training, and introduce more practical courses which will focus more on mini projects.

Using tools/IT equipment/facilities to make instruction more practical/relevant

After the analysis of the data the above theme, the views of students, support staff, instructors and graduates were synthesised. The suggestions of the students included instructors using videos and pictures to help students understand the instruction better, and students being given the opportunity to know and handle some of the IT software tools which would make them grasp the practical aspect of their training. In support of these suggestions, a support staff also suggested the need for the departments to get a studio and a laboratory where students could be trained, especially on how to draw and interpret maps. Similarly, two instructors suggested the need for all classrooms to be fitted with desktop computers and overhead projectors and in addition, more classrooms being built to make class size manageable. In apparent support of the views expressed by the students, support staff and instructors, a graduate also made the following comment: "there should be the introduction of computer-based software, such as remote sensing, GIS,SPSS and Excel, which is relevant to the study of geography".

Analysis of the views given by the students and a support staff, shows that the respondents would prefer instruction that makes use of multi-media resources and IT-based strategies aimed to make students get a better understanding of the instruction. From the analysis of these two issues, the researcher inferred that the geography departments could train students in employable skills if they adopted practice-oriented instruction aligned with workplace practices and skill-oriented training. The second inference was that the use of multi-media instructional resources and IT-based strategies would engender students' understanding of instruction, and enhance their employability skills acquisition prospects.

The above inferences have support from literature. The constructivist theory postulates that the training of students should emphasise hands-on assignments, experiments, simulations and use of equipment by the students. Evans et al.'s (2009) study recommended the adoption of practical curricula, and improvement in the use of information, communication and technology (ICT) facilities.

Improving Inter-organisational Linkages

After analysing this theme, three subthemes emerged. These are (i) interindustry and academia collaboration or inter-geography department collaboration, (ii) industrial attachments/student internships, and (iii) strengthening professional association collaboration.

After the analysis of the data on inter-industry and academia collaboration, the various perspectives of the students, instructors, support staff and graduate employees were synthesised. Suggestions offered by the students included (a) academic departments getting in touch with what was happening in the corporate world in order to update students on the current practices in the corporate world; and (b) professionals from the corporate world informing academic departments of the changes that they foresaw were likely to happen in their operations and accordingly must inform academic departments to alter their instructional strategies to align with the expected changes. One support staff also suggested the need for the departments

to engage regularly with all stakeholders within and outside the departments. In apparent support of this assertion, an instructor also suggested the need for the departments to involve industry and government agencies through the sharing of problems that could become basis for the design of students' projects and the solutions found to such problems would equip students with employable skills.

One student also made the following suggestion: "the various geography departments must collaborate with institutions which may require the services of their students so that practical field training will be given to students to enable them fit into the job market after school" To sum up the above views, the graduate employees also opined the need for employers and the departments organising regular seminars, workshops and internship programmes for students.

From the various suggestions given by the respondents on how to promote academia-industry collaboration, geography departments will have to explore more opportunities where such collaborations will

- (a) help update students on current workplace practices;
- (b) afford the departments the opportunity to alter their instructional strategies to be aligned to projected trends in workplace practices; and
- (c) promote student internship programmes, aimed at giving students practical field training.

To address the issue of promoting industrial attachments/student internships as part of training students in employable skills, the perspectives of students, instructors and graduate employees were synthesised. From the perspective of students, there should be more industrial attachment programmes. To be more specific, a female student suggested the need for student internship programmes being limited to year 2 and 3 since at those levels students would have had enough

knowledge about the geography programmes. In apparent support of the submissions made by the students, a graduate employee also suggested the need for students to embark on more industrial attachment programmes on a regular basis. Lastly, an instructor also suggested the formalisation of internship programmes with public and private sector organisations. From the analysis of the respondents' views, it appears that student internship is one key component of academia-industry collaboration, which can take different forms such as it becoming a compulsory course, its integration in the academic curricula and its orientation towards workplace practices.

To address the issue of strengthening professional associations' collaboration the perspectives of one student and two instructors were synthesised. One male student made the following suggestion: "There is the need for the various geography departments in the country to focus on bringing together all geography teachers for a conference twice or thrice a year, instead of the current once a year meeting organised by the Ghana Geographers' Association and the Ghana Geography Teachers' Association". The other two instructors also suggested the collaboration of geography departments with professional bodies to help streamline geography programmes and students being encouraged to join professional associations as student members.

The above view expressed by the student and two instructors emphasise the need for collaboration among all shades of geography teachers to form some sort of professional learning communities across the country. Such associations will create a forum for sharing ideas, expertise, networks and experiences. On the other hand, analysis of the students and instructors' perspectives in the survey questionnaire showed that most of the employability skills domains, with the exception of commercial awareness domain, had moderate level of development. The low rating

of the commercial awareness domain by the students in particular, is an antithesis to student employability skills' development as shown in the literature.

The above three findings from the qualitative analysis are supported by literature. The competency-based model argues that to train students to acquire key competencies, experiential training ought to be prioritised over academic or grammar-type training. This statement concurs with the human capital theory, which also argues that the training of students should include workplace production processes and practices. Lastly, the systems theory lends its support to experiential instruction in schools by postulating that, the throughput variables in an education system should include hands-on instructional activities (Inter- University Quality Assurance Committee, n. d.).

Some empirical studies have also shown the relevance of inter-organisational linkages to the training of students. Wiafe (2003) suggested that students should be introduced to real or simulated workplace practices, and instructors with industrial experience co-opted to spearhead such an initiative. In the same vein, Evans et al. (2000), also suggest the training of instructors in employment-related skills and the development of public-private partnerships in the training of students.

Furthermore, to promote university-industry linkages, Dr. Samuel Ankrah, the Chief Executive Officer of GamAnk Group, suggested that managers and corporate executives should be invited to schools to serve as guest instructors. Such an initiative is to shape learning and offer practical insights about workplace practices (Ankrah, 2016 May 11). Lastly, Palanichemy and Veeramani (2013) recommend the use of industrial work placement programmes by training institutions. They contend that, some employers prefer to recruit graduates with previous experience in industrial placements, since they have had the opportunity to

evaluate them up in the workplace and know much more about their suitability for specific jobs, than any degree transcript could tell them. In other words, such employers place much premium on what the competency-based model refers to as task-based training.

From the discussions on the study's findings and the existing literature, we can conclude that, improving inter-organisational linkage capacity in the geography departments is a sine qua non for student employability skills' development. This conclusion is premised on two reasons:

- (i) Universities who engage in University-industry linkages accrue certain benefits, which include student work placements, collaboration in course design and assessment, setting academic/professional standards, corporate executives' involvement in or contribution to teaching or workshops, and release of staff for workforce development activities (Hogarth et al. 2007).
- (ii) The corporate world, on the other hand, also benefits from such collaborations by recruiting graduates who could challenge the status quo in their organisations, assimilate issues quicker, use divergent perspectives (though mostly theoretical) in addressing issues, problem-solvers and innovators (they bring in new ideas & energy), and use their initiative by acting without waiting for instructions (Hogarth et al., 2007).

Other benefits accruing to corporate entities include universities designing continuous professional development and lifelong learning courses for their employees, universities serving as suppliers of research and development, and offering expert scientific assistance to companies.

Improving Intra-organisational Collaboration

After analysing this theme, two subthemes emerged. These are (i) Staff-student collaboration and (ii) Staff-staff collaboration. These sub-themes are presented in the ensuing paragraphs.

The discussion of staff-student collaboration is based on a synthesis of various perspectives by three students and a support staff. From the students' perspective, the students suggested (a) the need for instructors to desist from giving unannounced quizzes but must do well to give enough notice to students as to time and the type of assignments they would be giving; and (b) instructors must create a platform of equal opportunity so that every student does at least an oral presentation before leaving school and lastly, instructors must have more time for students. On the part of the support staff, he suggested the need for instructors to be open and less intimidating so students could understand their courses better and staff members should have regular contacts with students.

To address the issue of the staff-staff collaboration, one male student made the following comments: "I suggest the need for student presentations being maintained and improved upon; in addition, I suggest that instructors should collaborate with one another to ensure effective teaching of the practical aspects of the courses that they teach".

The above views expressed by the students and the support staff on the need for more intra-departmental collaboration, show that the students were not much enthused by the current level of intra-departmental collaboration, and that something needed to be done to help boost joint activities in the training of students. From the qualitative analysis, the current researcher infers the weak state of intra-organisational collaboration among the geography departments and suggests the

need for more collaborative activities in the departments to aid the training of students in key competencies. This inference is however, contrary to the quantitative analysis of this capacity dimension. Students and instructors' perspectives on this capacity dimension showed that it contributed to the moderate development of a majority of the employability skills domain, with the exception of commercial awareness. With regard to commercial awareness domain, though the students rated its level of implementation as low, their instructors thought otherwise - that the quality of this domain was moderate. The students' worldview on this issue was probably the outcome of the employable skills that they had acquired through intraorganisational collaboration. On the other hand, there is the possibility that the instructors might have been engaged in intra-organisational activities, but were unable to transfer their knowledge and experience in commercial awareness to their students. This could stem from a communication gap between the staff and students. Other probable reasons for improving intra-organisational collaboration are in the existing literature.

The study's findings are supported by the existing literature. The competency model postulates that training institutions should engender intra-unit collaborative discussions, especially between staff and students, if the latter are to acquire key competencies. Similarly, the student involvement theory contends that increased student participation in extra-curricular activities and interaction with staff, increases their academic learning time, thereby providing them the opportunity to gain these key skills. Lastly, the constructivist theory recommends group work and the use of peers as resources (i.e. collaborative learning), if students are to acquire key competencies.

Evidence from empirical studies also concurs with the above theoretical statements. Newmann et al.'s (2000) study showed that inter-staff collaboration when encouraged in schools brings about sharing of clear goals by the staff, engaging in joint professional inquiry to address challenges faced by the staff, and it provides opportunities for staff to influence school policies. On the contrary, Beaver and Weibaum (2012), argue that where inter-staff collaboration is weak, for example, when there is little communication and animosity among factions of the staff, it becomes extremely difficult for the staff to build coordinated and integrated curriculum.

Furthermore, partnership between the staff and students brings enormous benefits to academic departments. For example, at the Birmingham City University in the UK, the Centre for the Enhancement of Learning and Teaching (CELT) in the 2010/2011 academic year, facilitated large scale 'Development Days' based around faculties and course teams, including students in those teams. The aim of these development days was to ensure partnership in the design, delivery and philosophy of courses. The plenary sessions revealed that, though the staff thought they had done enough to embed employability issues in their courses, the students felt the staff could have done more (Pegg, Waldock, Hendy-Isaac & Lawton, 2006).

A scrutiny of the study's findings and the existing literature tells us that intra-organisational collaboration is a key contributor to student employability skills development. This conclusion is based on the assertion that in situations where educational institutions put much premium on collaborative activities, students tend to benefit by way of tapping into the insights, resources, experiences, expertise and ideas of the staff and their peers. On the contrary, where intra-organisational

collaboration is weak, attaining institutional goals becomes a mirage, thus denying students a forum for addressing their concerns and learning needs.

Curriculum/Programme Review or Improvement

Under this theme, the investigator analysed the students and graduate employees' perspectives on why there was the need for the geography departments to review their curricula to make them more inclined towards the development of employability skills. After the analysis, six subthemes emerged. These were

- (a) need for final year students to specialise only in geography (i. e. single major);
- (ii) need for final year students to study geography and one other social science subject (i .e. combined major);
- (iii) aligning courses with one another;
- (iv) need for an increase in instructional time; and
- (v) deletion of irrelevant courses; and
- (vi) the taught curriculum should be more industry/career-oriented.

To address the issue of need for final year students specialising only in specific areas in geography, the views of students were synthesised. A female student suggested that the geography programme should be a single major instead of the combined major that they were reading. To the student, specialisation in only geography would enable them make themselves ready for the job market, instead of reading two disciplines. Another female student also suggested that in the 3rd and 4thyears, there was the need for students to specialise only in geography and not the two subject areas that they currently read. In support of the views of the female

students, a male student made the following suggestion "I suggest the need for final year students not being allowed to read minor courses in other disciplines, as such an arrangement would make us have less time to learn and understand geography". This assertion is an affirmation of the student involvement theory.

The above perspectives of the students imply that students, especially 3rd and final year students should specialise in only one major - that is, geography. This will make students spend more time learning geography or increase their academic learning time to acquire geographic literacy; that such a specialisation is likely to equip students with work-based skills required at geography-related occupations.

Contrary to the above thesis on the need for final year students to specialise only in geography, a contrary school of thought emerged after the analysis of the qualitative data. To address this issue, various views of the students were synthesised. One male student, contrary to the geography major thesis, rather supported the current situation where students major in geography and one other social science subject, which in a way could brighten their prospects of getting jobs related to geography and other subjects. Another male student suggested that it was appropriate to have knowledge from varied fields so one can decide later where to specialise. A female student disagreed with the male course mate who said that other courses had practical aspects and geography didn't have it, hence the need to specialize from the onset. She rather thought majoring in two subject areas would give students many job options.

Concerning the above views of the students, their suggestion that students specialise in two major subject areas could be deemed to mean (a) the need to broaden the perspectives of geography graduates' job prospects and (b) creating opportunities for students to have a brighter chance of mastering the learning

outcomes in both geography and non-geography courses. It could also imply that the combined honours would enhance their prospects of getting employment in either geography-orientated occupations or other social science-related occupations after graduation. This claim is in line with an assertion made by Professor Jane Naana Opoku Agyeman, the then Ghana's Minister for Education, who at the 17th Congregation of the University for Development Studies, bemoaned the overspecialisation at the undergraduate level, and stressed that "the whole thing about undergraduate studies is to have options" (Univ. for Development Studies, 2016 November 14:61).

Addressing the issue of aligning courses with one another, the suggestion made by a female student was analysed. To the student, most of their courses were too broad and theoretical. She suggested the need for the courses to be structured in such a way that there was some form of coherence among them – that is, from level 100, one course should serve as a pre-requisite for another course so that there would be some sort of alignment in content structure.

The above views expressed by this female student could mean that the curricula of her department consisted of some discrete courses, whose duration was short, say one semester or year, which did not provide the students with a longer period to grasp key geographic concepts or principles. This type of curriculum structure does not train students to get a holistic perspective of their programmes of study, and it would therefore be more difficult for them to acquire the requisite skills.

To address the issue of the need for an increase in instructional time/duration of courses, the views of a female and a male student were synthesised. The female student suggested that some of their courses required a lot of time like GIS and

Remote Sensing since their contents were very broad hence, more instructional time should be allotted to these courses. A male student on the other hand, made the following assertion: "that the duration of some courses were short in nature, hence it would be difficult for geography graduates to compete with people who had studied similar courses for over a year or more". The above concerns by the students mean that by the nature of certain courses, the instructional time for training students to attain learning outcomes should be increased if students were to acquire these learning outcomes.

The last issue addressed in this section is the suggestion on the deletion of irrelevant courses. To address this issue, one male student suggested that some of the courses were not necessary, and they (students) thought the courses should be deleted from the curriculum. The implication of this statement by this male student is that there are some courses mounted by the geography departments that do not contribute meaningfully to their training. In other words, they are calling for such courses to be replaced with more outward-looking courses, which are likely to make them more competitive in the job market.

On the suggestion that geography departments should make the taught curriculum more industry/career-oriented, the views of the students revealed that the respondents would want the departments to align their courses with workplace happenings, that students should be trained in specific issues and courses that should be related to one's future career and introduction of society-related courses that would enable students to engage with people in society.

The major concern of the students was making the geography programmes more specific, which may call for specialisation in certain aspects of geography. Another concern was that the training should have practical components, 'aligned

with workplace practices. It also means that the curricula should be designed to address issues that geography-related occupations are currently dealing with or are likely to encounter in the future – students should be trained in anticipation of such development.

The foregoing inferences are in alignment with the existing literature. Newmann et al. (2000) observed that in schools where strong intra-organisation collaboration (i.e. professional learning communities) existed, programme alignment or coherence was strongly emphasised. This coherence was evident in instructional philosophy, curriculum materials, teaching and assessment in certain subjects. The issue of the taught curriculum being made more career-oriented was addressed by Wiafe (2003) who recommended that students should be trained to see the relevance of the courses that they were studying linked to workplace programmes and activities. Similarly, in addressing the issue of curriculum relevance, Evans et al. (2009) recommended that educational institutions should design programmes that meet stakeholders' needs.

On the deletion of certain irrelevant courses, Akinyemi et al. (2012) recommended that courses that are not marketable should be phased out, and emphasis rather placed on market-driven courses. On the issue of students specialising in only geography courses in the final year or courses in two social science subjects, including geography, a synthesis of the literature shows that geography students should not only be trained in subject-specific skills, but also be versatile in transferable skills (Kneale, 2014; University of Manitoba, 2009; UK QAA, 2014; German Geographical Society, 2014).

This study's finding on the need for increased instructional time is also in tandem with the student involvement theory, which posits that the number of hours

students spend on their books determines their level of academic achievement. In other words, the more time students spend listening to lectures, reading, discussing and engaging in hands-on activities, the more it impacts positively on their acquisition of geographic literacy. In the same vein, Haffar (2016) suggests that, one way of increasing student academic learning time is for their instructors to upload their course materials on a designated site on the internet, where students could have easy access, any time, any day and anywhere (Haffar, 2016 January 25). What Haffar is implying is that in this current digital age, instruction need not always be a face-to-face interaction between the instructor and students, but that other modern modes of instructional approaches such as on-line interaction could also be used.

From this study's findings and evidence from the literature, it can be concluded that a curriculum review or improvement is necessary, if geography students are to be trained to acquire employable skills. This conclusion is based on a synthesis of the study's findings and the literature, which showed that (i) there is the need to review the curricula to align with workplace requirements; (ii) students should be trained to acquire both subject-specific skills and generic skills, (iii) bringing more coherence into course design and implementation, (iv) replacement of courses with market-driven ones to enhance the employability prospects of geography graduates.

Summary of the Chapter

This chapter presented and discussed qualitative findings relating to the study's third research objective. In all, six major issues relating to the actions that the geography departments intend to take to improve the current state of student employability skills development were presented and discussed. These issues were not part of the survey protocol hence there was no quantitative finding on this

research objective. The discussion highlighted key issues for policy formulation and practice in geography education and training. The next chapter is a presentation and discussion of findings relating to the challenges that constrain the geography departments' capacity to train students in employable skills.

CHAPTER EIGHT

CHALLENGES CONSTRAINING EMPLOYABILITY SKILLS' IMPLEMENTATION IN GEOGRAPHY DEPARTMENTS

Introduction

The fourth objective of the study was to determine capacity challenges that account for the current state of student employability skills development in geography departments. To address this objective, views of respondents were collected from focus group discussions and interviews. This chapter presents and discusses the findings related to the themes that emerged from the qualitative analysis.

The first theme in this chapter is a summary of challenges of student employable skills development in geography departments. To address this issue, the views of the respondents, namely students, instructors, support staff, graduate employees and employers were synthesised. The themes that emerged after the data analysis are inadequate and deficient physical resources; limited/no interorganisational linkages; limited intra-organisational collaboration; broad, deficient and irrelevant curricula; large class sizes vis-a-vis limited physical space; and negative student attitude to learning (See Table 21).

Table 21 - Respondents' Views on Challenges Constraining Employability Skills' Implementation in Geography Departments

Challenges	Sub-themes of challenges
Inadequate & deficient physical resources	 Lack of appropriate logistics for engaging students in workplace practices; Inadequate, outmoded & malfunctioning equipment, particularly IT affect instruction and learning;
No or limited inter- organisational collaboration Limited intra- organisational collaboration	 Limited communication channels between geography departments and the corporate world; No evidence of inter-organisational collaboration; Current collaborative programmes not being effective No evidence of intra-organisational collaboration
Obsolete or inappropriate instructional strategies	 Use of 'grandfather' (archaic) lecture notes; Instructors' use of theoretical approach in handling the practice-oriented aspects of courses/topics; Instructors' overreliance on hand outs does not make students to develop critical reading skills; Instructors' strategies for assessing students encourage learning for reproduction (i. e. rote learning), instead of for understanding
Broad, deficient & irrelevant curricula	 Limited workplace courses or modules; Broad curricula make training for specific jobs more difficult; Geography curricula are more academic in nature than professional in nature
Large class sizes vis-à-vis limited physical space	 Large class sizes make conducting practical exercises difficult; Overcrowding at lectures, libraries &laboratories make instruction and learning very difficult
Negative student attitude to learning	 Student show apathetic attitude towards learning the practical aspects of courses; Students show apathetic attitude towards the acquisition of employable skills

Source: Field survey, Ababio (2015)

Inadequate Physical Resources

This theme covered issues such as inadequate, outmoded and malfunctioning equipment, particularly IT instruction and learning; and lack of appropriate logistics for engaging students in workplace practices. These are discussed in the ensuing paragraphs.

