

**KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY,
KUMASI**

**PROSPECTS AND CHALLENGES OF INTERDEPARTMENTAL
COLLABORATIONS IN RUNNING PROFESSIONAL DEVELOPMENT
PROGRAMMES IN KNUST**

BY

EVA PUORIDEME (BA FRENCH)

**A Thesis Submitted to The Department of Construction Technology and
Management, of The Kwame Nkrumah University of Science and
Technology, In Partial Fulfilment of the Award of the Degree of
MASTER OF SCIENCE**

NOVEMBER, 2018

DECLARATION

I hereby declare that, this thesis submission is my own work towards the **MSc Project Management** and that to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the University except where due acknowledgement has been made in the text.

EVA PUORIDEME

Signature

Date

Students Name

Certified by:

DR. EMMANUEL ADINYIRA

Signature

Date

Supervisor's name

Certified by:

PROF. BERNARD KOFI BAIDEN

Signature

Date

Head of Department's name

ABSTRACT

The collaboration existing within the various departments in the University (KNUST) in the development of Professional development programmes is unsubstantial. The aim of this research is to examine the prospects and challenges of interdepartmental collaboration in running Professional Development Programmes (PDPs) in KNUST. The study reviewed pertinent literature and adopted a descriptive case study design. Purposive sampling was used to select four units namely Bureau of Integrated Rural Development, Department of Food Science, National Institute of Mathematical Sciences, and The Short Courses/Programmes Unit for the study. The data for the study was obtained from heads of the units using interviews. The study examined respondents' characteristics, challenges of interdepartmental collaboration, benefits derived from interdepartmental collaboration in Professional Development Programmes and explored the factors that can influence a successful interdepartmental collaboration in professional development programmes in KNUST. The study found among other things that interdepartmental collaboration in the running of PDPs in KNUST is fraught with challenges such as lack of institutional support, lack of teamwork, ineffective collaborative efforts from other departments, selfishness of some departments and lack of understanding within departments in the University. It was found that the programmes come with benefits to the individuals involved in the facilitation of it, the departments that are engaged in it and the university at large. It was therefore strongly recommended that the university makes it a matter of policy for all departments to engage in the running of PDPs.

TABLE OF CONTENTS

DECLARATION	ii
ABSTRACT	iii
TABLE OF CONTENTS	iv
LIST OF TABLES.....	vii
DEDICATION.....	viii
ACKNOWLEDGEMENT	ix
CHAPTER ONE	1
INTRODUCTION	1
1.1 Background.....	1
1.2 Problem Statement	3
1.3 Research Questions	3
1.4 Aim and Objectives.....	4
1.4.1 Aim	4
1.4.2 Objectives	4
1.5 Scope of Study	5
1.6 Methodology	5
1.7 Significance of Study.....	6
1.8 Structure of Study	6
CHAPTER TWO	8
LITERATURE REVIEW	8
2.1 Introduction.....	8
2.2 Professional Development Programmes	8
2.3 Foundation in The Areas of Defining Collaboration	10

2.4 Collaborative Decision Making and Organisational Factors Necessary for Collaboration.....	12
2.5 Developing Interdepartmental Collaborations	18
2.6 Challenges of Interdepartmental Collaboration	18
2.7 Benefits to Be Derived from Interdepartmental Collaboration.....	20
2.8 Factors That Can Influence Successful Interdepartmental Collaboration	21
2.9 Chapter Summary	26
CHAPTER THREE	28
RESEARCH METHODOLOGY	28
3.1 Introduction.....	28
3.2 Research Design and Approach	28
3.3 Study Location	29
3.4 Study population	30
3.5 Sampling Technique and Sample size	30
3.6 Data sources and collection method	31
3.7 Ethical Considerations	32
3.8 Analysis of Data.....	32
CHAPTER FOUR.....	33
DATA PRESENTATON, ANALYSIS AND DISCUSSION.....	33
4.1 Introduction.....	33
4.2 Demographic Information.....	33
4.4 Nature of departmental collaborations.....	36
4.5 Challenges of Interdepartmental Collaboration	39
4.6 Benefits That Will Be Derived from Interdepartmental Collaboration on Professional Development Programmes	40
4.6.1 Visibility of the Department	41