On the issue of inadequate and malfunctioning equipment, particularly, IT devices, the views of students, instructors, support staff, graduate employees and employers were synthesised. One female student in the focus group discussion made the following assertion: "At times, there are situations where the department had limited amount of equipment for teaching some courses; the amount of furniture in the lecture theatres was grossly inadequate and that some equipment for teaching were malfunctioning". In apparent affirmation of this student's assertion, majority of the support staff succinctly stated that the equipment for instruction was not adequate. Lastly, the graduate employees gave a litany of challenges that they encountered when they were students. These included tools for practical work not being adequate and lack of adequate facilities for fieldwork.

Analysis of the above views by the respondents shows that the problem of resource constraints was not only identified by those who were currently studying or working at the geography departments, but also those who had even completed their studies. Again, the respondents bemoaned challenges posed by non-functioning IT devices and poorly equipped academic user facilities such as classrooms and laboratories. What this finding means is that physical resource constraints is reducing the capacity of the geography departments to train students to acquire employable skills, since the physical facilities serve as auxiliary resources in the training of students.

The qualitative finding on this theme is in alignment with literature. Mbewa's (2014) study in Tanzania revealed that in schools where there was a dearth of academic facilities, and students had to share those available, this tended to limit the opportunity for students to acquire employable skills. On the contrary, in well-endowed schools, where students had the opportunity to practise using equipment such as the computer, the students had a greater chance to acquire and apply employable skills on their own, even after they had left school.

In summation, the study's finding and the literature tell us that the quantity and quality of the available physical resources can have either positive or negative impact on student employability skills development. This suggests that the geography departments need to put in place proactive measures to acquire the appropriate physical resources if they are desirous of equipping their students with employable skills.

Limited Inter-organisational Linkages

This theme showed how lack of external collaboration could affect employability skills training. The sub-themes that emerged after the analysis were limited or no communication channels between geography departments and the corporate world; and ineffective current collaborative programmes.

On the issue of limited communication channels between the departments and the corporate world, the views of students, graduates and employers were synthesised. The students bemoaned the situation where today academic institutions had failed to liaise with corporate entities, which could place their professionals at the disposal of such educational institutions who could guide students on skills needed in the world of work. In support of this assertion, another student said there appeared to be lack of coordination between the universities and the corporate world.

To cross validate the views of the students with that of the external stakeholders, the views of graduate employees and employers were synthesised. A graduate employee also lamented the situation where there had not been any collaboration between his organisation and the geography department he graduated from. In support of this claim, three other graduate employees opined that ever since they were employed, there had not been any form of collaboration between their establishments and their former academic departments. This is what one of them asserted in defence of this claim: "There has not been any formal collaboration between my company and my former department. However, sometimes when the company needs maps of our operational areas, it falls on the geography department at the University of Ghana" (GGQT). Three of the employees who responded to the item on whether there was any collaboration between their establishment and the geography department, intimated that there was not a formal collaboration, except for personal interaction with individual instructors.

Analysis of the above views from three different groups of respondents shows that inter-organisational collaboration was a capacity resource that was poorly utilised by the geography departments, in spite of the inherent benefits that would have inured to the benefit of students. If this capacity had been properly utilised, it would have helped the departments to mobilise both human and physical resources from their external environments.

On the issue of ineffective current collaborative programmes between the departments and the world of work, the view of one female student was synthesised. She opined that the collaborations were not effective and that they needed to be strengthened. The above perspective by a female student means that, even in situations where the geography departments had some form of inter-organisational

collaboration, it was essentially ineffective. Though there was some semblance of inter-organisational linkage activities in the departments, they appeared to have been ineffective as pointed out by some students. What this means is that the use of external collaborators to train students, appeared not to be part of the ethos of the geography departments. This inference drawn on the qualitative findings seems to be in contradiction to the quantitative findings.

The quantitative results on the issue of level of inter-organisational collaboration revealed that most of the four employability skills domains had moderate development from inter-organisational linkages. The divergence in the qualitative and quantitative findings may be that the issue of limited inter-organisational linkage emerged after analysing the qualitative data, but the respondents' responses in the survey questionnaire were informed by pre-determined items so they could not have identified any deficiency in this capacity dimension.

The conclusions drawn on this theme appear to have been affirmed by an advice that Dr Samuel Ankrah, Chief Executive Officer of GamAnk Group gave to the nation's universities. He stated among other things that school departments and teachers can strengthen inter-organisational linkages by undertaking job shadows with relevant managers. He added that there should be private sector institutional representation on university programmes, especially the professional and semi-professional ones. He also suggested that student internships ought to be made compulsory for all business entities, and that these entities must file a return at the end of the year with the National Youth Authority (Ankrah, 2016 May 11).

From the study's findings and the literature, we can conclude that in situations where geography departments fail to make maximum use of external stakeholders such as employer organisations, there is the possibility that students'

chances of acquiring employable skills outside their departments will be in serious jeopardy. This is because some of these corporate bodies have the professional acumen and the facilities to complement the efforts of the instructors in the training of students.

Limited Intra-organisational Collaboration

This theme implied that the departments failed to utilise their internal social networks to train students in employable skills. One theme that emerged after the analysis of data was the issue of no evidence of intra-organisational collaboration. To tackle this issue, the views of four support staff and a student were synthesised. To a question as to whether they remembered any occasion in the past on which all the units/sections in this department collaborated in the skills training of students, all the four support staff who responded to this question said 'No'. In apparent affirmation of this assertion, the male student made the following comments: "Our instructors seldom engage students in problem-based projects outside the university environment. I am yet to experience any joint project organised for students in my 4-year stay in the department".

To both the support staff and student, intra-organisational collaboration was a resource that was hardly utilised by the geography departments in the training of students. What this means is that the geography departments did very little to mobilise the ideas, perspectives, knowledge, experiences and expertise of both staff and students for the training of students. Conversely, findings from the quantitative data rather showed that the geography departments used this capacity dimension to develop to a moderate degree, most of the employability skills domains, with the exception of the commercial awareness domain. However, the qualitative finding is concurred by Beaver and Weibaum's (2012) contention that when skills and

expertise are not shared, and for that matter remain with individual staff members, such kind of human capital cannot be harnessed for improved performance. In a school setting, this means that students may not be able to attain the expected level of achievement.

From the study's finding and the literature, we can conclude that, when training departments or institutions fail to maximise their human resource capacity, this may lead to those entities not being able to carry out their mandates effectively. In the case of geography departments, when the management fails to coordinate the activities of all the units or sections in the department, what this means is that students' attainment of learning outcomes is likely to be jeopardised, since the foremost mandate of every academic department is to train students.

Obsolete or Inappropriate Instructional Strategies

Issues considered under this theme include the use of archaic lecture notes, theoretical instructional strategies to address practical learning outcomes, over-reliance on instructor hand-outs and focusing on reproduction of learning materials instead of understanding of learning materials.

On the issue of use of 'grandfather' or archaic lecture notes by instructors, one male student had this to say. "I think our instructors ware not abreast of modern sources of information as some instructors continue to use archaic lecture notes, for instance, archaic statistics on some aspects of population, which may not have served any useful purpose".

The implication of the above statement by this male student is that if instructors continued to furnish students with out-dated information, there was no way students could acquire the appropriate learning outcomes in this digital age. This finding is in tandem with Haffar's assertion that "a good many teachers at the

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their purview, where the youth are still taught the old fashion way of copying and memorising information as if they cannot think and do things for themselves" (Haffar, 2015 June 15:38).

Another issue related to the theme on obsolete instructional strategies was that of the use of theoretical approach to handle practical aspects of courses. To address this theme, the views of students and graduate employees were synthesised. One female student made the following comments: "Our cartography course did not provide a practical experience and also, teaching was not effective as there were no available physical resources to teach some courses". To affirm the claim by the student, four graduate employees bemoaned the situation where as students, some of the courses were taught in abstract manner; sometimes, time did not allow students to explore more things in the field; and there was lack of fieldwork and practical activities; and about 99% of instruction focused on textual material and theory with little practical work.

Analysis of the above views expressed by the students and graduates implies that the training of students is devoid of the much-needed practical activities that are likely to equip them with the right skills for the world of work. This finding is an attestation of Haffar's assertion that, there are some instructors in the universities who are compelled to adopt the information-giving approach to instruction all because of the lack of physical facilities such as airy building, electricity, computers and public address systems. To him, this excuse is untenable. He added that, in the past he had personally observed an instructor in a large public university in Accra who used the above-mentioned facilities to dictate notes for grown up students to copy and memorise to pass examinations (Haffar, 2015 June 15).

In condemning the passive approach to instructing students, Haffar bemoaned the situation where instructors subjected students to a culture of "sitting and awaiting", which to him rewards passivity and conformity through standardised examinations, but strangles imagination and creativity (Haffar, 2015 June 15). Instead of the continued reliance on the theory-based form of education in Ghana, he suggested that the nation's education should rather focus on practical projects such as hands-on projects of exploration and purpose. He added, when students are trained to reflect on action, this helps them to be better decision-makers (Haffar, 2015 July 6).

Another related issue discussed in this section was that of over-reliance on instructors' hand-outs. To address this issue, the view of a female student was analysed. She contended that learning materials made students over protective since the aim of studying was to pass exams and improve average marks hence students didn't learn anything aside the information given by the instructor. The implication of the above view by this female student is that, if instructors continue to encourage students to limit their reading assignments to only hand-outs provided by them, students are likely to be dependent on their instructors for the provision of reading materials, which may not augur well for their academic training.

The last issue discussed in this section was that of instructional strategies promoting learning for reproduction. To help address this theme, the view of a female student was synthesised. She bemoaned how instructional strategies promoted superficial learning in the following way: The assessment of our learning does not favour students, instead the assessment expects students to "chew and pour" (i. e. rote learning) (FUSFT).

The above view of the female student implies that assessment of student learning is not helping students to acquire the right learning outcomes in so far as, instructors continue to assess students for reproduction of knowledge, instead of understanding. What this subtheme means is that the approach used to instruct students to learn was limited to students' ability to reproduce verbatim the learning material without any recourse to understanding the learning material. This finding is contrary to Dr Samuel Ankrah's advice to the universities that students should be trained to have a positive mental attitude in school. He went on to add that after a good foundation in basic skills of literacy and numeracy, instructors should focus on teaching subjects such as analysis, discovery, problem-solving, communication and self-confidence (Ankrah, 2016 May 11). In support of Dr Ankrah's allusions, Haffar blames some instructors for the theory-based instructional strategies used in our universities. He contended "we have instructors with vast academic accolades and loud titles who tend to perpetuate this dead-end routine of notes dictation that passes for quality education" (Haffar, 2015 June 15:38).

From the study's findings and the literature, we can conclude that instructors' continued use of archaic instructional strategies and learning materials, theory-based instruction and the desire to teach for reproduction, instead of understanding, are antitheses to students' acquisition of employable skills, since such a training paradigm denies students access to updated learning materials and experiential learning.

Broad and Irrelevant Curricula

The respondents, per their responses described the curricula as broad and irrelevant to current job requirements. The following subthemes also emerged – limited workplace courses, broad curricula making training for specific job more

difficult and geography curricula being academic instead of being vocational in nature. One issue that emerged after the analysis of this theme was limited workplace courses. From the analysis, it appeared that the departments' inability to train students to acquire employable skills was in a way due to the limited opportunities given to students to read courses related to workplace practices. In support of this claim, a male student made the following assertion:

Another possible reason for the perceived mismatch between skills training of students and required workplace skills is that there appears to be a dearth of workplace behavioural courses in our universities, which will prepare students to be abreast of workplace ethos and ethics. I therefore suggest that academic departments should mount standalone courses in workplace behavioural practices (MUSFT).

What the above view expressed by the male student means is that, for geography graduates to fit properly into the job market, the geography departments must introduce courses that are likely to give graduates knowledge on workplace ethos and practices. In other words, the students find themselves in the current situation because the geography departments could not link themselves to would-be employer organisations, for purposes of designing courses that would equip their students with skills that are relevant to the world of work requirements. This finding is in line with what Michael Potter, renowned international management and development consultant, noted, "that one reason why majority of graduates are not getting jobs may be that the curriculum used to teach these young students/graduates is a little bit out of date or just the focus is so much on theoretical teaching methods and completion certification than practical work experience supported by proper training and mentoring" (Awiah, 2013 September 2:59).

Another issue that emerged after the analysis of this theme was that the broad curricula made training for specific jobs more difficult. The perspectives of the student and graduate employees appear to be congruent with this claim. A female student noted that the courses were not career courses as compared to other professional courses hence it was difficult for geography graduates to move into the job market after graduation since all jobs had specific job requirements. Majority of the employers appeared to support this claim as they all admitted that the geography graduates they were working with did not have the requisite employable skills.

Analysis of the above views of the students and employers means that the broad academic curricula of geography departments is not helping geography graduates acquire the relevant skills to enable them fit into the job market. This inference affirms Michael Potter's assertion that "whilst most universities and colleges' main pre-occupation is to focus on giving students theoretical knowledge and completion certification, today's employers are looking for graduates who possess some practical experience together with key competencies of creativity, innovation and entrepreneurial spirit" (Awiah, 2013 Sept. 2:59).

Another issue emerging from the analysis of this theme was that the geography curricula were more academically-oriented than vocationally-oriented. In support of this finding, a female student asserted that by the broad nature of the geography curricula, geography graduates were more likely to apply for jobs that did not require specific skills, but general knowledge.

The above view of the female student shows that the academic curricula in geography were not designed to meet the skill demands of specific occupations. What this means is that the skills that students derive from their training are of academic nature, making it difficult for geography graduates to meet the skill

demands of some specific occupations. This finding is in contradiction to Haffar's four suggested questions that all curricula objectives should address. These are

- (i) Is the curriculum capable of creating jobs by equipping students with employable skills?
- (ii) How does the curriculum add value to the country's inputs?
- (iii) Does the curriculum help the youth to fill existing jobs that require the use of technology?
- (iv) Does the curriculum help the youth to be entrepreneurs who make it by solving existing national and international problems? (Haffar, 2016 January 25: 38).

The findings of the study and the literature clearly show that the type of curricula used to train a nation's youth, determines the quality of its human capital. Low level of human capital is the result of the theoretical and irrelevant curricula used to teach students, whilst a high level of human capital comes from the use of experiential and work-based curricula.

Large Class vis-à-vis Limited Physical Space

Large class size affects instruction in several ways. Two of these ways are the negative effect on practical instruction and as an impediment to effective instruction and learning. After analysing this theme, one issue that emerged was that large class sizes made practical instruction difficult. In support of this claim, a male student bemoaned the situation where student numbers in class made it difficult for instructors to conduct practical work and therefore called for a reduction of the class sizes. This student's submission is in support of the demographic profiles of the instructors, which included average class size of a compulsory course handled by an instructor. Out of the 27 instructors included in the sample, about one-third handled

classes of over 300 students, whilst another one-third handled classes of between 200 and 299 students. What this means is that in situations where geography departments did not have adequate physical space and equipment, the instructors were compelled to engage in theory-based instruction instead of practice-oriented instruction due to the relatively large class sizes.

Another issue that emerged after the data analysis was that the overcrowding in the classroom, libraries and laboratories impede instruction and learning. In addressing this issue, the views of a male student and a graduate employee were considered. One male student made the following comment: "the large student numbers have resulted in overcrowded lecture theatres which make instruction and learning ineffective". In support of the submission by the male student, the graduate employee recounted his experience as an undergraduate student where large class sizes made it difficult for effective teaching and learning.

The above views of the student and graduate employee could mean that the rapid increase in student numbers were not equally matched with the expansion of physical resources such as classrooms, laboratories and libraries, bringing about ineffective instruction and learning. The implication of this subtheme is that the limited physical space vis-à-vis large class size is bound to serve as an obstacle to effective instruction and learning. This is because in such situations, instructors are overwhelmed by the large class sizes, and the physical facilities may not be adequate to take care of the increasing student numbers, making learning difficult.

The implication of large class size may be one of the reasons why some instructors resort to theory-based instruction. This statement is supported by Paulo Frere, a Brazilian educator who noted in his book titled "The Pedagogy of the Oppressed", that narration (with the teacher as the narrator) leads the students to

memorise mechanically the narrated content. Worse still, it turns students into 'containers', into receptacles to be filled by the teacher. The more completely he fills the receptacles, the better a teacher he is. The more meekly the receptacles (i.e. students) permit themselves to be filled, the better students are" (Haffar, 2015 June 15:38).

From the study's finding and the literature, we can conclude that factors such as large class size and inadequate instructional resources tend to impact negatively on instructional delivery and student learning. When this happens, students are not likely to acquire the key competencies that the geography departments are supposed to provide.

Negative Student Attitude to Learning

Out of the analysis of this theme emerged issues such as students' attitude towards practical aspects of courses and students' attitude towards the acquisition of employable skills. Students' apathetic attitude towards practical aspects of courses was one of the two issues that emerged after the data analysis. To address this claim, a male student contended that some students were sometimes lazy since they did not like to take the practical aspect of the courses and felt they were being bothered. In addition, some students put pressure on their instructors to excuse them from the practical aspect of the courses. What this submission implies is that for students to acquire learning outcomes there is the need for them to take all courses seriously, including practice-oriented courses which may seem distasteful to them.

Another issue that came up for discussion under this theme was students' apathetic attitude towards acquisition of employable skills. In defence of this statement, a male student made the following assertion:

"I would say that the acquisition of employable skills depends to an extent on the individual student. Some students shy away from participating in activities that are likely to help them acquire these skills. My suggestion is that students should seize gvery opportunity to develop these skills" (MUSFT)

Analysis of these views by the male student means that though it is mandatory for geography departments to train students to acquire the right skills for the world of work, it is equally important for students to take their studies seriously if the geography departments were to attain their statutory goals of training students for further studies and the workplace. The finding on students' negative attitude to learning is in contradiction to the postulates of the student involvement theory by Astin (1984). It argues that, for students to gain key competencies, they need to put in extra effort and energy to bring about the desired learning and personal development.

In addition, students' apathetic attitude to the acquisition of employable skills is contrary to the student involvement theory. It states that, for students to get the requisite learning outcomes, they need to work hard at their studies, and do more than the content that their instructors deliver.

The study's finding and the literature, show that though it is the responsibility of geography departments to expose students to experiential and employability skills training, the students on their part have an equal responsibility of making themselves available and accessible to be trained. If the instructors are ready to teach, but the students are not willing to receive the instruction, there is no way students can acquire the key competencies, which will later help them not only to get jobs but also, to keep them and progress in those jobs.

Summary of the Chapter

This chapter presented and discussed qualitative findings relating to the study's fourth research objective. In all, seven major issues relating to the challenges that constrain geography departments' capacity to improve the current state of student employability skills development, were presented and discussed. These issues were not part of the survey protocol hence there was no quantitative finding on this research objective. The discussion highlighted key issues for policy formulation and practice in geography education and training. A discussion of the summary, conclusions and implications for policy, research and practice are included in the last chapter, Chapter 9.

CHAPTER NINE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

The purpose of this descriptive study was to evaluate the capacity of geography departments to equip undergraduate students with employable skills in three public universities in Ghana.

Existing literature supports the assertion that academic departments have the remit to train students for employment in their external environment – both the proximate and distal environments. The results of this study will therefore, provide documented evidence outlining actions of geography departments that are necessary to contain the pressure of providing relevant training to their students to meet labour market skills requirements. This chapter contains a summary of the research, including the key findings, conclusions and recommendations for practice/policy and future research

Summary of the Study

A mixed methods descriptive study was utilised for this study. It combined quantitative and qualitative data collection and analysis. Quantitative data was collected from 260 undergraduate final year students in three geography departments in three public universities and 29 instructors. Survey questionnaires were also administered to 19 support staff of the three departments, 19 geography graduate employees and four employers of geography graduates. Qualitative data were collected through focus group discussions with four different cohorts of 36 level 400 undergraduate students. Six observation guides were also administered by three

research assistants and four structured interview guides administered to four of the instructors who responded to the survey questionnaire. Content analysis was made using 37 curriculum documents comprising course outlines as well as examination and quiz papers of levels 100 to 400 students.

The quantitative and qualitative data were simultaneously collected by the investigator and his field assistants. The quantitative and qualitative data were analysed separately. The quantitative data analysis resulted in the means and standard deviations of 171 items on a personally constructed survey instrument titled "Capacity for Employability Skills Development Survey" (CESDS), which made it possible to evaluate the five capacity dimensions of the geography departments for student employability skills development. The qualitative data were thematically analysed to get various themes on the impact of the capacity dimensions on student employability skills development. To present both the quantitative and qualitative data, tables were utilised.

Key Findings of the Study

This section provides the findings of the study. It provides a synopsis of key results in relation to the research questions and the overall purpose of the study.

• The quantitative results related to research question one showed that influence of human resources on employability skills implementation was moderate. The instructors and students' perspectives showed that, of the 33 employable skills assessed, 29 and 26 skills had moderate levels of implementation respectively. On the other hand, the qualitative findings showed that human resource capacity had both positive and minimal impact. Evidence of positive impact was in students' acquisition of employable skills (e.g. use of equipment, ability to conduct independent research, writing and

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reading, problem-solving, communication, self-confidence, interpersonal and self-confidence) due to instructional activities such as group work, oral presentations, fieldwork and research. The minimal impact of human resource was in the form of students' (a) passive involvement in lectures; (b) limited exposure to fieldwork and other practical activities; (c) limited understanding of instructional materials due to the use of verbose and technical language by instructors; (d) concern that instruction was not related to real world issues and in addition, instructors teaching for reproduction, instead of for understanding.

- One of the quantitative findings related to research question one was leadership capacity's impact on student employability skills development. From the instructors' perspective, eight and 21 skills had high and moderate levels of implementation respectively, out of the 33 skills assessed. The students on the other hand, rated 29 skills as moderately implemented. The qualitative findings on the other hand showed that leadership as a resource had positive impact on student training. The positive impact was made possible through heads' of department initiatives such as making funds available for fieldtrips and other practical activities, organising seminars and public presentations, spearheading design of courses, promoting internet-based instruction, and initiating procurement of equipment and other teaching and learning materials.
- Another key finding related to research question one was the impact of intraorganisational collaboration on the training of students. The quantitative
 findings showed that, out of the 33 skills assessed, the instructors and
 students rated 31 and 20 skills as having had moderate levels of

implementation respectively. Similarly, the qualitative findings showed both positive and minimal impact. The positive impact was evidenced by staff and students collaborating to undertake team teaching, organising fieldtrips, tutorials, oral and poster presentations for students, conducting joint review of programmes and courses, and students being trained collectively to acquire employable skills such as data gathering, leadership, writing, reading and communication. The minimal impact of intra-organisational collaboration was evidenced by the limited deployment of physical resources to train students and limited promotion of research activities at the department level.

- One other finding related to research question one was the physical resource capacity impact on student training. The quantitative results showed that the instructors and students rated 30 and 28 skills as having had moderate levels of implementation respectively. The instructors even rated two skills as having been highly developed. The qualitative results on the other hand showed both positive and minimal impact. Evidence of positive impact was in the area of students' use of GIS equipment, use of equipment during fieldwork, use of library facilities as sources for course design and implementation, ability to conduct research and write reports, ability to do oral presentations and developing teamwork and problem-solving skills. The minimal impact was in the form of limited physical space in lecture theatres, laboratories, reading rooms and libraries, malfunctioning and obsolete equipment.
- Another finding related to research question one was the impact of interorganisational collaboration on training of students. From the perspectives of instructors and students, 32 and 25 skills had moderate levels of

implementation respectively. Similarly, the qualitative findings showed mixed impact. The positive impact was evidenced by staff and students embarking on fieldtrips to geography-related establishments, staff-student exchange programmes with other universities and team teaching with other academic departments, all of which led to students' acquisition of employable skills. Some of these skills were lifelong learning, ability to put theory into practice, use of modern equipment and design of projects. The minimal impact was as a result of limited involvement of professionals from the world of work and other academic departments in the design and implementation of programmes and courses and most collaborative activities being initiated by individual instructors instead of the departments.

Quantitative findings related to research question two showed that the curricula was used to develop to a moderate level most of the employable skills. Of the 10 intellectual skills assessed, nine were moderately implemented. Of the nine personal/key skills assessed, seven and one had moderate and low levels of implementation respectively. All eight personal attributes/skills assessed had moderate level of implementation. Lastly, for commercial awareness skills, of the seven skills, four and three had moderate and low levels of development. The qualitative findings on curricula contribution to students' training showed both positive and minimal impact. The positive impact was in the form of some courses and activities (e.g. GIS, remote sensing, transport geography, research methods, student oral presentations and group work), having equipped students with employable skills such as problem-solving, social, communication, intellectual and judicious use of resources. The minimal contribution of the curricula to

student training was the result of the broad nature of the curricula, theory-based curricula, unrelated curricula contents to workplace practices, exams-oriented curricula and non-marketable nature of certain courses.

- The quantitative findings related to actions that the geography departments would have to take to improve students' employability skills development (i.e. research question 3), showed that, out of eight skills assessed under the impact of inter-organisational linkage, seven and one had moderate and low levels of implementation, respectively. This finding was validated by the qualitative results, which showed that majority of the respondents wanted the geography departments to collaborate more with professionals in the corporate world, embark more on staff-student exchange programmes and provide students with internship opportunities. The quantitative findings on intra-organisational collaboration showed that, of the nine skills assessed, seven and two had moderate and low implementation, respectively. This finding is in tandem with the qualitative findings, which showed that two actions that the respondents wanted the departments to take; were improvement in staff-student exchange programmes and more staff-student collaborations. Other qualitative findings related to research question three were that the departments must develop more innovative strategies to train students, engender more practice-oriented training/instruction and embark on regular curriculum enrichment or improvement.
- Quantitative findings related to research question four showed that, of the
 nine skills assessed under the impact of physical resources, seven and two
 were moderately and lowly implemented skills. The implication is that the
 geography departments had a capacity challenge in not deploying their

physical resources to train students to the highest level. This finding is in line with the qualitative results, which revealed a number of challenges faced by the geography departments. These challenges were inadequate and deficient physical resources; limited inter-organisational linkages; limited intra-organisational collaboration; obsolete or inappropriate instructional strategies; broad, deficient and irrelevant curricula; large class size vis-à-vis limited physical space and negative student attitude towards learning. All these challenges had a negative impact on the geography departments' capacity to develop students' employable skills to the maximum.

Conclusions

The conclusions emerging from the interpretation and discussion of the qualitative and quantitative data are next presented. The generalisation of these conclusions is confined to the three geography departments in the Ghanaian public universities used for the study.

• The first objective sought to explore how the geography departments deployed their capacity to equip undergraduate students with employable skills. Both the qualitative and quantitative findings showed that through the deployment of different types of resources like leadership, human, physical, intra-organisational collaborations and inter-organisational linkages, the geography departments were able to equip students, to a moderate degree, with intellectual, key and personal attributes learning outcomes. However, one particular employable skill domain, which the departments failed to implement to an appreciable level, is commercial awareness. From the findings of this study and literature, we can infer that the geography departments, like other tertiary academic departments have

- not been able to deploy their resources to equip adequately their students with employable skills.
- The aim of the second objective was to investigate the degree to which the curricula of the geography departments have been able to meet the employability skills needs of their undergraduate students. The results of this study was that both the documented and the taught curricula met the employability skill needs of the students to a moderate extent as the curricula could not meet fully, the expectations of all the stakeholders. This finding is affirmed by existing literature on how some higher education institutions have failed to integrate employable skills into their curricula. The current study's finding and the literature imply that the fact that the curricula of the geography departments met to a moderate extent the employable skill needs of students, might have been the result of the curricula being bereft of employability skill contents, as is the case with other higher education institutions.
- departments must take to address the capacity challenges that they are facing. The finding was that for the geography departments to overcome their capacity challenges in the training of students, they needed to create an environment, which called for innovation, review of archaic policies and practices, and above all, enhanced collaborative activities. The study's finding is consistent with existing literature, which stress the need for educational institutions to mobilise all kinds of networking resources, if they have to give their students adequate training in employable skills. From the study's finding and literature, we can conclude that the geography

departments have a number of proactive measures that they will have to take in order to overcome the challenges besetting the training of students in employable skills.

The fourth objectives ought to determine the capacity challenges that account for the current state of employability skills implementation in the geography departments. The study identified a suite of constraints, which mainly had to do with resource deficits in terms of human, physical, curricula, student attitudes and collaborations. The study's finding is in alignment with existing literature which contends that the training of students by some higher education institutions is fraught with various forms of human-induced and material resource constraints. What the study's finding and literature imply is that failure of geography departments to adequately train students to acquire employable skills may be the result of their inability to contend with resource constraints that may be human or material in nature.

Recommendations for Practice and Policy

The study makes the following recommendations to key stakeholders such as the geography departments, students, geography graduates and the government as to how students should be trained effectively to acquire employable skills.

The role of the Geography Departments

1. The geography departments should de-emphasise the importance attached to the grading of student performance and rather focus on students' completion of tasks, which calls for a demonstration of competencies required at the workplace. For the instructors to be able to do this they should be trained in

- general pedagogical knowledge and skills the departments should make it mandatory for all instructors to get a minimum professional qualification in education, with specialisation in geography education.
- 2. The departments should regard their students as key stakeholders in geography education by occasionally holding public fora on a number of teaching and learning themes such as (a) teaching students how to engage in in-depth or active learning, (b) the importance of study groups, (c) how students should prepare for examinations, and (d) ways that can help students develop self-efficacy attributes.
- 3. Concerning the use of digital technological devices in classroom teaching, the departments should make it mandatory for all the instructors to use them in the training of students. The heads of department could assist the instructors by procuring these IT and geospatial devices for the departments.
- 4. The departments should also embark on periodic review and re-structuring of their curricula to be in alignment with the fast changing trends in the world of work, by for example, designing new embedded and standalone courses in which employability skills are either blended with academic skills or are taught as discrete courses respectively.
- 5. The capacity of the heads of department should be strengthened through periodic training in leadership skills. Newly appointed heads of department should be given orientation on issues such as (a)how to craft visions and mission statements and how to align the staff, students and other stakeholders towards the realisation of these statements, (b) how to have access to information, knowledge and methods towards the realisation of the vision, (c) how heads of departments could coordinate and balance conflicting interests

- of staff, students and other stakeholders, and (d) best practices in the design, implementation and evaluation of employability issues in geography education.
- 6. There is the need for the geography departments to foster increased intra- and inter-organisational collaborations within and outside the departments. The former could be harnessed through the formation of professional learning communities (PLCs), where staff members share their expertise and experiences with one another within and outside the departments. The latter can also take the form of (a) student internship programmes, (b) instructors being attached to employer organisations to acquire the requisite workplace experience in their areas of specialisation, (c) having public or private sector representatives on curriculum design, implementation and review committees, and (d) inviting business executives and professionals from stakeholder organisations to serve as guest lecturers in certain courses.

The role of the Geography Student

- 1. It is recommended that geography students should be made responsible for their own learning, by helping them to explore different learning strategies or methods to attain course or programme objectives. Some of these learning strategies are rehearsal, elaboration, organisation and concept mapping strategies.
- 2. Students should be encouraged to explore every opportunity to develop interactive skills and personal attributes such as communication, teamwork and interpersonal skills. Such skills would enable them to communicate formally and informally with a wide range of people both internal and external to their departments. For example, for students to develop teamwork

skills, they should be encouraged to work with more than one team in a semester, and be able to re-adjust from one project situation to another in an ever-shifting work situation.

The role of the Geography Graduate

Since employer organisations are now looking beyond degree subjects and classification of degree certificates when recruiting graduates, the geography graduate should endeavour to add value to his/her existing stock of employable skills. He/she can do this by offering free services to employer organisations with the goal of acquiring the relevant workplace competencies, which would improve their level of personal motivation to seek work and widen the extent of their mobility in seeking work.

The role of Government

Since employability is a necessary (i.e. a requirement), but not a sufficient (i. e. adequate) condition for employment, it is incumbent on the government to improve the macroeconomic stability of the country. This can be done by increasing the medium-to-long term business confidence in the economy, so that investors could partner the government and other stakeholders in employment-generating ventures.

Contribution of the Study to Knowledge

One of the contributions of the study to new knowledge is related to Griffith's (1997) theoretical pluralism concept, which enabled the investigator to utilise a number of theories in explaining the research phenomenon. The study has demonstrated the possibility of using five theories and three models to explain how geography departments can deploy their capacities to equip undergraduate students with employable skills in public universities. As regards the systems theory, the

study contributes to exploring the usefulness of the systems approach as a methodology in engendering training of students in universities, adding to earlier work (e.g. Mukhopadhayay, 2005; Lunenburg, 2010). The study also suggests ways of using theoretical pluralism or theoretical triangulation to inform how academic departments' deployment of capacity could help train students in employable skills. These suggestions can be employed elsewhere in the context of academic departments who have an interest in re-orienting their academic programmes to address the current challenges in the world of work.

Another contribution to new knowledge made through the study is the development of an evaluation framework called Logic Model on Employability Skills' Development, premised on the conceptual framework for the study. The model as a system is structured into three subsystems: input, activities and outcomes subsystems.

The input subsystem is about what the geography departments should invest to ensure effective and efficient employability skills implementation. Among the suggested input variables are (a) an inspirational head of department well versed in current best practices in geography education, who has shared vision and mission for their departments; (b) dedicated and committed staff well equipped with both academic and professional knowledge in their fields of specialisation; (c) adequate and modern physical resources, including process-based curricula and finance; d) well-co-ordinated intra- and inter-organisational linkages to engender strong collaborative activities; and (e) students with self-efficacy attributes.

The activities subsystem is a sphere where the actual training of students takes place. According to this logic model, for students to acquire employable skills, the study suggests that geography departments adopt the experiential approach to

training (Rama, Etling & Bowen, 1993), instead of the traditional or academic approach. In experiential training, real or simulated situations where eventually the trainees will operate are emphasised (a postulate of the constructivist theory). The instructors must serve as facilitators, catalysts or resource persons. In addition, the study recommends a process-based curriculum, which places premium on hands-on or experiential learning to engender employability skills implementation. The study further suggests student internship programmes, which could make the geography departments enter into collaborations with the corporate community. Such collaborations will provide opportunities for the instructors to gain more industrial experience in their fields of specialisation. In summary, the use of the experiential approach through interactive lectures, model building, simulations, individual and group projects/experiments is in line with best practices in the training of students (York & Knight, 2006).

Lastly, the outcomes subsystem suggests the specific changes (in terms of behaviour, knowledge, skills, status and level of functioning) that are likely to inure to the benefit of geography graduates, and by extension their departments and Ghana as a whole. In the short-term (i. e. 1 to 3 years after graduation), geography graduates who are successfully trained with this model will demonstrate all the four domains of employability skills at their workplaces, if they are fortunate to get employment. As a result of the experiential training, graduates attending interviews will be able to provide in evidence, product portfolios showcasing what they did in school. Furthermore, the employers will see competence areas of job candidates from the evidence provided and the sampled geographic work products will help educate employers who hitherto had not previously hired geography graduates. In the medium term (i.e. 4 to 6 years after graduation), outcomes of employability skills

training as suggested by this logic model will inure to the benefit of the geography departments in the area of effective use of new instructional materials and employability-based curricula, adoption of new pedagogies that encourage experiential or hands-on activities, and availability of self-assessment documents, useful for accreditation and other external reviews. The long term (i.e. 7 years after graduation) outcomes (often called impact) for the country may include lowered incidence of hopelessness, unemployment and poverty among university graduates as incomes accrued from their gainful employment will rather help them to save for capital formation, ensure a longer life span and give them confidence for greater political participation. Figure 5 is a diagram on a logic model for employability skills development in geography departments.

The last contribution made by the study to new knowledge is practice knowledge. The study recommends the adoption of professional learning communities (PLCs) in all the geography departments. Since learning is the foundation of PLCs, the study recommends the creation of continuous learning opportunities for all stakeholders in the geography departments. This is because studies have shown that when the skills and expertise of staff are not shared, such kind of human capital cannot be engendered for improved student performance, and by extension student employability skills development (Beaver & Weinbaum, 2012). The findings of this study showed that when the geography departments behaved as PLCs, they would develop multiple partnerships with corporate communities through collaborative activities such as team teaching, joint research projects, corporate executives serving as guest instructors, and the promotion of student industrial attachments or training.

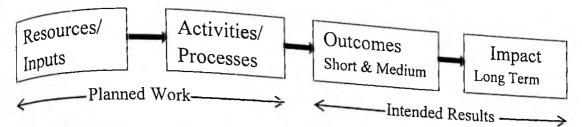


Fig. 5 – Diagram showing how to Use a Logic Model for Employability Skills
Implementation

Suggestions for Further Research

The following issues emerging from this study call for further in-depth investigations:

- 1. Investigate the skill gaps of newly employed geography graduates vis-à-vis their occupation/job profiles in geography-orientated occupations;
- 2. Compare geography students' perspectives on the differences between the suite of employability skills that they had acquired from their education and training on one hand, and those that they had acquired from sources such as work experience, their interests and extra-curricular activities; and
- 3. Examine employer organisations' perspectives on factors accounting for skill shortages associated with some specific positions reserved for geography graduates in their industrial establishment,

BIBLIOGRAPHY

- AAC & U (American Association of Colleges and Universities) (2002). "Greater expectations: A new vision for learning as a nation goes to college".

 Washington DC. Available at www.greaterexpectations.org/
- (AAU) Association of African Universities (2015). The AAU university-industry linkages workshop document, October 14-16, 2015. Accra: AAU.
- Ababio, B.T. (2007). The place of geographical education in the school curriculum.

 Journal of Counselling, Education and Psychology, 1(1), 25-36.
- Acheampong, I. K. (2006). Human resource development, labour market concepts & operations. Cape Coast: Catholic Mission Press.
- Addae-Mensah, I. (2006). The education system in Ghana, A critical analysis. Cited in the report of the 57th Annual New Year School, Institute of Adult Education, University of Ghana, Legon-Accra, pp. 56 57.
- Adentwi, K. I. (2005). Curriculum development: An introduction. Kumasi: Wilas Press Ltd.
- Adu, K. & Orivel, F. (2006). Tertiary education financing strategy in Ghana (Report to the National Council of Tertiary Education). Accra: NCTE.
- Aguinis, H. & Kraiger, K. (2009). Benefits of training and development for individuals and teams, organisations, and society. *Annual Reviews of Psychology*, 60, 451-474. Available at www.annualreviews.org.
- Aikins, K.W. (2014). The relationship between sustainable development and resource use from a geographic perspective. *Natural Resources Forum*, 38, 261-269.
- Akinyemi, S., Ofem, I. B. & Ikyenomore, S. O. (2012). Graduate turnout and graduate employment in Nigeria. *International Journal of Humanities and Social Science*, 2 (14), 257-264.

- Amartya, S. (1999). Development as freedom. New York: Alfred, A. Knopf, Inc.
- Amedahe, F. K. (2002). Fundamentals of educational research methods. Cape Coast: University of Cape Coast Printing Press.
- Anamuah-Mensah, J., Asare-Ameyaw, A. and Dennis, S. (2007). Bridging the gap linking the school and the world of work in Ghana. *Journal of Career and Technical Education*, 23(1),133-152.
- Anderson, L. W. (2004). Increasing teacher effectiveness (2nd ed.). Paris: UNESCO, HEP.
- Ankrah, S. (2016, May 11). Collaborating with universities to produce better graduates. *Daily Graphic*, p. 9.
- Archer, T. & Layman, J. (n. d.). Focus group interview: Evaluation guide sheet.

 Columbus: The Ohio Cooperative Extension Service, Ohio State University.
- Asafu-Adjaye, P. (2012). Private returns on education in Ghana: Estimating the effects on employability in Ghana. African Sociological Review, 16 (1),121-139.
- Asante, K. B. (2015, July 6). What do we want education to achieve? *Daily Graphic*, p. 7.
- Astin, A. (1984). Student involvement: A development theory for higher education.

 Journal of College Student Development, 4 (5), 518-529.
- Atherton, J. S. (2010). Learning and teaching: Constructivism in learning (On-line)

 UK: Available at www.learningandteaching.info/learning/constructivism.

 Htm.
- Australian Geography Teachers' Assoc. (2007). In Erasmus Int. Geography
 Report (Feb. 2008) "Study into teaching of geography in Years 3-10". Report
 to the Dept. of Education, Employment and Workplace Relations.

- Avoke, K.S. & Avoke, M. (2012, June 11). University education, waste and graduate unemployment. *Daily Graphic*, p. 10.
- Awiah, D. M. (2013, September 2). Tertiary institutions urged to prepare students for job market. *Daily Graphic*, p. 59.
- Ayara, N. N. (2002). The paradox of education and economic growth in Nigeria: An empirical evidence. Selected papers for the 2002 Annual Conference, Nigerian Economic Society (NES). Ibadan: Polygraphics Ventures Ltd.
- Baah-Boateng, W. & Baffour-Awuah, D. (2015). Skills development for economic transformation in Ghana. Paper presented to the African Centre for Economic Transformation (ACET). Retrieved from www.acetforafrica.
- Babalola, J. B. (2003). Budget preparation and expenditure control in education. In J. B. Babalola (Ed.). *Basic text in educational planning*. Ibadan: Awemark Industrial Printers.
- Bandura, A. (1997). Self-theories, the exercise of control (2nd ed.). New York: Freeman.
- Bassi, L. J. & McMurrer, D. P. (2006). Employers' perspectives on human capital development and management. Paris: Organisation for Economic Cooperation and Development (OECD).
- Bawakyillenuo, S., Akoto, O. I., Ahiadeke, C., Aryeetey, B. E. & Agbe, K.E. (2013). Tertiary education and industrial development in Ghana. A Working Paper, London: International Growth Centre.
- Baylina, M. & Villanueva, M. (2011). Challenges, expectations and reality: The adaptation of a geography degree to the European Higher Education Area.

 European Journal of Geography, 1 (1), 12-21
- Beaver, K. J. & Weibaum, H.E. (2012). Measuring school capacity, maximizing

- International Encyclopaedia of Curriculum. Oxford: Pergamon Press, pp. 414-418.
- Bould, D. J. (Ed.) (1985). Problem-based learning in education for the professions. Sydney: HERDSA.
- Bowers-Brown, T. & Harvey, L. (Aug. 2004). Are there too many graduates in the UK? A literature review and an analysis of graduate employability: In *Industry and higher education*, pp. 243-54.
- Braskamp, L. A. (1980). Assessing the utilisation of a program evaluation or review. Paper presented at planning and conducting Program Evaluation and Reviews in Higher Education Conference. St. Petersburg, Florida, Jan. 1980.
- Bregoli, I. (2013). Effects of DMO coordination on destination brand identity: A mixed method study on the city of Edinburgh. *Journal of Travel Research*, 52, 212-224.
- Bridgestock, R. (2009). The graduate attributes we have overlooked: Enhancing graduate employability through career management skills. *Higher Education and Research Development*, 28, 31-44.
- Business Dictionary (n.d.). Definition of a leader. Retrieved from www.businessdictionary.com/definition/leader.html
- Canada's Ministry of Education (2005). Education for all: The report on the expert panel on literacy and numeracy instruction for students with special education needs, kindergarten to grade 6, Ontario Education, ISBN 0-7794-8060. Retrieved November 16, 2006.
- Candy, P. C. & Crebert, R. G. (1991, Sept-Oct.). Ivory tower to concrete jungle:

 The difficult transition from the academy to the workplace as learning environment. *Journal of Higher Education*, 62(J), 570-592.

- Capella University (undated). Competency education. Retrieved from www.competency-basededucation.capaellauniversity.htm
- CBI (2011). Working towards your future: Making the most of your time in higher education. London: CBI. Available from http://aces.shu.ac.uk/employability/resources/CBI NUS Employability%20report- May202011.pdf.
- Centre for Developing and Evaluating Lifelong Learning (CDELL) (2007). The teaching, learning and assessment of generic employability skills. Available from http://www.marchmont.ac.uk/Documents/Projects/ges/ges-guide (optimized). Pdf. Accessed on 13th February 2012].
- Chapagain, C. P. (Sept. 2004). Human resource capacity building through appreciative inquiry in achieving developmental goals. A Ph.D. Dissertation, Madison University, USA.
- Clark, G. & Wareham, T. (2000). "Geography at university: Making the most of Your geography degree courses". Paper presented at a Seminar titled "Strategic issues in developing key skills in geography in higher education", organised by the Geography Discipline Network (GDN) with the Institute of British Geographers (RGS IBG) at the Headquarters of the Royal Geographical Society, London on 2nd September, 1999. Retrieved from www.eprints.lancs.ac.uk/370/1/Geography@University.pdf
- Cohen, L. & Manion, L. (1994). Research methods in education. London: Routlege.
- Committee on Review of Education Reforms in Ghana (2002). Meeting the challenges of education in the twenty first century. Accra: Adwinsa Publications (Gh.) Ltd.
- Coopers & Lybrand (1998). Skills development in higher education. Committee of Vice Chancellors and Principals of Universities of the UK (CVCP); London:

- Committee on Review of Education Reforms in Ghana (Oct. 2002). Meeting the challenges of education in the 21st century. Accra: Adwinsa Publications.
- Corominas, E., Saurina, C. & Villar, E. (2010). The match between university education and graduate labour market outcomes (education-job match): An analysis of three cohorts in Catalonia, Barcelonia: AQU Catalunya. Retrieved from www.aqu.cat.
- Coyne, K. & Dye, R. (1998). The competitive dynamics of network-based businesses. *Harvard Business Review (January-February)*, 99-109.
- Creswell, J.W. &Plano Clark, V.L. (2011). Designing and conducting mixed methods research. Thousand Oaks, CA: Sage.
- Creswell, J.W. (1994). Research design: Qualitative and quantitative approaches.

 Thousand Oaks, CA: Sage.
- Creswell, J.W. (2003). Research design: Qualitative, quantitative, and mixed methods approaches. Thousand Oaks, CA: Sage.
- Cronbach, L. (1980). Towards reform of program evaluation. San Francisco: Jossey-Bass Publishers.
- Curran, V., Christopher, J., Lemire, F., Collins, A. & Barrett, B. (Mar. 2003).

 Application of a responsive evaluation approach in medical education.

 Medical education, 37(3), 256-266.
- Darkwa, P. & Adu-Gyamfi, A. B. (2013). "Graduate employability: Analysing the factors that influence graduate unemployment in Ghana". In AAU 13th General Conference Proceedings on "Transforming African Higher Education for Graduate Employability and Socio-Economic Development". Libreville, Gabon, May 28 31, 2013.
- Dearing report (1997). Higher education in the learning society: Report of the

- National Committee of Enquiry into Higher Education. London: HMSO.
- pe la Harpe, B., Radloff, A. & Wyber, J. (2000). Quality and generic (professional) skills. Quality in Higher Education, 6 (3), 231-243.
- Denison, E. F. (1962). Education, economic growth and gap information. *Journal of Political Economy*. 70 (5), 124-128.
- Denzin, N. K. (1989). The research act (3rd ed.). Englewood Cliffs: Prentice Hall.

 Dept. of Geography & Resource Development Factsheet(2015), University of Ghana, Legon. Retrieved from www.ug.edu.gh/geography.
- Dept. of Geography & Rural Development (2015). Factsheet 2015, Kwame Nkrumah University of Science & Technology. Retrieved from www.knust.edu.gh/geography.
- Dess, G. G. & Pickens, J. C. (1999). Beyond productivity: How leading companies achieve superior performance by leveraging their human capital. New York:

 American Management Association.
- Deuren, V. R. (2013). Capacity development in higher education institutions in developing countries. Working Paper No. 2013/30. Maastricht, NL. Maastricht School of Management.
- De Vita, J. C. & Fleming, C. (Eds.) (2001). Building capacity in non-profit organizations. Washington, D.C.: The Urban Institute. Retrieved from http://www.urban.org
- Dunn, K. (2007). The contemporary application of systems approach to education:

 Models for effective reforms. Lanham, Maryland: University Press of America.
- Dweck, C. (1999). Self-theories: Their role in motivation, personality and development. Philadelphia: Psychology Press.

- Ecker, R., Dufour, R. & Dufour, R. (2002). Getting started: Re-culturing schools to Become professional learning communities. Bloomington, IN: National Educational Service.
- Edoimioya, P. O. (2014). Managing higher institutions using systems approach method.. *Journal of Education and Policy Review*, 6 (1), 35–41.
- Educational Broadcasting Corporation (undated). Constructivist theory.

 Available at www.educationalbroadcastingcorporation.com
- Ellington, H. I. (1989). Problem-based learning in education and training.

 Aspects of Education and Training Technology, XXII, Kogan, pp. 62 67.
- Ely, M., Anzul, M., Friedman, T., Garder, D., & Steinmetz, A. (1991). Doing qualitative research: Circles within circles. London: Falmer Press.
- Evans, D., Flora, C., Goodpastor, G., Shepherd, P. & Tolo, K. (2009). Assessment of higher education institutional capacity in selected geographic and subject areas in Indonesia. Retrieved from Institutional Capacity Assessment of Selected Indonesian Higher Education Institutions.pdf.Adobe Reader.
- Evans-Klock, C. (2016). "What is the 2030 Agenda for Sustainable

 Development?" The United Nations in Ghana. Retrieved on 14/01/2016

 from www.unghana.org/site/index.php
- Fadare, S. O. (2013). Resource dependency in institutional and stakeholder organizational theories in France, Nigeria and India. *International Journal of Management and Sustainability*, 2 (12), 231-236.
- Fagerlind, A. & Saha, L.J. (1997). *Education and national* developments. New Delhi: Reed Educational and Professional Publishing Ltd.
- Felder, R. (1996). Matters of style. ASEE Prism. 6 (4), 18-23.
- Fletcher, B.A. (1968). 'The aims of university education'. In D. Layton

- (Ed.). University teaching in transition (pp. 3-7). Edinburgh: Oliver and
- Fletcher, J.A. (2000). The appraisal of mathematics teachers in Ghana. *Journal of Educational Management*, 3, 36-63.
- Fowler, A. & Ubels, J. (2010). The Multi-faceted Nature of Capacity: Two

 Leading Frameworks. In: J. Ubels, N. Acquaye-Baddoo and A. Fowler(Eds.).

 Capacity development in practice. London & Washington, DC: Earthscan, pp. 11 24.
- Free Dictionary (undated). Perspective: Definition of perspective. Available at www.thefreedictionary.com/perspective
- Fugar, F. D. K., Ashiboe-Mensah, N. A. & Adinyira, E. (2013). Human capital theory: Implications for the Ghanaian Construction Industry Development.

 Journal of Construction Project Management and Innovation, 3(1), 464-479.
- Gale, H. (2008). "Not another strategy? Linking the learning and teaching and human resource strategies via the development of a professional doctorate".

 Educational Developments, 9, 7-11.
- Gambin, L., Hogarth, T., Murphy, L., Spreadbury, K. Warhurst, C. et al. (Jan. 2006). Research to understand the extent, nature and impact of skills mismatch in the economy. London: Dept. for Business Innovation & Skills.
- Gamerith, W, Hemmer, I. & Czapek, F. (Eds.) (2014). Educational standards in geography for the intermediate school certificate, with sample assignments.

 Bonn, Germany: GGA.
- Geisinger, R. H. (Oct 1968). Systems analysis and education research literature review. Harrisburg, Pennsylvania: Pennsylvania State Dept. of Public Instruction.

- Gerber, R. (2009). Geographical education. In M. Sala (Ed.) Geography, 1, 120-145. EOLSS. Retrieved from www.eolss.net/sample-chapters/c01/E6-01-03.pdf
- German Geographical Society (2012). Educational standards in geography for the intermediate school certificate, with sample assignments. Bonn, Germany: DGfG.
- Gichaga, F.J. (1993). Foreword. In B. Matiru, A. Mwangi & R. Schlette (Eds.)

 Teach your best: A handbook for university lecturers. Kassel, Germany:

 University of Kassel.
- Gondwe, M. & Walenkamp, J. (2011). Alignment of higher professional education with the needs of the local labour market: The case of Ghana. Hague: The Hague University of Applied Sciences.
- Grandori, A. (1997). An organizational assessment of inter-firm coordination modes.

 Organisational Studies, 18 (6), 897-925.
- Gyasi-Agyei, A. (2013, May 13). A sustainable tertiary education model needed for Ghana (1), *Daily Graphic*, p. 35.
- Haffar, A. (2014, September 8). Education for the 21st century skills: Best practices from Singapore, Finland and Switzerland. *Daily Graphic*, p. 55.
- Haffar, A. (2014, December 19). Purposeful education using local inputs and hands-on abilities: Some highlights from year 2014(Pt. 2). *Daily Graphic*, p.7.
- Haffar, A. (2015, January 12). Education for the world of work: Advancing Ghana from a Third World to a First. *Daily Graphic*, p. 55.
- Haffar, A. (2015, June 8). Technology and innovations for the dynamic 21st Century.

 Time to re-think and upgrade teaching standards. *Daily Graphic*, p. 38.
- Haffar, A. (2015, June 15). Avoiding the mis-education of Ghana's youth: A call for

- innovative approaches and commitment. Daily Graphic, p. 38.
- Haffar, A. (2015, July 2015). The WAEC challenge for the 21st century: Exams for transforming a developing country through project-based education. *Daily Graphic*, p. 18.
- Haffar, A. (2015, September 28). Are Ghana's public universities doing the best for the youth? A renaissance for innovation and employment. *Daily Graphic*, p. 38.
- Haffar, A. (2016, January 25). Critical thinking: The heart, spine and soul of quality education. *Daily Graphic*, p. 38.
- Haffar, A. (2016, March 29). Activities to maximise teaching and learning. Some suggested methodologies for greater retention. *Daily Graphic*, p. 53.
- Haffar, A. (2016, April 25). Ban the lectures and focus on the world of work: appropriate education for developing Ghana. *Daily Graphic*, p. 38.
- Haffar, A. (2016, July 16). Quality education depends on skills, applications: In loving memory of Ephraim Amu, the great thinker and doer. *Daily Graphic*, p. 38.
- Haffar, A. (2016, August 29). Ghana's prosperity depends on the practicality of education: The NAB must support concrete skills for employment. *Daily Graphic*, p. 38.
- Haffar, A. (2016, September 28). Are Ghana's universities doing the best for the youth? *Daily Graphic*, p. 38.
- Hall, M. H., Andrukow, A., Barr, C. Broek, K., de Wit, M., Embuldeniya, D. et al. (2003). The capacity to serve: A qualitative study of the challenges facing Canada's non-profit and voluntary organizations. Toronto, ON: Canadian Centre for Philanthropy.

- Harbison, F. H. & Meyers, C. A. (1964). Education, manpower and economic growth. New York: McGraw-Hill.
- Harvey, L. & Green, D. (1994). Employer satisfaction. Birmingham: QHE.
- Hatfield, S. R. (2001). The student learning self-study: Choices and opportunity. In J. L.Ratcliff, E. S. Lubinescu & M. A. Gaffney (editors). *How accreditation influences assessment*. Pp. 23-33. San Francisco: Josswey-Bass, Inc.
- Heathfield, M. S. (undated). What is human resource development? Retrieved from www.About.com
- Henderson, V. J., Shalizi, Z & Venables, J. A. (2001). Geography and development.

 Journal of Economic Geography, 1, 81-105.
- Henry, M.S. (2011). The fallacy of the human capital theory. Accessed from www.taboogive.com/the-fallacy-of-the-human-capital-theory
- Henson, K. T. (2003). Foundations for learner-centred education. A knowledge base. Education, 124 (1), 5-16.
- Hillage, J. & Pillard, E. (1998). Employability: Developing a framework for policy analysis. Research Report RR85: Department for Education and Employment.
- Hogarth, T., Winterbotham, M. Hasluck, C. Carter, K., Daniel, A. E. et al. (2007).

 Employer and university engagement in the use and development of graduate level skills Research Report No. 835A. London: Department of Education and Skills.
- Hoggart, K. (1996). All washed up and nowhere to go? Public policy and geographical research. *Progress in Human Geography*, 20, 110-122.
- Hord, S. M. (1997). Professional learning communities: What are they and why are they important? *Issues about change*, 6(1), 12-17.

- Huit, W. (2007). Bloom's et al.'s taxonomy of cognitive domain. Educational Psychology Interactive. Valdosta, GA: Valdosta State University. Available at http://www.edpsycinteractive.org/topics/cognition/bloom.html[pdf]
- International Geographical Union Comm. on Geographical Education (1992).

 International charter on geographical education. Freiburg, Germany: IGU-CGE.
- ILO (2006). Implementing the global employment agenda: Employment strategies in support of decent work, "Vision" document. Geneva: ILO implications for regional cooperation. United Nations University, Discussion Paper No. 2007/3, UNU-WIDER, www.wider.unu.edu
- ILO (2012). Africa's response to the youth employment crisis: Regional report (March- May, 2012). Geneva: ILO.
- Inter-University Quality Assurance Committee (IQAC) (undated). Quality

 evaluation guide draft document. Cape Coast: University of Cape Coast

 Press.
- Jafaru, M. J. (2017, January 23). Minister to push for position of special prosecutor.

 Daily Graphic, p. 16.
- Jenkins, A. & Pepper, D. (1988). "Enhancing students' employability and self-expression: How to teach oral and group skills in geography". *Journal of Geography in Higher Education*, 12 (1), 67-83.
- JICA (March, 2007). Philosophy and significance of JICA's assistance in mathematics and science education. Tokyo: IFIC.
- Johnson, B. & Christensen, L. (2008). Educational research: Quantitative, qualitative and mixed approaches. Thousand Oaks, CA: Sage Publications.
- Johnson, B., Onwugbuzie, A.J. & Turner, L.A. (2007). Toward a definition of

- mixed methods research. Journal of Mixed Methods Research, 1,112-133.
- Johnson, B. R. (1997). Examining the validity structure of qualitative research. *Education*, 118 (3), 282-292.
- Johnston, R. J. (1997). 'Graduateness' and a core curriculum for geographers.

 Journal of Geography in Higher Education, 21(2), 245-259.
- Joint Committee on Standards for Education Evaluation (1981). Standards for educational programs, projects and materials. New York: McGraw-Hill Book Co.
- Jones, K. I. (Ed.) (1992). Encyclopaedia of career change and work issues. Phoenix, Arizona: Orynx Press.
- Kane, E. (1990). Doing your own research: How to do basic descriptive research in the social sciences and humanities. New York: Marion Boyars Pub. Ltd.
- Kent, A. (1996). Evaluating the geography curriculum. In A. Kent, D. Lambert, M.Naish and F. Slater, *Geography in education* (pp. 133–195). Cambridge: University of Cambridge Press.
- King, H. (2001). Editorial: Case studies in problem-based learning from geography, earth and environmental; sciences. *Planets Special Issue 2*, 3-4.
- Kneale, P. E. (2014). Study skills for geography students: A practical guide (2nd ed.). New York: Routledge
- Knight, P. T. & Yorke, M. (2001). Employability and good learning in higher education. *Teaching in Higher Education*, 8(1), 3-16.
- Kolnik, K. (2012). Coming together: Geography and citizenship education for sustainable living. *Metodicki Obzori*, 7 (3),17-24.
- Krejcie, R. V. & Morgan, D. W. (1970). Determining sample size for research activities. Journal of Education and Psychological Measurement, 30, 607-610.

- Krueger, R.A. (1994). Focus groups: A practical guide applied research (2nd ed.).

 Thousand Oaks, CA: Sage Publications.
- Krugman, P. (1998). The role of geography in development. A paper prepared for the Annual World Bank Conference on Development, Washington, D.C. April 20-21, 1998.
- Lambert, D. & Morgan, J. (2011). Geography and development: Development education in schools and the part played by geography teachers. London:

 Development Education Research Centre, www.ioe.ac.uk/derc
- Learning Theories Knowledge Base (2011, August). Constructivism at learning-Theories.com. Retrieved August 24, 2011 from www.asell.org/educational-information/learning-theories.
- Leedy, D. L. & Omrod, J. E. (2005). Practical research planning and design. (5th ed.). New Jersey: Merril Prentice Hall.
- Lees, D. (2002). Graduate employability Literature review. Learning and Support

 Network Generic Centre. Retrieved from http://www.ltsn.ac.uk
- Lewis, R. G. & Smith, H. D. (1994). Total quality in higher education. Delray Beach, FL.: St. Lucie Press.
- Lowden, K., Hall, S., Elliot, D., & Lewin, J. (2011). Employers' perspectives of the employability skills of new graduates. Project Report. London, UK: Edge Foundation.
- Lubinescu, E. S., Ratcliff, J. L. & Gadfney, M. A. (2001). Two continuous collide:

 Accreditation and assessment. In J. L. Ratcliff, E. S. Lubinescu & M. A.

 Giffney (Eds.). How accreditation influences assessment(pp. 5-21). San

 Francisco: Jossey-Bass, Inc.
- Lum, L. (2001). Law school urged to increase admission standards. Black Issues in

- Higher Education, 18(14), 12-17.
- Lunenburg, C. F. (2010). Schools as open systems. Schooling, 1 (1), 1-5.
- Lusthaus, C., Adrien, M. H., Anderson, G., Carden, F. & Montalvan, G. P. (2002).

 Organisational assessment: A framework for improving performance.

 Washington and Ottawa: International Development Research Centre & Inter-American Dev. Bank.
- Manchester Metropolitan University (MMU) (undated). Selling your skills: How your degree has made you employable. A hand out designed by the Careers and Employability Service Units, MMU. Available at www.mmu.ac.uk/careers/guides
- Marimuthu, M., Arokiasamy, L. & Ismail, M. (2009). Human capital development and its impact on firm performance: Evidence from developmental economics. *Journal of International Social Research*, 2 (8), 265-272.
- Martins, F. (2009). Teaching information science students for the use of different methodologies. In *Qualitative and Quantitative Methods in Libraries Theory and Application*. Proceedings of the International Conference on QQMI. Retrieved from www.worlddecibooks.com/compsci/7691.html
- Mbewa, M. (2014). Ability of the secondary school curriculum to equip students with employable skills in Tanzania. *Journal of Education and Curriculum Development Research*, 2(2), 71-85.
- McCaslin, N.L. & Tibezinda, J.P.(undated). Assessing target group needs. In FAO

 Corporate Document Repository. National Resource Management &

 Environmental Development.
- McCowan, T. (2014). Can higher education solve Africa's job crisis? Understanding graduate employability in Sub-Saharan Africa. London: The British Council.

- McNernay, D. J. (1995). "Designer" downsizing: Accent on core competencies. HR Focus, 72 (2).
- Merriam, S. B. (1998). Qualitative research and case study applications in education. San Francisco: Jossey-Bass.
- Merriam-Webster Incorporated (1999). Webster's new explorer dictionary.

 Springfield: Federal Street Press.
- Mgangira, B.M. (2003). Integrating the development of employability skills into Civil engineering core subjects through a problem-based learning approach.

 International Journal of Engineering Education, 19 (5),759-761.
- Mhlanga, E. & Shumba, O. (2013). Reporting research results and findings. In S.
 M.Tichapondwa, Preparing your dissertation at a distance: A research guide, pp. 216-237.
- Ministry of Education (2011). *Performance of the education sector*, 2009 2011.

 Accra: Ministry of Education.
- Ministry of Manpower, Youth & Employment (2009). National employment policy.

 Accessed on 14/07/2012 and Retrieved from

 http://siteresources.worlbank.org/INTLM/Resources/Ghana NATPOLICYD

 EC11B.pdf
- Misener, K. & Doherty, A. (2008). A case study of organizational capacity in non-profit community sport. *Journal of Sport Management*, 23, 457-482.
- Miyittah-Kpogbe, M. (2011, August 29). Universities must create jobs, Daily Graphic, pp. 19.
- Mohammedbhai, G. (2008). The effects of massification on higher education. Accra:

 Association of African Universities.
- Moreland, N. (2006). Entrepreneurship and higher education: An employability

- perspective. Learning and Employability Series One. Heslington York, UK: The Higher Education Academy.
- Morgan, J. (2012). Teaching geography in secondary schools as if the planet matters . New York: Routledge.
- Morley, J. (2006). The academic phrasebook. The University of Manchester.

 Retrieved on April 22, 2009 from www.phrasebook.manchester.ac.uk/
 index.htm
- Mosha, J. H. (1986). The role of African universities in national development: A critical analysis. *Comparative Education*, 22 (2), 93-109.
- Mukhopadhyay, M. (2005). The total quality management in education (2nded.).

 New Delhi: Sage.
- National Accreditation Board (NAB)(Nov 2011). Roadmap to accreditation (revised ed.). Accra, Ghana: NAB
- National Council for Geographic Education (NCGE) (2012). Geography for life:

 National Geography Standards (2nd ed.). GENIP. Available at

 www.ncge.org/geography-for-life/
- National Development Planning Commission (Feb. 2008). Medium –Long Term

 National Development Plan (7-Yr Dev. Plan). Accra: NDPC.
- National Institute of Open Schooling (NIOS) (1989). Module 1: Nature of geography as a discipline. Dept. of School, Education & Literacy, MHRD, India. Retrieved Fromwww.nios.ac.in/geography.pdf
- National Open University, Nigeria (undated). Course guide for EDT 821:

 Instructional task analysis psychological basis of instructional media.

 Available at www.nou.edu.ng/uploads/NOUN_OCL/pdf/EDU/EDT821/
- Naude, W. (2007). Geography and development in Africa: Overview and

- implications for regional cooperation. United Nations University, Discussion Paper No. 2007/3. UNU-WIDER, www.wider.unu.edu
- Nellie Mae Education Foundation (2011, Nov. 11). Proficiency-based pathways initiative one-pager. Paper presented at the Proficiency-Based Pathways Sharing Our Work Convening, Amherst, MA.
- Nenty, H. J. (2009). Writing a qualitative research thesis. *International Journal of Educational Science* 1 (1), 19-32. Kamla-Rai.
- New Brochure(2012). Dept. of Geography and Regional Planning, Cape Coast: University of Cape Coast Printing Press.
- Newcastle University (2016). School of Geography, Politics and Sociology:

 Undergraduate geography degree programmes. Available at

 www.ncl.ac.uk/undergraduate/degree/geography/
- Newmann, M. F., King, B. & Youngs, P. (2000). Professional development that addresses school capacity: Lessons from urban elementary schools. *American Journal of Education 168*, 259-299.
- Nowotny, H. (1995). Mass higher education and social mobility, a tenuous link. In

 E. Dill & B. Sporn (Eds.). Emerging patterns of social demand and

 university reforms through a glass darkly. Oxford: IAU Press/Pergamon,

 pp. 72 89.
- Nusche, D. (2008). "Assessment of learning outcomes in higher education: A comparative review of selected practices". OECD Education Working Papers No. 15, OECD Publishing.
- O' Day, J., Goertz, E. M. & Floden, E. R. (1995). Building capacity for education reform. Philadelphia, PA: Consortium for Policy Research in Education (CPRE).

- OECD (1999). Human capital investment: International comparison. Paris: OECD.
- OECD (2011). Building a high-quality teaching profession: Lessons from around the World. Background Report for the International Summit on the Teaching Profession Paris: OECD Publishing.
- Ogundele, A. G. (2011). Higher education and employability in the international labour market. In O.D. Durosako & A. A. Adegoke. *Higher education and globalization*. Ibadan: Stirling-Horden Publishers Ltd., pp. 201 209.
- Olaniyan, D.A. & Okemakinde, T (2008). Human capital theory: Implications for educational development. European Journal of Scientific Research, 24(2), 157-162.
- Oluyomi, S. & Adedeji, S. O. (2012). Skills mismatch among university graduates in the Nigerian labour market. US-China Education Review AI, 90 98. ISSN 1548-6613.
- Onwuegbuzie, J. A. & Collins, M. T. (2007). A typology of mixed methods sampling designs in social science research, 12 (2), 281-316.
- Onwuegbuzie, J. A. & Leech, L. N. (2006). Linking research questions to mixed methods data analysis procedures. *The Qualitative Report, 11* (3), 474-498.
- Oppong, S. & Sachs, P. R. (2015). Managing graduate unemployment in emerging economies: Critical analysis of the skills mismatch and oversupply thesis.

 *Posslovnalzvrsnost Zagreb, God. IX, BR1, 125-138.
- Organisation for Economic Development & Cooperation (OECD) (2001). The well-being of nations: The role of human and social capital. Paris: OECD.
- Orinos, N. (June, 2012). Skills and competencies. International Journal of Business and Social Research (IJBSR), 2 (3), 53-72.
- Owotunde, P. O. (2000). Technical and vocational education for national

- development: The Nigerian experience. In B. B. Ogbonna (Ed.). Science and technology education for national development. Jos: Zimlek Comms. Oxford Brookes University (undated). Geography brochure: Career in geography. Available at www.social-sciences.brookes.ac.uk
- Page, J. (2012). Youth, jobs and structural change: Confronting Africa's "employment problem". Working Paper No. 155(Oct. 2012). Tunisia: ADB.
- Pajares F. (2007). Elements of research proposal. Emory University, U.S.A.
- Palanichamy, C. & Veeramani, S. (2013). Employability enhanced education From theory to practice. Sarawak, Malaysia: Curtin University.
- Panagiotakopoulos, A. (2012). Employability skills development in Greek higher education institutions (HEIs). *Higher Education, Skills and Work-Based Learning*, 2 (2), 141-150.
- Patton, M.Q. (2002). Qualitative research and evaluation methods. Thousand Oaks: Sage Publications.
- Pawson, F., Fournier, E., Haigh, M., Muniz, O., Trafford, J., & Vajoczki, S. (2006).

 Problem-based learning in geography: Towards a critical assessment of its purposes, benefits and risks. *Journal of Geography in Higher Education*, 30, 272-289.
- Pegg, A., Waldock, J., Hendy-Isaac, S. & Lawton, R. (2006). *Pedagogy for employment*. York, UK: ESECT & Higher Education Academy.
- Perez, M. (2011). Competency-Based education: How are competence-based

 Education and content-based education different? Classroom Link Electronic

 Journal. Retrieved from http://pearsonclassroomlink.com/articles/ 0211/0501.htm
- Pfeffer, J. & Salanchi, G. R. (1978). The external control of organizations. A

- resource dependence perspective. New York: Harper & Row.
- philip, R., Bain, J., McNaught, C., Rice, M. & Tripp, D. (2001). Handbook for learning-centred evaluation of computer-facilitated learning projects in higher education. Committee for University Teachers' Staff Development (CUTSD). Downloaded from www.col.org/prest
- Preston, E. J. & Geoffrey, J.M. (1981). All possible worlds: A history of geographical ideas (2nded.). New York: John Wiley & Sons.
- Priest, N., Rudenstine, A., Weisstein, E. & Gerwin, C. (2012). Making mastery work: A close-up view of competency education. Quincy, MA: Nellie Mae Education Foundation. Available at http://bit.ly/makingmasterywork.org
- Psacharopoulos, G. & Woodhall, M. (1985). Education for development: An analysis of investment choices. New York: Oxford University Press.
- Quaye, M. (Nov. 2016). Curricula must be relevant. Daily Graphic, p. 61.
- Rama, B. R., Etling, A. W. W., & Bowen, B. E. (1993). Training of farmers and extension personnel. In R. K. Samanta (Ed.), *Extension strategy for agricultural development in 21st century*. New Delhi: Mittal Publications.
- Robbins, S. P. & DeCenzo, D. A. (1998). Fundamentals of management (2nd ed.).

 New York: Upper Saddle River.
- Rocco, T. S., Bliss, L. A., Gallagher, S. & Perez-Prado, A. (Spring 2003). Taking the next step: Mixed methods research in organisational systems. *Information Technology, Learning and Performance Journal*, 21(1), 19-29. Routledge.
- Sala, M. (2009). Foundations of geography. *Geography Vol. 1*.EOLSS. Available at www.eolss.net/sample-chapters/c01/E6-14-01.pdf
- Salant, P. & Dillman, D. (1994). How to conduct your own survey. New York: John Wiley and Sons Inc.

- Samoff, J. & Carol, B. (2003). 'From manpower planning to the knowledge era:

 World Bank policies on higher education in Africa'. Paper prepared for the

 UNESCO forum on higher education, research and knowledge: Stanford

 University.
- Sankar-Tokmak, H., Baturay, H. M. & Fadde, P. (July 2013). Applying the context, input, process and product model for evaluation, research, and redesign of an online master's program. *The International Review of Research in Open and Distributed Learning*, (s-1), 14(3), 1492-3831. Available at www.irrodl.org/index.php/irrodl/article/view/1485/2536. Date accessed 06 Feb. 2016.
- Schnoker, M. & Marzano, R. J. (2000). Realising the promise of standards-based education. *Educational Leadership*, 56 (6), 17-21.
- Schon, D.A. (1983). The reflective practitioner: How professionals think in action.

 New York: Basic Books.
- Schultz, T. W. (1963). The economic value of education. New York: Columbia University Press.
- Scot, D. & Usher, R. (1996). Understanding educational research. London:
- Scriven, M. (1972). Pros and cons about goal-free evaluation. *Evaluation Comment*, 3(4), 1-4.
- Shiparo, J. (2014, Feb 19). Competency-based degrees: Coming soon to a campus near you. Retrieved from www.comtency-baseddegreescoming soon campus near you-commentary-The Chronicle Higher Education.htm
- Shulman, L. E. (1987). Those who understand knowledge growth in teaching.

 Educational Researcher. 15, 4-14.
- Shultz, T. W. (1981). The economic value of education. Berkeley; University of

- California Press.
- Shumba, O. (2013). Data handling, analysis and interpretation: Hints and caveats. In S.M. Tichapondwa, *Preparing your dissertation at a distance: A research guide*, pp. 138-155.
- Sidhu, K. S. (2002). Methodology of research in education. New Delhi: Sterling Publishers Private Limited.
- Simon Fraser University (2009). What can you do with a geography degree?.

 Retrieved from www.sfu.ca/career/WCID.html
- Skilbeck, M. & Connell, H. (2000). Access and equity in higher education: An international perspective on issues and strategies in higher education.Government Publications, Molsworth, St. Dublin: Stationery Office.
- Smith, K. M. (1980). An analysis of the practice of educational program in terms of the CIPP model (PhD. thesis), Loyola University of Chicago.
- Smith, M. K. (2004). Educational development in Ghana. Accra: Unimax Publishers.
- Solem, M, Cheung, I & Schlemper, B.M. (2008). Skills in professional geography:

 An assessment of workforce needs and expectations. *The Professional Geographer*, 60(3), 356-373. Retrieved from http://www.tandfonline.com
- Society of South African Geographers (SSAG) (2003). Geography: The state of discipline in South Africa A survey, 2000/2001. University of Pretoria: SSAG.
- Spence, M. (1973). Job market signalling. Quarterly Journal of Economics, 87 (3), 355-375.
- Ssebuwufu, T. Ludwick, T. & Beland, M. (2012). Strengthening university-industry linkages in Africa: A study on institutional capacities and gaps. Accra: AAU.

- Stavredes, T. (2011). Effective online teaching: Foundations and strategies for student success. Retrieved August 8, 2011 from University Illinois, College of Education Online Website:

 http://www.learn.education.illinois.edu/file.php/1647/LearningTheory-Jossey-Bassey.pdf
- Stufflebeam, D. L. (1971). The use of experimental design in educational evaluation.

 Journal of Educational Measurement, 2(4), 267-274.
- Stufflebeam, D. L. (1973). Evaluation as enlightenment for decision-making. In B. R. Worthen and J. R. Sanders (Eds.), *Educational evaluation: Theory and practice*. Belmont, Calif.: Wadsworth Publishing Co.
- Sturgis, C. (2012). Boston Day and Evening Academy: Where competency education is good teaching practice. Retrieved from www.competencyworks.org/how-to-/boston
- Taber, K. S. (2011). Constructivism as educational theory: Contingency in learning and optimally guided instruction. In T. Hassasskhah (Ed.). *Educational theory* (pp. 39-61). New York: Nova Science Publishers, Inc.
- Talbot, P. (2000). Careers using geography. London: Kogan Page.
- Tashakkori, A, & Teddie, C. (Eds.). (2003). Handbook of mixed methods in social and behavioural research. Thousand Oaks, CA: Sage.
- Teicher, U. (1985). Occupational structures and higher education, In R. B.

 Clark & R. G. Neave (Eds.). The encyclopaedia of higher education

 (pp. 975-992). Oxford: Pergamon.
- Thurow, L. (1975). Generating inequality. New York: Basic Books Inc.
- UK QAA (2014). Subject Benchmark Statement: Geography. Part A: Setting and maintaining academic standards. Available at www.qaa.ac.uk/assuring-

- standards-and-qualifying/the-quality-code/quality-code-part-a.
- Ukpere, W. I. (2009). Distinctiveness of globalisation and its implications for labour markets: An analysis of economic history, from 1990 2007. The Indian Economic Journal, 56 (4), 1-12.
- UNDP (2010). Human development report 2010. The real wealth of nations:

 Pathways to human development. Retrieved from

 http://hdr.undp.org/en/media/HDR-2010-EN_Complete_reprint.pdf
- UNESCO (1998). Higher education in the twenty-first century: Vision and action.

 Paris: UNESCO. 5-9 October, 1998.
- UNESCO (1998). World declaration on higher education for the twenty-first century: Vision and action. Adopted by the World Conference on Higher Education, Paris, 9th October, 1998.
- UNESCO (2012). Education for sustainable development: Source book. Paris: UNESCO.
- UNESCO Institute for Statistics (UIS) (2011). International Standards Classification of Education. Montreal, Canada: UNESCO. Retrieved from www.uis.unesco.org
- UNESCO Institute for Statistics (2012). International standards classification of education 2011. Montreal, Canada: UIS.
- University for Development Studies (2016, November 14). 17th Congregation. Daily Graphic, p.61.
- University of California, Los Angeles (UCLA) (2009). Guidelines for developing and assessing student learning outcomes for undergraduate majors (1sted.). Available
 - at www.wasc.ucla.edu/eer_endnotes/Learning_Outcomes_Guidelines.pdf

- University of Manitoba (2009). What can I do with an undergraduate degree in geography? Retrieved from www.umanitoba.ca/geography.
- University of Sussex (2010). School of Global Studies, Geography and Development Studies: (BA) Geography and development studies entry for 2010. Available at www.sussex.ac.uk/global/internal/departments/geography/ugcourse/2010/LL79...
- University of Twente (2015). Systems theory. Available at www.utwent.nl/cw/theorieenoverzicht/Theory%20Clusters/
 Communication%2
- Vinson, D., Nixon, S., Walsh, B., Walker, C., Mitchel, E. & Zaitseva, E. (2010).

 Investigating the relationship between student engagement and transition: In

 Active Learning in Higher Education, 11(2), 131-143.
- Welman, J. C. & Kruger, S. J. (1999). Research methodology for the business and administrative sciences. Cape Town: Oxford University Press.
- Werner, M. J. & Desimone, L. R. (2009). Human resource development (5th ed.).

 Mason, USA: South Western Cengage Learning.
- Wiafe, A. (2003). Bridging the gap between employers' labour needs and the supply of university graduates: The case of social science graduates of the University of Ghana. MPhil Dissertation, University of Cape Coast.
- Wiggins, G. (1989, May). A time test: Toward a more authentic and equitable assessment. *Phi Delta Kappan*, 70 (9), 703-713.
- Wikipedia, the free encyclopaedia (undated). Classical antiquity. Available at www.wikipedia.org/wiki/classicalantiquity.
- Wiki-spaces Classroom (undated). Behaviourism, cognitivism, constructivism and

- banner/2/
- William, B. (2010). Systems thinking and capacity development in the international arena. In N. Fujita (ed.) Beyond Logframe: Using systems concepts in evaluation. Tokyo: Foundations for Advanced Studies on International Development.
- Wilson, M. R. & Bertenthal, M. W. (2005). Systems for state science assessment. Washington, D.C.: National Academic Press.
- Withum, S. F. (2006). Educational facilities planning: A systems model. Ed. D. dissertation, Duquesne University.
- World Bank (1994). *Higher education: The lesson of experience*. Washington, D. C.: The World Bank.
- World Bank (2010). Education in Ghana: Improving equity, efficiency and accountability of service delivery. Report No. 59755-GH. Washington, D.C.
- World Bank (2013). Learning outcomes. A hand out published by the World Bank Group. Available at www.worldbank.org/education/outcomes
- World Public Library (2015). *Program evaluation*. A publication of World

 Public Library Association. Retrieved from www.worldlibrary.org/articles/

 program-evaluation
- Worthen, B. R. & Sanders, J. R. (1987). Educational evaluation: Alternative approaches and practical guidelines. New York: Longman.
- Yin, R.K. (2003). Case study research: Design and methods. Thousand Oaks, CA: Sage Publications.
- Yorke, M. & Knight, P. (Reprinted) (2006). Embedding employability into the curriculum. York. Higher Education Authority.

Zukin bin Sidek, M. (2004). Determinants of graduate employability: A study of UUUM. An unpublished M.Sc. (Management) dissertation, Universiti Utara Malaysia.

APPENDICES

APPENDIX A

QUESTIONNAIRE FOR UNIVERSITY TEACHERS

Dear colleague:

I am pursuing a doctorate degree in Development Studies at the University of Cape Coast. The title of my thesis is Evaluating Capacity of Geography Departments for Student Employability Skills' Development in three Public Universities in Ghana. As a fellow educator, I am requesting your participation in this study by using between 15 and 20 minutes of your time to complete this questionnaire. The head of department has given me permission to conduct this investigation in this department.

This self-completion questionnaire aims to get the experience and perceptions of various groups of individuals on some dimensions of capacity of the geography departments. Your response will help this researcher make a determination as to how geography departments deploy their capacities in the employability skills training of students in Ghana. The information you provide will help inform capacity development initiatives, and thus benefit your department.

The data collection is based on the Systems Approach which tries to discover how the various units in an organisation interact to attain its goals.

Participation in this research is voluntary, and you are under no obligation to participate. Your identity will be protected and the confidentiality of your responses guaranteed, as your name will not appear in the research report. In any sort of report that might be published, no information will be used that would make it possible to

identify you. Should you feel not to answer some questions or complete some parts of the questionnaire you can do so. I appreciate the time and effort you are offering.

If you have any question about this research, please feel free to talk to me in person or contact me on 233-244-721747 or email me at either <u>ababs58@yahoo.com</u> or <u>bethel.ababio@ucc.edu.gh</u>.

Your rights as a Participant

This research has been reviewed and approved by the Institutional Review Board of University of Cape Coast (UCCIRB). If you have any questions about your rights as a research participant, you can contact the Administrator at the IRB Office between the hours of 8:00 a.m. and 4:30 p.m. through the phones lines 0332133172 and 0244207814 or email address: <u>irb@ucc.edu.gh</u>.

Thank you in advance for your cooperation.

Bethel T. Ababio, Doctoral Candidate

University of Cape Coast

CONSENT DECLARATION BY PARTICIPANT

I agree to participate in this study	
	Date

Signature of Participant

Section A: Personal Information

please tick $[\sqrt{\ }]$ or write down your responses, where appropriate

1.	Name of Department:
	Gender: Male [] Female []
3.	Nationality: Ghanaian [] African [] (Specify nationality)
4.	Age: Under 30 years [] 31-45 years [] 46-60 years [] Above 60
	years []
5.	Highest academic qualification: Master's degree [] Doctorate degree []
	Other (Specify)
6.	Professional qualification (if any, specify)
7.	Professional designation: Assistant Lecturer [] Lecturer [] Senior Lecturer
	[] Associate Professor [] Professor []
8.	Job Type: Full-time [] Part-time []
9.	Length of teaching as a University Teacher: Under 5 years [] 6-10 years []
	11-15 years [] 16 years and above []

Sections B to F: Five Dimensions of Capacity

This questionnaire survey is designed to assess the capacity of your academic department concerning the employability skills training of students. The questions have been designed around some dimensions of organisational capacity. Your perceptions on the items under each capacity dimension are rated according to the following decision rule format:

- 1=We do not do this or have this in this department. 2 = We are starting to move in this direction. 3 = We are making good progress here. 4 = We have this condition well established. 5 = We are refining our practice in this area. Tick the rating for each item that best reflects your perception or view. However, items 1 to 5 have unrated responses because they are not directly related to the capacity dimensions under consideration. Section B: Human Resources Capacity of the Department 1. How many courses, on the average, do you teach in a week? 1[] 2[] 3[] 4 and more [] 2. How many credit hours on the average do you cover in a week? 1-3 [] 4 -6[]7-9[]Above 9 credit hours[] 3. What year groups do you teach at the undergraduate level? Level 100 [] Level 200 [] Level 300 [] Level 400 4. What is the average class size of a compulsory class you handle? Under 100 [] 100-199 [] Between 200 and 300 [] Over 300 []
 - 5. What is the average class size of an elective course you handle? Under 50 []51-99 [] 100 150 [] 151 and above []

Item	Intellectual Skills Indicators					
No.	Preamble: The instructors in this department have been able to help develop students'	1	2	3	4	5
6.	Critical thinking	-				
7.	Problem solving					
8.	Analytical skills	-				
9.	Logical argument	-				
10.	Ability to put theory into practice	-		_	-	
11.	Ability to evaluate evidence	-		-	-	<u> </u>
12.	Ability to synthesise	+	-	-	-	-
13.	Ability to read varied textual materials	+-		-	-	
14.	Critical reflective thinking	+		-	-	-
15.	Creative thinking and visioning	+-	<u> </u>	\vdash	-	-

Item No.	Personal and Key Skills Indicators	1	2	3	4	5
110.	Preamble: The instructors in this department have			1		
	been able to help develop students'					
	skills					
16.	Ability to communicate through writing					
17.	Ability to communicate through					
	speaking/presentations					
18.	Ability to communicate through listening					
19.	Ability to communicate graphically/visually					
20.	Ability to use computer applications					
21.	Ability to learn how to learn (i.e. having the					
	disposition to learn)				_	<u> </u>
	Land perform research		}			
22.	Ability to understand and perform research		-	-	-	-
23.	Mathematical/numeracy			<u></u>		

Item	Personal Attributes Indicators					
No.	Preamble: The instructors in this department have been able to help develop students'	1	2	3	4	5
24.	Ability to adapt and learn	_	_			
25.	Ability to make timely decisions		-			_
26.	Ability to manage conflicts	+	-	-	-	-
27.	Ability to be responsible risk-takers	_	-		-	-
28.	Ability to work independently with little or no supervision	+-				
29.	Leadership and assertive	-	-		-	
30.	Teamwork and interpersonal	-	-			-
31.	Personal organisation and time management	+	-			-

Item	Knowledge/Experience with Employer	1	2	3	4	5
No.	Organisation Indicators					
	Preamble: The instructors in this department have been able to develop student'skills					
32.	Knowledge of the vision and mission of potential employer organisations/agencies					
33.	Knowledge of the structure of employer organisations					
34.	Knowledge of the skills required by potential employer organisations					
35.	Ability to participant in work-based training programmes or internships					
36.	Ability to design project work and students portfolios around work place practices					
37.	Ability to organise development/open day activities					

Ability to simulate workplace practices in the	
	Ability to simulate workplace practices in the

Section C: Leadership/Management Capacity of the Department

	Intellectual Skills Indicators	1	2	3	4	5
Item	Preamble: The leadership/management of this				•	٦
No.	department has in various ways aided to develop/build students'skills					
39.	Critical thinking		-		+-	-
40.	Problem solving	_	-	 	-	
41.	Analytical skills		+			
42.	Logical argument		-		-	
43.	Ability to put theory into practice				+-	
44.	Ability to evaluate evidence					
45.	Ability to synthesise					
46.	Ability to read varied textual materials					
47.	Critical reflective thinking				1	
48.	Creative thinking and visioning					

 -	Personal and Key Skills Indicators	1	2	3	4	5
Item No.	Preamble: The leadership/management of this department has in various ways aided to develop/build students'skills					
49.	Ability to communicate through writing					
50.	Ability to communicate through speaking/presentations					
51.	Ability to communicate through listening					

52.	Ability to communicate graphically/visually
53.	Ability to use computer applications
54.	Ability to learn how to learn (i.e. having the disposition to learn)
55.	Ability to understand and perform research
56.	Mathematical/numeracy

	Personal Attributes Indicators	1	2	3	4	5
Item No.	Preamble: The leadership/management of this department has in various ways aided to develop/build students'skills					
57.	Ability to adapt and learn					
58.	Ability to make timely decisions					
59.	Ability to take initiatives			<u> </u>		_
60.	Ability to be responsible risk-takers			ļ	ļ_	<u> </u>
61.	Ability to work independently with little or no supervision					
62.	Leadership and assertive		ļ	-	-	-
63.	Ability to develop self-awareness		 -	_	-	-
64.	Ability to develop self-confidence					<u> </u>

Item	Knowledge/Experience with Employer Organisation Indicators								
No.	Preamble: The instructors in this department have been able to develop students'skills Knowledge of the vision and mission of potential employer organisations/agencies	1	2	3	4	5			
66.	Knowledge of the structure of employer organisations					-			
67.	Knowledge of the skills required by potential employer organisations	-		-		-			
68.	Ability to participant in work-based training programmes or internships					-			
69.	Ability to design project work and students' portfolios around work place practices					-			
70.	Ability to organise development/open day activities to which potential employer organisations are invited					-			
71.	Ability to simulate workplace practices in the classroom					-			

Section D: Intra-Organisational Collaboration

	Intellectual Skills Indicators	1	2	3	4	5
Item	Preamble: The various units/sections in this					
.,	department have on various occasions collaborated to					
No.	develop/build students'skills					
72.	Critical thinking	-				
73.	Problem solving					
74.	Analytical					
75.	Logical argument					
76.	Ability to put theory into practice					-
77.	Ability to evaluate evidence					_
78.	Ability to synthesise			ļ		-
79.	Ability to read varied textual materials		-	ļ		
80.	Critical reflective thinking		_		-	<u> </u>
81.	Creative thinking and visioning					

	Personal and Key Skills Indicators					
Item	Preamble: The various with	1	2	3	4	5
No.	develop/build students'skills					
82.	Ability to communicate through writing					
83.	Ability to communicate through speaking/presentations				_	
84.	Ability to communicate through listening	-	-	-	-	-
85.	Ability to communicate graphically/visually	-	-		-	-
86.	Ability to use computer applications		-	-	-	-
87.	Ability to learn how to learn (i.e. having the disposition to learn)	-				
88.	Ability to understand and perform research	-	-		-	-
89.	Mathematical/numeracy		+-	-	-	

Item	Knowledge/Experience with Employer	1	2	3	4	5
No.	Organisation Indicators					
	Preamble: The various units/sections in this		1			
	department have on various occasions					<u> </u>
90.	Ability to adapt and learn					<u> </u>
91.	Ability to make timely decisions					
92.	Ability to manage conflicts					_
93.	Ability to be responsible risk-takers					_
94.	Ability to work independently with little or no supervision				-	
95.	Leadership and assertive		<u> </u>			-
96.	Teamwork and interpersonal		<u> </u>	ļ		-
97.	Personal organisation and time management					

	collaborated to develop/build students'skills		
98.	Knowledge of the vision and mission of potential employer organisations/agencies		
99.	Knowledge of the structure of employer organisations		
100.	Knowledge of the skills required by potential employer organisations		
101.	Ability to participant in work-based training programmes or internships		
102.	Ability to design project work and students portfolios around work place practices		
103.	Ability to organise development/open day activities to which potential employer organisations are invited		
104.	Ability to simulate workplace practices in the classroom		

Section E: Physical Resources Capacity

	Intellectual Skills Indicators	1	2	3	4	5
Item No.	Preamble: The programmes/curricular and other physical resources have been used to train students'skills					
105.	Critical thinking	<u> </u>		-		-
106.	Problem solving					
107.	Analytical			-		
108.	Logical argument		-	-		
109.	Ability to put theory into practice					

ty to synthesise				
ty to read varied textual materials				
ive thinking and visioning	-			
c	cal reflective thinking tive thinking and visioning	cal reflective thinking	cal reflective thinking	cal reflective thinking

	Key Skills Indicators	1	2	3	4	
Item	Preamble: The programmes/curricular and other				4	5
No.	physical resources have been used to train students'skills					
115.	Ability to communicate through writing	-	 	+-		
116.	Ability to communicate through speaking/presentations				_	
117.	Ability to communicate through listening					
118.	Ability to communicate graphically/visually	-	-			
119.	Ability to use computer applications					
120.	Ability to learn how to learn (i.e. having the disposition to learn)					
121.	Ability to understand and perform research					
122.	Ability to efficiently use different equipment/devices					
123.	Mathematical/numeracy		_		ļ	ļ
Item	Personal Attributes Indicators	1	2	3	4	5
No.	Preamble: The programmes/curricular and other physical resources have been used to train students					

Ability to adapt and learn	=
Ability to make timely decisions	
Ability to manage conflicts	
Ability to be responsible risk-takers	
Ability to work independently with little or no supervision	
Leadership and assertive	
Teamwork and interpersonal	
Personal organisation and time management	
	Ability to make timely decisions Ability to manage conflicts Ability to be responsible risk-takers Ability to work independently with little or no supervision Leadership and assertive Teamwork and interpersonal

Item	Knowledge/Experience with Employer Organisation Indicators Preamble: The programmes/curricular and other physical resources have been used to train students'skills	1	2	3	4	5
132.	Knowledge of the vision and mission of potential employer organisations/agencies					
133.	Knowledge of the structure of employer organisations					
134.	Knowledge of the skills required by potential employer organisations					
135.	Ability to participant in work-based training programmes or internships					
136.	Ability to design project work and students portfolios around work place practices					
137.	Ability to organise development/open day activities to which potential employer organisations are invited					
138.	Ability to simulate workplace practices in the					

classi	room		

Section F: Inter-Organisational Linkages Capacity

Item No.	Intellectual Skills Indicators Preamble: The department has been involved in collaborative training programmes with other departments/organisations to develop/build students'skills	1	2	3	4	5
139.	Critical thinking		+-	-	<u> </u>	-
140.	Problem solving	-		-	_	-
141.	Analytical	+-	 -		_	
142.	Logical argument	-	<u> </u>	+-	-	
143.	Ability to put theory into practice	-		-	-	
144.	Ability to evaluate evidence	-				-
145.	Ability to synthesise					
146.	Ability to read varied textual materials	+				
147.	Critical reflective thinking	+-	-	-	-	+-
148.	Creative thinking and visioning					

	Key Skills Indicators	1	2	3	4	5
Item No.	Preamble: The department has been involved in collaborative training programmes with other departments/organisations to develop/build students'skills					
149.	Ability to communicate through writing					
150.	Ability to communicate through speaking/presentations					
151.	Ability to communicate through listening	-	-	-		
152.	Ability to communicate graphically/visually]	<u> </u>

153.	Ability to use computer applications
154.	Ability to learn how to learn (i.e. having the
155.	Ability to understand and perform research
156.	Mathematical/numeracy

Item No.	Preamble: The department has been involved in collaborative training programmes with other departments/organisations to develop/build students'skills	1	2	3	4	5
157.	Ability to adapt and learn		+-			
158.	Ability to make timely decisions			†		
159.	Ability to take initiatives					
160.	Ability to be responsible risk-takers					
161.	Ability to work independently with little or no supervision					
162.	Leadership and assertive					
163.	Ability to develop self-awareness					
164.	Ability to develop self-confidence		<u> </u>			

	Knowledge/Experience with Employer Organisation Indicators	_				
Item No.	Preamble: The department has been involved in collaborative training programmes with other departments/organisations to develop/build students'skills	1	2	3	4	5
165.	Knowledge of the vision and mission of potential employer organisations/agencies					
166.	Knowledge of the structure of employer organisations			-		
167.	Knowledge of the skills required by potential employer organisations			-	-	
168.	Ability to participant in work-based training programmes or internships			-		
169.	Ability to design project work and students portfolios around work place practices					
170.	Ability to organise development/open day activities to which potential employer organisations are invited					
171.	Ability to simulate workplace practices in the classroom					

APPENDIX B

INTERVIEW SCHEDULE FOR HEADS OF DEPARTMENT

Dear Head of Dept.:

Thank you for voluntarily agreeing to participate in this interview regarding evaluation of capacity of geography (academic) departments for student employability skills development in three public universities in Ghana. Prior to this interview session, I ask that you carefully read the information listed below.

My name is Bethel Tawiah Ababio, a doctoral student in the Institute of Development Studies, at the University of Cape Coast. As part of my doctoral studies, I am expected to complete a thesis requirement and interviewing key heads of academic departments and their faculty members is one way that I will be able to derive data for my thesis. Professor S.B. Kendie and Professor A.M. Abane, who are my principal and co-supervisors respectively, are supporting my thesis writing efforts.

By having this exploratory conversation and interview with you, I want to gain a better impression of faculty members' expert opinions on the capacity of their departments in developing the employability skills of students for the world of work. From your voluntary participation, I will be able to derive data that will elucidate if academic departments in tertiary education institutions play, or do not play any roles in Ghana's human resource development efforts, and why or how so.

Again, I sincerely thank you for your time and voluntary participation in this important interview. Your answers will certainly inform the remainder of my thesis.

Should you have any questions, please contact me directly.

With gratitude,

Bethel T. Ababio - University of Cape Coast

Cell phone: 233-244-721747; email - ababs58@yahoo.com

Breakdown of Interview questions

- Human resource capacity Item 1
- Physical resource capacity Items 2 to 5;
- Inter-organisational linkages capacity Items 6 and 7
- Leadership/Management capacity Items 8 and 9;
- Intra-organisational collaboration Item 10
- 1. What are the department's niches in employability skills training of undergraduate students? (state at least two) Briefly outline the factors that have accounted for these niches.
- 2. How are the department's programmes and activities addressing the employability skills training needs of undergraduate students?
- 3. What are the sources of funding for the skill training programmes and activities run by this department, and how sustainable are these sources?
- 4. To the best of your knowledge, what curriculum/programme improvement or review has this department initiated in the past to cater for the employability needs of undergraduate students?
- 5. From your perspective as the head of department, how adequate are the teaching-learning facilities for the effective skills training of undergraduate students?
- 6. What factors facilitate the department's collaboration or partnership with other departments or organisations in the employability skills training of students?
- 7. What are the typical "customer" organisations, government ministries, departments and agencies that employ products of this department?

- 8. In what ways do you motivate other senior members in ensuring that they contribute to the employability skills training of students?
- 9. What capacity building measures would you suggest be put in place to improve the employability skills training of students?
- 10. What are the intra-organisational collaborations put in place by the management of this department to ensure that all the stakeholders in this department contribute to the employability skills training of students?
- 11. What concluding comments would you like to make regarding your participation in this interview?

APPENDIX C QUESTIONNAIRE FOR SUPPORT STAFF

Dear Respondent

I am a doctoral student at the University of Cape Coast, who is undertaking a research project under the theme Evaluating Capacity of Geography Departments for Student Employability Skills Development in three Public Universities in Ghana. This self-completion questionnaire aims to collect information on the perceptions of various groups of individuals on some selected dimensions of organisational capacity of academic (geography) departments. Your response will help this researcher make a determination as to how academic (geography) departments deploy their capacities in the employability skills training of students in Ghana. However, the information you provide will inform capacity development initiatives and thus benefit the department.

The data collection is based on the Systems Approach to organisational change, which tries to discover what is working, what is best, what gives life, etc. in an organisation, people or individual. So, the questions are based on issues that are appreciative, that are praise worthy, and that are successful practices or success stories. In other words, the research is related to positive attitude, which this researcher strongly believes leads to positive action and, subsequently to organisational change.

Participation in this research is voluntary, and you are under no obligation to participate. Your identity would be kept secret, and the confidentiality of your responses guaranteed, as your name will not appear in the research report. In any sort of report that might be published, no information will be used that would make it possible to identify you. Should you feel not to answer some questions or complete

some parts of the questionnaire you can do so. I appreciate the time and effort you are offering.

If you have any question about this research, please feel free to talk to me in person or contact me on 233-244-721747 or email me at either ababs58@yahoo.com or bethel.ababio@ucc.edu.gh

Your rights as a Participant

This research has been reviewed and approved by the Institutional Review Board of University of Cape Coast (UCCIRB). If you have any questions about your rights as a research participant you can contact the Administrator at the IRB Office between the hours of 8:00 a.m. and 4:30 p.m. through the phones lines 0332133172 and 0244207814 or email address: <u>irb@ucc.edu.gh</u>.

Thank you in advance for your cooperation.

Signed:

Bethel T. Ababio, Doctoral Candidate

University of Cape Coast

CONSENT DECLARATION BY PARTICIPANT

I agree to participate in this study		

	Date	
Signature of Participant	Date	

SECTION A: PERSONAL INFORMATION

Please tick $[\sqrt{\ }]$ or write down your responses, where appropriate

	1.	Name of Department:
	2.	Gender: Male [] Female []
	3.	Nationality: Ghanaian [] African [] (Specify nationality)
	4.	Age: Under 30 years [] 31-45 years [] 46-60 years [] Above 60
		years []
	5.	Highest academic qualification: First degree [] Master's degree []
Ot]	her	(Specify)
Pro	ofes	sional qualification (if any, specify)
	6.	Professional designation: Administrative/Technical/Research Assistant []
		Senior Administrative/Technical/Research Assistant [] Principal
		Administrative/Technical/Research Assistant[] Chief
		Administrative/Technical/Research Assistant []
Ot	ther	(Specify)
	7.	Job Type: Full-time [] Part-time []
	8	Length of service in this institution: Under 5 years [] 6-10 years [] 11-15
		years [] 16 years and above []
	9	. Length of service at current position: Under 5 years [] 6-10 years [] 11-15
		years [] 16 years and above []

SECTION B: PROFESSIONAL RESPONSIBILITIES

Please tick $[\sqrt{\ }]$ or write down your responses, where appropriate

10. What specific professional responsibilities do you undertake with regard to the training of students?
11. Is this department adequately staffed to effectively handle the tasks that your
unit/section performs? Yes [] No []
12. How adequate are the facilities in this department for the training of
students?
Very adequate [] Adequate [] Quite adequate [] Not adequate []
13. In what way (s) do you assist the academic staff in the training of students?
14. In your estimation, do students consider your role in the department critical
to their training? Yes [] No []
15. If yes to item 15, how do you know this? Formal reports from students []
Informal reports from students [] Other
(specify)
(specify)
this department collaborated in the skills training of students? Yes [] No []

role did you play to bring about this?
e good (IIIS)
18. You have a knack for helping the department to practise and support new
ways of training students. Always true [] Frequently true [] Sometimes
true []Rarely true [] Never true []
19. Briefly suggest ways in which your interaction with other staff members and
students should be made more relevant to meet the training needs of students.
SECTION C: BUILDING STAFF CAPACITY/DEVELOPMENT
20 My saver benefited from any form of institution/department sponsored
20. Have you ever believed
institution?
Ves [] No []

21. If yes, what specific programme (s) did you participate in?
22. How beneficial was this programme to you in the effective discharge of your
responsibilities? Very much [] Averagely [] Not at all []
23. How would you rate the staff development programmes put in place for the
staff in your unit or section? Excellent [] Very Good [] Good [] Poor
[] Very Poor []
24. Aside your own experience, capacity-building programmes have always had
positive impact on the performance of staff in the department. Strongly agree
[] Agree [] Disagree [] Strongly disagree [] Not Sure []

THANK YOU

APPENDIX D

QUESTIONNAIRE FOR STUDENTS

Dear Respondent

I am a doctoral student at the University of Cape Coast, who is undertaking a research project under the theme Evaluating Capacity of Geography Departments for Student Employability Skills Development of Students in three Public Universities in Ghana. This self-completion questionnaire aims to collect information on the perceptions of various groups of individuals on some selected dimensions of organisational capacity of geography departments. Your response will help this researcher make a determination as to how geography departments deploy their capacities in the employability skills training of students in Ghana. However, the information you provide is to inform capacity development initiatives and thus benefit the department.

The data collection is based on the Systems approach which tries to discover what is working, what is best, what gives life, etc. in an organisation, people or individual. The questions are based on issues that are appreciative, that are praise worthy, and that are successful practices or success stories. In other words, the research is related to positive attitude, which this researcher strongly believes leads to positive action and, subsequently to organisational change.

Participation in this research is voluntary, and you are under no obligation to participate. Your identity would be kept secret and the confidentiality of your responses guaranteed, as your name will not appear in the research report. In any sort of report that might be

published, no information will be used that would make it possible to identify you. Should you feel not to answer some questions or complete some parts of the questionnaire you can do so.

Should you feel not to answer some questions or complete some parts of the questionnaire, you can do so. I appreciate the time and effort you are offering.

If you have any question about this research, please feel free to talk to me in person or contact me on 233-244-721747 or email me at either ababs 58@yahoo.com or bethel.ababio@ucc.edu.gh

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Thank you in advance for your cooperation.

Bethel T. Ababio, Doctoral Candidate

University of Cape Coast

CONSENT DECLARATION BY PARTICIPANT

I agree to participate in this study

SECTION A: PERSONAL INFORMATION

1.	Name of Department:
	Programme Pursued:
3.	Subject Area Combination (showing major and
	minor)
4.	Class Level (Year Group)
5.	Gender: Male [] Female []

Sections B to F: Five Dimensions of Organisational Capacity

Instructions: This questionnaire survey aims to assess the organisational capacity of your academic department concerning the employability skills training of students. The items have been designed around five dimensions of organisational capacity. Kindly indicate your response to the items based on your experience and perception of the organisational capacity of your department in training students in employable skills. For sections B to F, please rate each item by ticking one of the boxes to the right of the statement that best reflects your opinion as shown by the following decision rule format.

- Strongly Agree (SA) 4: To a large extent, you do accept the
 statement as it applies to students' evaluation of employability skills
 development
- Agree (A)- 3: To some extent, you do accept the statement as it
 applies to students' evaluation of employability skills development.

- Disagree (D) 2: To some extent, you do NOT accept the statement
 as it applies to students' evaluation of employability skills
 development.
- Strongly Disagree (SD) 1: To a large extent, you do NOT accept the statement as it applies to students' evaluation of employability skills development
- Not Sure (NS) 0: You are uncertain as to whether you agree or do
 not agree with the statement

Section B: Human Resource Capacity of Department

Item No.	Intellectual Skills Indicators Preamble: The instructors in this department have been able to help develop students'	SA	A	D	SD	NS
6	Critical thinking	 	 	†		
7	Innovative	 		+	 	,
8	Analytical			 -	 	
9	Logical argument	† 	 	 		
10	Ability to put theory into practice					
11	Ability to evaluate evidence			1		
12	Ability to synthesise					
13	Ability to read varied textual materials					
14	Critical reflective thinking					
15	Creative thinking and visioning					

Item	Personal and Key Skills Indicators	SA	Α	D	SD	NS
No.	Preamble: The instructors in this department					
	have been able to help develop students'		<u> </u>			
	skills			 		
16	Ability to communicate through writing					
17	Ability to communicate through]	
	speaking/presentations					
18	Ability to work with others					
19	Ability to communicate graphically/visually					
20	Ability to use computer applications					-
21	Problem solving					
22	Ability to look for and handle data					
23	Mathematical/numeracy	L			L	

Item	Personal Attributes Indicators	SA			T _	T
No.	Preamble: The instructors in this department have)A	Α .	D	SD	NS
	been able to help develop students' skills					
24.	Ability to adapt and learn			<u> </u>		
25.	Ability to make timely decisions				 	
26.	Ability to take initiatives	<u> </u>				
27.	Ability to be responsible risk-takers					
28.	Ability to work independently with little or no			 	ļ. —.	
	supervision					
29.	Leadership and assertive			 	-	
30.	Ability to develop self-awareness			_	-	-
31.	Ability to develop self-confidence				-	

Item	Knowledge about how Employer Organisations	SA	Α	D	SD	NS
No.	work Indicators					
	Preamble: The instructors in this department have					
	been able to develop students'skills					
32.	Knowledge of the vision and mission of potential					
	employer organisations/agencies		<u> </u>			
33.	Knowledge of the structure of employer					
	organisations					
34.	Knowledge of the skills required by potential					
	employer organisations		<u> </u>			<u> </u>
35.	Ability to participant in work-based training					
	programmes or internships	ļ	<u> </u>		ļ	
36.	Ability to design project work and student					
	portfolios around work place practices	<u> </u>	ļ		↓	<u> </u>
37.	Ability to organise development/open day					
<u> </u>	activities to which potential employer					
l	organisations are invited	<u> </u>	_		+-	
38.	Ability to simulate workplace practices in the					
	classroom	<u> </u>	<u></u>	<u> </u>		

Section C: Leadership/Capacity of the Department

Item No.	Intellectual Skills Indicators Preamble: The leadership/management of this department has in various ways aided to develop/build students'skills	SA	A	D	SD	NS
39.	Critical thinking	 -	├			
40.	Innovative	 	 			
41.	Analytical	<u></u>		1		

42.	Logical argument			
43.	Ability to put theory into practice	 +		-
44.	Ability to evaluate evidence	 	+	
45.	Ability to synthesise	 +	+	
46.	Ability to read varied textual materials		+	
47.	Critical reflective thinking	 	+	-
48.	Creative thinking and visioning			-

Item No.	Personal and Key Skills Indicators Preamble: The leadership/management of this department has in various ways aided to develop/build students'skills	SA	A	D	SD	NS
49.	Ability to communicate through writing					
50.	Ability to communicate through speaking/presentations					
51.	Ability to work with others					
52.	Ability to communicate graphically/visually					
5 3 .	Ability to use computer applications					
54.	Problem solving					
55.	Ability to look for and handle data					
56.	Mathematical/numeracy					

	Personal Attributes Indicators	SA	Α	D	SD	NS
ltem	Preamble: The leadership/management of this					
	department has in various ways aided to					
No.	develop/build students'skills					ļ
57.	Ability to adapt and learn					
58.	Ability to make timely decisions					
59.	Ability to take initiatives					
60.	Ability to be responsible risk-takers					
61.	Ability to work independently with little or no		1			
	supervision					
62.	Leadership and assertive					
63.	Ability to develop self-awareness					
64.	Ability to develop self-confidence					

42.	Logical argument			 	
43.	Ability to put theory into practice			 	
44.	Ability to evaluate evidence		_	 	-
45.	Ability to synthesise			 	
46.	Ability to read varied textual materials			 	
47.	Critical reflective thinking		+-	 	_
48.	Creative thinking and visioning		+-	 	

Item No.	Personal and Key Skills Indicators Preamble: The leadership/management of this department has in various ways aided to develop/build students'skills	SA	Α	D	SD	NS
49.	Ability to communicate through writing					
50.	Ability to communicate through speaking/presentations					
51.	Ability to work with others					
52.	Ability to communicate graphically/visually					
53.	Ability to use computer applications					
54.	Problem solving					
55.	Ability to look for and handle data					
56.	Mathematical/numeracy				<u> </u>	

	Personal Attributes Indicators	SA	Α	D	SD	NS
Item	Preamble: The leadership/management of this department has in various ways aided to					
No.	develop/build students'skills					ļ
57.	Ability to adapt and learn			<u> </u>		
58.	Ability to make timely decisions					
59.	Ability to take initiatives					
60.	Ability to be responsible risk-takers					
61.	Ability to work independently with little or no supervision					
62.	Leadership and assertive			_		
63.	Ability to develop self-awareness					
64.	Ability to develop self-confidence					

Item No.	Knowledge about how Employer Organisations work Indicators Preamble: The instructors in this department have been able to develop students'skills	SA	Α	D	SD	NS
65.	Knowledge of the vision and mission of potential employer organisations/agencies					
66.	Knowledge of the structure of employer organisations		-			
67.	Knowledge of the skills required by potential employer organisations					
68.	Ability to participant in work-based training programmes or internships		_			
69.	Ability to design project work and student portfolios around work place practices	-				
70.	Ability to organise development/open day activities to which potential employer organisations are invited					
71.	Ability to simulate workplace practices in the classroom					

Section D: Intra-Organisational Collaboration

Item No.	Intellectual Skills Indicators Preamble: The various units/sections in this department have on various occasions collaborated to develop/build students'skills	SA	A	D	SD	NS
72.	Critical thinking					
73.	Innovative		<u> </u>			
74.	Analytical	<u> </u>			ļ	
75.	Logical argument	ļ	ļ			
76.	Ability to put theory into practice	ļ		<u> </u>		
77.	Ability to evaluate evidence			ļ		
78.	Ability to synthesise	ļ	ļ	<u> </u>		
79.	Ability to read varied textual materials	<u> </u>	<u> </u>		ļ	
80.	Critical reflective thinking	-	 -		ļ. <u>.</u> .	ļ
81.	Creative thinking and visioning				1	

			*	Τ_	T	100
	Personal and Key Skills Indicators	SA	Α	Ð	SD	NS
Item	Preamble: The various units/sections in				1	
No.	this department have on various occasions					
	collaborated to develop/build		<u> </u>			

	students'skills		T			
82.	Ability to communicate through writing		 -			
83.	Ability to communicate through speaking/ presentations					
84.	Ability to take initiatives					
85.	Ability to communicate graphically/visually					!
86.	Ability to use computer applications			-		
87.	Ability to develop self-awareness	<u>-</u>			- +	
88.	Ability to look for and handle data		-	 	-+	
89.	Mathematical/numeracy				-	
<u></u>			l			

	Personal Attributes Indicators	SA	Α	D	SD	NS
Item	Preamble: The various units/sections in this					
No.	department have on various occasions					
	collaborated to develop/build					
	students'skills					
90.	Ability to adapt and learn					
91.	Ability to make timely decisions					
92.	Ability to take initiatives					
93.	Ability to be responsible risk-takers					
94.	Ability to work independently with little or no					
	supervision		<u> </u>			_
95.	Leadership and assertive			<u> </u>		ļ
96.	Ability to develop self-awareness			ļ	<u> </u>	<u> </u>
97.	Ability to develop self-confidence				<u> </u>	

	Knowledge about how Employer Organisations work	SA	Α	D	SD	NS
Item	Indicators	·				
No.	Preamble: The department has been involved in				ł	
	collaborative training programmes with other					
	departments/organisations to develop/build			1		
	students'skills		<u> </u>	<u> </u>	 	
98.	Knowledge of the vision and mission of potential					
•	employer organisations/agencies	ļ_ _ _	<u> </u>	 	 	-
99.	Knowledge of the structure of employer organisations	 	 			 -
100.	Knowledge of the skills required by potential employer					
	organisations	ļ	 	 		+
101.	Ability to participant in work-based training	1				
	are grammes or internships	├		+		+
102.	Ability to design project work and student portfolios					
	around work place practices	-	-	-	-	+
103.	At little to organise development/open day activities to					
	which notential employer organisations are mytted	┼		+	+	+
104.	Ability to simulate workplace practices in the				1	
	classroom			-		

Item No.	Intellectual Skills Indicators Preamble: The programmes/curricular and other physical `resources have been used to train students'skills	SA	A	D	SD	NS
105.	Critical thinking		-	┼		
106.	Innovative	-	+	+	 	
107.	Analytical	 			├	
108.	Logical argument	<u> </u>	+	+-	 	┼
109.	Ability to put theory into practice		-	-	├	
110.	Ability to evaluate evidence		†-	1	 	+
111.	Ability to synthesise	1	+-	<u> </u>	 	
112.	Ability to read varied textual materials		 	†-		
113.	Critical reflective thinking				_	
114.	Creative thinking and visioning				1	

	Personal and Key Skills Indicators	SA	Α	D	SD	NS
Item	Preamble: The programmes/curricular and other physical resources have been used to train students'skills Ability to communicate through writing Ability to communicate through speaking presentations Ability to work with others Ability to communicate graphically/visually Ability to use computer applications					
No.	other physical resources have been used to		1	1		į
	train students'skills			<u></u>		
115.	Ability to communicate through writing			_		
116.	Ability to communicate through speaking/					
	presentations		<u> </u>	<u> </u>		
117.	Ability to work with others		<u> </u>		ļ <u></u>	<u> </u>
118.	Ability to communicate graphically/visually		ļ		ļ	ļ
119.	Ability to use computer applications		<u> </u>	<u> </u>		
120.	Problem solving			<u> </u>		
121.	Ability to look for and handle data	<u> </u>	ļ	<u> </u>		ļ
122.	Ability to efficiently use different			ŀ		
	equipment/devices	 	 -	 		
123.	Mathematical/numeracy	<u> </u>	<u> </u>	<u> </u>	<u> </u>	L

	Personal Attributes Indicators	SA	A	D	SD	NS
Item No.	Preamble: The programmes/curricular and other physical resources have been used to train students'skills					

124.	Ability to adapt and learn			
125.	Ability to make timely decisions	 		+
126.	Ability to manage conflicts			-
127.	Ability to be responsible risk-takers			
128.	Ability to work independently with little or no supervision			+
129.	Leadership and assertive			
130.	Teamwork and interpersonal		-	
131.	Personal organisation and time management			

	Knowledge/Experience with Employer	SA	Α	D	SD	NS
Item	Organisation Indicators					
No.	Preamble: The programmes/curricular and				ł	
	other physical resources have been used to					
	train students'skills					
132.	Knowledge of the vision and mission of potential					
L	employer organisations/agencies					<u> </u>
133.	Knowledge of the structure of employer					
	organisations	<u> </u>	ļ	<u> </u>		<u> </u>
134.	Knowledge of the skills required by potential			ļ		
	employer organisations		<u> </u>	<u> </u>	<u> </u>	
135.	Ability to participant in work-based training	ļ				
	programmes or internships	<u> </u>		 -	<u> </u>	
136.	Ability to design project work and student					
	portfolios around work place practices	↓ ——		 	 	
137.	Ability to organise development/open day					
	activities to which potential employer					
	organisations are invited	 		 	+	+
138.	Ability to simulate workplace practices in the					
	classroom			<u> </u>		

		CA	_	ם	SD	NS	ł
	Intellectual Skills Indicators	SA	Α	ן ט	30	'''	١
Item	Preamble: The department has been						
No.	involved in collaborative training						١
140.	programmes with other			1			١
	donartments/organisations to develop/build						
	students'skills					+	1
		1		1		1	
139.	Critical thinking						

140.	Problem solving					
141.	Analytical			+		
142.	Logical argument			-		
143.	Ability to put theory into practice			+		-
144.	Ability to evaluate evidence		-	+		
145.	Ability to synthesise			-	<u> </u>	
146.	Ability to read varied textual materials	_	_	1		
147.	Reflective thinking			1	_	
148.	Creative thinking and visioning					

	Key Skills Indicators	SA	Α	D	SD	NS
ltem	Preamble: The department has been involved					
No.	in collaborative training programmes with other					
	departments/organisations to develop/build students'skills					
149.	Ability to communicate through writing					
150.	Ability to communicate through					
	speaking/presentations					
151.	Ability to communicate through listening					
152.	Ability to communicate graphically/visually					
153.	Ability to use computer applications					
154.	Ability to learn how to learn (i.e. having the					
	disposition to learn)					
155.	Ability to understand and perform research					
156.	Mathematical/numeracy					

ſ		Personal Attributes Indicators	SA	A	D	SD	NS	
	No.	Preamble: The department has been involved in collaborative training programmes with other departments/organisations to develop/build students'skills						
	1							

157.	Ability to adapt and learn	
158.	Ability to make timely decisions	
159.	Ability to take initiatives	
160.	Ability to be responsible risk-takers	
161.	Ability to work independently with little or no supervision	
162.	Leadership and assertive	
163.	Ability to develop self-awareness	
164.	Ability to develop self-confidence	
164.	Ability to develop self-confidence	1

	Knowledge about how Employer Organisations	SA	A	D	SD	NS
Item	work Indicators					
No.	Preamble: The department has been					
	involved in collaborative training					
	programmes with other	ı			ı	
	departments/organisations to develop/build					
	students'skills					
165.	Knowledge of the vision and mission of potential					
	employer organisations/agencies			<u> </u>	L	
166.	Knowledge of the structure of employer				ļ	
	organisations	<u> </u>	 	 		<u> </u>
167.	Knowledge of the skills required by potential			1	ļ	
	employer organisations		-	↓ —	↓	 -
168.	Ability to participant in work-based training					Ì
	programmes or internships		 -		 	+-
169.	Ability to design project work and student					
	portfolios around work place practices	 	╅─	┼─	+	+
170.	Ability to organise development/open day					
	activities to which potential employer					
	organisations are invited	+	+	+-	+	
171.	Ability to simulate workplace practices in the	•				1
	classroom					

APPENDIX E

FOCUS GROUP DISCUSSION PROTOCOL FOR STUDENTS

Dear Students:

Thank you for voluntarily agreeing to participate in this interview regarding evaluation of capacity of geography departments for student employability skills development in three public universities in Ghana. Prior to this interview session, I ask that you carefully read the information listed below.

My name is Bethel Tawiah Ababio, and a doctoral student in the Institute of Development Studies, at the University of Cape Coast. As part of my doctoral studies, I am expected to complete a thesis requirement and interviewing key heads of academic departments and their faculty members is one way that I will be able to derive data for my thesis. Professor S. B. Kendie and Professor A. M. Abane, who are my principal and cosupervisors respectively, are supporting my thesis writing efforts.

By having this exploratory conversation and interview with you, I want to gain a better impression of faculty members' expert opinions on the capacity of their departments in developing the employability skills of students for the world of work. From your voluntary participation, I will be able to derive data that will elucidate if academic departments in tertiary education institutions play, or do not play any roles in Ghana's human resource development efforts, and why or how so.

Again, I sincerely thank you for your time and voluntary participation in this important interview. Your answers will certainly inform

the remainder of my thesis. Should you have any questions, please contact me directly.

With gratitude,

Bethel T. Ababio - University of Cape Coast

Cell phone: 233-244-721747; email - ababs58@yahoo.com

Breakdown of questions according to capacity dimensions

- Human resource capacity Items 1, 2, 4 to 7
- Material resource capacity Items 3 and 8
- Intra-organisational collaboration capacity Items 9 and 10
- Inter-organisational linkage capacity Item 11
- Leadership/Management capacity Items 12
- 1. In what three ways would you say the training given to students in this department is equipping them with the right employable skills?
- 2. Aside academic training, why do you think students should be trained to develop employable/soft skills?
- 3. What evidence is there in the implemented (taught) curriculum that affirms that students are being trained to acquire employable skills?
- 4. From what is currently happening in the world of work, how in your view, should students be trained to acquire employable/soft skills?
- 5. What do you think accounts for the perceived mismatch between the training of students and the practical realities in the world of work?
- 6. What two instructional practices used by instructors do you think should be discouraged, if students were to be properly trained to acquire employable skills?

- 7. What group projects or joint field study have you and your colleagues undertaken in the past year or so? How beneficial was this in helping you acquire employable skills?
- 8. Do you support the view that the quality of the teaching-learning facilities in this department predisposes students to the effective acquisition of employable skills? If Yes, how?
- 9. In what ways do the various units or categories of staff in this department collaborate to undertake joint ventures to train students in employable skills?
- 10. Do you remember any previous staff-student collaboration aimed to develop student employability skills? How was it like?
- 11. What is your view on the assertion that students tend to acquire more employable skills from extracurricular activities outside the department than from the formal training they receive at the department?
- 12. As a follow up to item 11, what two capacity building measures would you suggest, should be introduced by the management/leadership to promote employability skills development in this department?
- 13. What concluding comments would you like to make regarding your participation in this focus group discussion?

THANK YOU

APPENDIX F

GENERAL OBSERVATION GUIDE

- 1. Name of Institution or department -
- 2. Date (s) /Period of Visit –
- 3. Time of Visit -
- 4. Framework for designing Observation Schedule: Constructive Theory
- 5. Name of Observer –

S/N	Item/event/activity observed	High quality	Moderate quality	Low
	3337.732	quanty	quanty	quanty
1	Physical evidence of activities indicating intra-organisational collaborations at the time of the visit			
2	State of facilities / equipment for training students			
3	State and types of Library reading materials on employability skills			
4	Observation of artefacts, posters, bulletin board notices indicating partnership, alliances or networking with other departments			
5	State of office space and equipment for academic staff			
6	State of lecture halls/study rooms for teaching & learning			

7 Notices indicating extra- curricular activities likely to enrich employability skills of students	1
--	---

CHECKLIST FOR OBSERVING A CLASS

NOTE: The aim of this checklist is to provide factual information on activities taking place during instruction.

- 8. Instructor/Student readiness for instruction (e.g. punctuality to class)
- 9. Instructional methods used by the instructor
- 10. Level of student involvement in the instruction
- 11. Instructor's use of AV/IT during the instruction
- 12. Relationship of the instruction to real world situation

APPENDIX G

DOCUMENT CHECKLIST

PROGRAMME MAPPING OF THE PROFILE AND CURRICULA OF GEOGRAPHY DEPARTMENTS

- Profile of academic, administrative, technical and auxiliary staff, showing their academic and professional qualifications, work experience, etc.
- 2. Profile of students admitted into the department
- 3. Department brochure showing details of programmes/activities
- 4. Department strategic plan showing how its vision is being implemented
- 5. Bulletin boards showing capacity-related information
- 6. Course Outlines, Examination and Quiz papers

APPENDIX H

INTERVIEW GUIDE FOR EMPLOYERS

Dear Sir/Madam:

This study aims to evaluate the capacity of geography departments to train undergraduate students in employable skills. Please spend some time to respond to the questions in this interview guide.

- 1. Name of Business Organisation/establishment:
- 2. Position of Respondent:
- 3. What functions do geography graduates in this organisation perform?
- 4. What employable skills /qualities does this organisation/establishment look for when employing geography graduates?
- 5. Do the geography graduates working in this organisation/establishment have the requisite employable skills to perform their jobs? Yes [] No []
- 6. If No to item 5, what employable skills deficiencies have you observed in the geography graduates?
- 7. What employable skills would you recommend as relevant to the job that geography graduates do in this organisation/establishment?
- 8. Which of the skills mentioned in item 7 do you think must be added to the curricula/ programmes of geography departments?

- 9. From your interaction with geography graduates in this organisation/establishment, how adequate do you find their training in employable skills?
 - 10. What forums does your organisation engage geography departments in to express your views on the kind of employable skills needed by your organisation/establishment?
 - 11. What types of collaboration does your organisation/establishment have with geography departments?
 - 12. In what way(s) is the academic training received by the geography graduates meeting the employability skills needs of this organisation/establishment?
 - 13. What suggestions would you give to bridge the gap between the needs of your organisation/establishment and the employable skills acquired by geography graduates?

THANK YOU

APPENDIX I

INTERVIEW GUIDE FOR GRADUATE EMPLOYEES

This study aims to evaluate the capacity of geography departments to train undergraduate students in employable skills. Please do spend some time to respond to the questions in this interview guide.

- 1. Name of Organisation/establishment:
- 2. Current Position in the Organisation/establishment:
- 3. Job Title:
- 4. What are the employable skills that you need to perform your current job effectively and efficiently?
- 5. In what way(s) would you say the employable skills that you acquired from the geography department meet the skill requirements for your current job?
- 6. What would you consider as the strengths in the geography training that you had at your alma mater?
- 7. What would you consider as the weaknesses in the geography training that you had at your alma mater?
- 8. What employable skills were you asked to give account of when you were interviewed for your current job?

- 9. In what way(s) has this organisation/establishment been collaborating with your former department or any other geography department?
 - 10. From your experience as an employee in this organisation/establishment, what employable skills do you think are relevant to your work, though were not part of the suite of skills given to you during your undergraduate geography training?
 - 11. What suggestions would you give in order for the skills listed in item 10 to be embedded in the curricula/programmes of geography departments?
 - 12. What other suggestions would you like to give as a solution to bridging the gap between workplace skill requirements and the employable skills acquired by geography graduates?

APPENDIX J

INTERVIEW GUIDE FOR ACADEMIC STAFF

Dear Interviewee:

Thank you for voluntarily agreeing to participate in this interview regarding evaluation of capacity of geography departments for student employability skills development in three public universities in Ghana. Prior to this interview session, I ask that you carefully read the information listed below.

My name is Bethel Tawiah Ababio, and a doctoral student in the Institute of Development Studies, at the University of Cape Coast. As part of my doctoral studies, I am expected to complete a thesis requirement and interviewing key heads of departments and the faculty of academic departments in higher education institutions is one way that I will be able to derive data for my thesis. Professor S.B. Kendie and Professor A. M. Abane, who are my principal and co-supervisors respectively, are supporting my thesis writing efforts.

By having this exploratory conversation and interview with you, I want to gain a better impression of the faculty members' expert opinions on the *capacity of their departments in developing the employability skills of students* for the world of work. From your voluntary participation, I will be able to derive data that will elucidate if academic departments in higher education institutions play, or do not play any roles in Ghana's human resource development efforts, and why or how so.

Again, I sincerely thank you for your time and voluntary participation in this important interview. Your answers will certainly inform the remainder of my thesis.

Should you have any questions, please contact me directly. With gratitude,

Signed:

Bethel T. Ababio - University of Cape Coast

Cell phone: 233-244-721747; Email – <u>ababs58@vahoo.com</u>

Breakdown of Interview questions according to five capacity dimensions

- Human resource capacity Items 1 to 4;
- Material resource capacity Items 5 to 7; 13
- Inter-organisational linkages capacity Item 8;
- Leadership/Management capacity Items 9, 10 &14
- Intra-organisational collaboration Items 11 and 12
- What kind of employability skills do you consider very crucial to students' attainment of a B.A. / B.Sc. /B.Ed. degree? List at least three skills in a descending order of importance.
- 2. How do you ensure that students acquire the employability skills listed in item 1 above?
- 3. What evidence would you look for to be convinced that experiential or hands-on learning has taken place in the undergraduate student population?

- 4. What two instructional practices would you suggest should be discouraged, if employability skills were to be engendered in the training of undergraduate students?
- 5. What is your view on the argument that it is better for employability skills training to be embedded in undergraduate programmes instead of the skills being taught as stand-alone courses?
- 6. How are the programmes or curricula in this department addressing the employability skills requirements of the employment sector?
- 7. In what ways would you say the following facilities in this department (e.g. library, laboratories, GIS, etc.) are meeting the employability skills training needs of undergraduate students?
 - (i) Department library
 - (ii) Laboratories
 - (iii) Cartography/map room
 - (iv) GIS room
 - (v) Others (specify)
 - 8. What kind of collaborations/partnerships (national, international) does this department have with other departments or analogous establishments to promote employability skills training of students?
 - (i) National
 - (ii) International

- 9. Aside teaching, in what other way do you support the leadership/management of this department in carrying out its mandate of training students in employability skills?
- 10. What two capacity building measures would you suggest be put in place for the effective employability skills training of undergraduate students in this department?
- 11. How does the implementation of activities/programmes in this department justify the assertion that there is a shared sense of purpose and responsibility amongst all stakeholders in the department?
- 12. What are some of the roles assigned to students during Development or Open Days to show that they are being trained to acquire employability skills?
- 13. What changes (if any), would you like to see implemented in your programmes to enhance the employability skills training of undergraduate students?
- 14. What concluding comments would you like to make regarding your participation in this interview?

THANK YOU

APPENDIX K

CODES FOR PARTICIPANTS

For the qualitative data collection, the researcher collected data from six observation guides, four focus group discussions, open-ended questions administered to two heads of department, four instructors, 19 support staff, four employers and 19 geography graduate employees.

In order to make access to the six different transcripts used to display the analysed data from the field survey more transparent, the researcher adopted the following codes:

- (a) HDQT Heads of Department Open-ended Questions Transcript
- (b) ASQT Academic Staff Open-ended Questions Transcript
- (c) SSQT Support Staff Open-ended Questions Transcript
- (d) USFT Undergraduate Students' Focus Group Discussion Transcript
- (e) GGQT Geography Graduates Open-ended Questions Transcript
- (f) EGQT Employers of Geography Graduates Open-ended Questions

 Transcript
- (g) OT Observation Guide Transcript
- (h) M Male
- (i) F Female

APPENDIX L UCC ETHICAL CLEARANCE LETTER

UNIVERSITY OF CAPE COAST

INSTITUTIONAL REVIEW BOARD SECRETARIAT

TEL: 03321-33172/3 / 0207355653/ 0244207814

C/O Directorate of Research, Innovation and Consultancy

E-MAIL: irb@ucc.edu.gh OUR REF: UCC/IRB/3/111 YOUR REF:

22 TH MARCH, 2016

Mr. Bethel T. Ababio Department of Art and Social Science Education University of Cape Coast

Dear Mr. Ababio,

ETHICAL CLEARANCE -ID NO: (UCCIRB/CES/2015/02)

The University of Cape Coast Institutional Review Board (UCCIRB) has granted Provisional Approval for implementation of your research protocol titled: "Evaluating capacity of geography departments for student employability skills development in three universities in Ghana."

This approval requires that you submit periodic review of the protocol to the Board and a final full review to the UCCIRB on completion of the research, The UCCIRB may observe or cause to be observed procedures and records of the research during and after implementation.

Please note that any modification of the project must be submitted to the UCCIRB for review and approval before its implementation.

You are also required to report all serious adverse events related to this study to the UCCIRB within seven days verbally and fourteen days in writing.

Always quote the protocol identification number in all future correspondence with us in relation to this protocol

Yours faithfully.

ev (Samuel Asiedu Owusu) ADMINISTRATOR

The Chairman, UCCIRB

ADMINISTRATOR
INSTITUTIONAL REVIEW BOARD
UNIVERSITY OF CAPE COAST
Date: 7717

APPENDIX M KRECHIE AND MORGAN (1970) TABLE FOR SAMPLE SIZE DETERMINATION

TABLE FOR DETERMINING SAMPLE SIZE FROM A GIVEN POPULATION

				PATION				l .	
N*	SI	N	S	N	S			1	
10	10	100	80	_		N	S	N	S
15	14	110	_	280	162	800	260	2800	338
20	19		86	290	165	850	265	3000	341
		120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	
35	32	150	108	360	186	1100	285		354
40	36	160	113	380	191		_	5000	357
45	40	170	118	400		1200	291	6000	361
50 -	44	180			196	1300	297	70 00	364
			123	420	201	1400	302	8000	367
55	. 48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	<u> 59</u>	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	. 381
_90.	<u>73</u>	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	100000000	384

^{*} N is the population size

SOURCE: Krejcie, R. V. & Morgan, D. W. (1970). Determining sample size for research activities. Journal of Education and Psychological Measurement, 30, 607-610.

[!] S is the sample size

APPENDIX N ACTION VERBS FOR DEFINING OBJECTIVES USING BLOOM'S TAXONOMY (REVISED)

	TAXONOMY (REVISED)						
Taxonomy	Sample Verbs for Stating Specific Learning Outcomes Cite, define, identify, label, list, match, name,						
Categories							
Remember							
	recognise, reproduce, select, state, etc.						
Understand	Classify, convert, describe, distinguish between,						
	explain, extend, give examples, illustrate,						
	interpret, paraphrase, summarise, translate, etc.						
Apply	Apply, arrange, compute, construct,						
	demonstrate, discover, modify, operate, predict,						
	prepare, produce, relate, show, solve, use, etc.						
Analyse	Analyse, associate, determine, diagram,						
	differentiate, discriminate, estimate, infer, order,						
	outline, point out, separate, subdivide, etc.						
Evaluate	Appraise, assess, compare, conclude, contrast,						
	criticise, discriminate, evaluate, judge, justify,						
	support, weigh, etc.						
Create	Combine, compile, compose, construct, create,						
	design, develop, devise, formulate, integrate,						
	modify, organise, plan, propose, rearrange,						
	reorganise, revise, rewrite, tell, write, etc.						

Source: Anderson and Krathwohl (Eds.). (2001)

APPENDIX O POTENTIAL AREAS OF EMPLOYMENT FOR GEOGRAPHY

STUDENTS IN GHANA

- 1. National Population Council Headquarters, Regional and District Offices.- As population officers at the various scales
- 2. Local Government Metropolitan, Municipal and District Assemblies (e.g. planning and budget officers
- 3. Civil Service Ministries, Agencies and Departments
- 4. Security Services Army, Navy, Air Force, Immigration Authority, Fire Service, Customs & Excise Authority, Prison Service, Police Service, Bureau of National Investigation (BNI)
- 5. National Planning Development Commission
- 6. Teaching Service(*) (e.g. Secondary and Tertiary Institutions)
- 7. National Disaster Management Commission (NADMO)
- 8. Ghana Statistical Services Head Office, Regional and District Offices
- 9. Health Services
- 10. Lands Commission
- 11. Ghana Metrological Authority
- 12. Maritime Industry (E.G. Ghana Ports & Harbour Authority)
- 13. Town & Country Planning
- 14. Aviation Industry
- 15. Geological Services Department
- 16. Survey Department
- 17. Museums and Monuments Board.
- 18. Transport Industry (*) (e.g. Metro Mass Transport)
- 19. Agricultural Industry agricultural and project officers with agrobased enterprises.
- 20. Tourism Industry e.g. Tour guides
- 21. Hospitality Industry (*) restaurants, food joints, etc.
- 22. IT and Geospatial Industry (*) (e.g. remote sensing, GIS
- 23. Financial Services (*) e.g. micro finance firms, banks. Ghana Revenue Authority, etc.
- 24. Non-Governmental Organisations (NGOs)
- 25. Insurance Companies
- 26. The Media Electronic and Print
- 27. Self-Employment farming, trading, craft industry, etc.
- 28. Environmental Protection Authority (EPA)
- 29. Regional & Urban Planners
- 30. Wetlands Management Experts e.g. "Ramseyer" Sites

NB: The Sectors/organisations in bold print are those in which the

Geography graduates included in the study were working.

CANDIDATE'S VITA



Bethel T. Ababio holds a Bachelor of Arts (B. A.) Honours degree in Geography with Political Science from the University of Ghana (1986), a Master of Philosophy degree (M.Phil.) in Human Geography from the University of Oslo (1994) and a Postgraduate Diploma in Education(PGDE) from the University of Cape Coast (2001). He is currently a Senior Lecturer in Geography Education at the Department of Business & Social Sciences Education, University of Cape Coast, Ghana. He has been teaching in this University for almost16 years, having risen through the ranks as an Assistant Lecturer to his current position. He is a member of the Ghana Geographical Association (GGA), and the Ghana Geography Teachers' Association (GGTA), having served as a resource person on four different occasions at their Annual General Conference in Ghana. He has about 20 publications to his credit.

The candidate's address is:

Bethel T. Ababio

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ABSTRACTS OF PUBLICATIONS FROM THE THESIS

(1) Actions to Improve Current State of Student Employability Skills' Development in Ghana's Public Universities: A Case Study of Geography Departments

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Abstract

The paper explored perspectives of stakeholders in geography education on measures geography departments should take to equip students with employable skills. The study was conducted against the backdrop of a common perception that in Ghana, there appears to be a disparity between what the world of work expects from university graduates and what universities produce. This perceived gap was the thrust of this study. Constructivist Theory, which in the 20th Century was popularised by Jean Piaget and John Dewey formed the theoretical framework for the study. Three objectives were used to guide the study. The case study research design was adopted for this study. Purposive sampling was used to select 36 undergraduate students and 19 support staff. Census sampling was used to select two heads of department; convenience sampling was used to select four instructors who were willing to participate in the study. Snowball sampling was also used to select four employers and 19 graduate employees. Thematic analysis was used in analysing the data. One of the findings was the suggestion by the stakeholders that the geography departments should adopt a more innovative approach to the training of students. Another finding was the need for the geography departments to periodically review their curricula. A major recommendation was that the geography departments should occasionally organise seminars and workshops on innovative instructional practices and social networking among staff and students.

Key words: Ghana, geography departments, employability skills, innovative training, curriculum review, and undergraduate students.

(2) Assessing Impact of Resource Capacity of Geography Departments on Student Employability Skills' Development in Public Universities in Ghana

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ABSTRACT

Educators assume that training institutions that are under-resourced are not likely to attain their goal of equipping their graduates with the requisite skills for the world of work. They further assume that resource capacities exist in the human, physical and other resources of academic departments. In order for geography departments to make judicious use of their resource capacities, this study explored and described the types of resource capacities that geography departments possess to train students in employable skills. The study in the main, adopted a qualitative research design, using focus group discussions and open-ended interview schedules for data collection. Different categories of respondents were included in the study:36 students, 4 instructors, 4 employers, 19 support staff and 19 geography employees. The study institutions were the geography departments at the University of Ghana, University of Cape Coast, and Kwame Nkrumah University of Science and Technology, all in Ghana. Results of the study showed that the geography departments deployed their resources to varying degrees to train students to acquire employable skills. Most of the employable skills that students acquired were developed to a moderate level. Based on the findings of the study, the study recommended that the geography departments formulate policies to improve the quality of all five capacity resources in the geography departments.

Keywords: Ghana, Capacity resources, geography departments, employability skills, human resource, physical resource, leadership resource, and intra- and inter- organisational resources.

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