4.6.2 Knowledge Sharing with Other Departments and Strategic Alliance	43
4.6.3 Avenue for Interdepartmental Partnerships Beyond the collaborative Running of PDPs.....	47
4.6.4 Removal of Unhealthy Competitions and Uniting to Achieve Broader Goals for the Development of the University at Large.	49
4.7 Factors That Can Influence a Successful Interdepartmental Collaboration on Professional Development Programmes.	50
CHAPTER FIVE	54
SUMMARY OF KEY FINDINGS, CONCLUSION AND RECOMMENDATIONS OF THE STUDY	54
5.1 Introduction.....	54
5.2 Summary of Major Findings of the Study	54
5.2.1 Nature of Departmental Collaborations	54
5.2.2 Challenges of Interdepartmental Collaboration	56
5.2.3 Benefits That Will Be Derived from Interdepartmental Collaboration on Professional Development Programmes	56
5.2.4 Factors That Can Influence a Successful Interdepartmental Collaboration on Professional Development Programmes	58
5.3 Conclusion of the Study.....	58
5.4 Recommendations of the Study	59
5.5 Recommendations for future studies	60
REFERENCES.....	61
APPENDIX I: INTERVIEW GUIDE	74

LIST OF TABLES

Table 4.1 Summarised Responses of the Field Data Collected	34
--	----

DEDICATION

I first of all dedicate this piece of work to Almighty God for his love, protection and faithfulness. Secondly, I also dedicate this work to my Parents and Siblings for their immense support and encouragement.

ACKNOWLEDGEMENT

To God be the Glory for the strength and knowledge to undertake this project. I am indebted to my project supervisor Dr. Emmanuel Adinyira who made time for me despite his busy schedule. I also thank all the lecturers in my Department.

Finally, I thank my family and also Mr. Yaw Amo Sarpong for their support and advice.

CHAPTER ONE

INTRODUCTION

1.1 Background

Demand for tertiary education, nationally and worldwide, in the last few decades has outstretched the limited resources of educational institutions. Access to tertiary education and training has, therefore, become sought after and available to a few. The solution had been to utilize innovative approaches including Professional Development Programmes in the form of Short Courses, Summer School Programmes, Trans-disciplinary Student Platforms, International Student Exchange Programmes, and Open Distance and e-Learning (ODeL).

The Ghana Government policy on Tertiary Education provides the policy framework for Ghanaian Universities to increase access to tertiary education and capacity building programmes even for the informal sector. In response to this, the Kwame Nkrumah University of Science and Technology (KNUST), Kumasi, took up the challenge of strategically increasing access to quality higher education and capacity building training programmes through the establishment of a new unit, KNUST Short Courses and Programmes Unit.

The KNUST adopted Short Courses and Programmes to serve as a viable complement to the conventional academic courses and face-to-face regular education. The Short Courses and Programmes Unit planned offering demand-driven tailor-made short courses for all manner of persons.

KNUST is committed to enhancing its image and competitiveness to become a centre of excellence in the development and delivery of innovative and contemporary industry-related proficiency courses, technical and entrepreneurial skills training programmes for manpower development at all levels. To achieve this, the University set up the Short Course and Programmes Unit to fashion out demand-driven short courses and programmes that are industry specific aimed at enhancing professional capabilities of organizations.

Collaborations between different departments within a University enhances service innovation which in turn positively influences part of the performance of the University. However, various Departments within Universities do not collaborate effectively with each other in developing and organising Professional Development Programmes. There has been theoretical development over recent years researching interdepartmental collaborations by some few authors (Kezar & Lester, 2009; DuCroix, 2015).

Kezar & Lester (2009) addressed how Colleges and Universities can reorganise to foster more collaborative work. Furthermore, DuCroix (2015) in her research addressed ways of improving interdepartmental collaboration by discovering the methods to increase collaboration that could support organisational values and strategic goals.

However, some gaps do exist in their literature since there is a dearth and scarcity of literature in these areas especially developing interdepartmental collaboration on Professional Development Programmes in the form of Short Courses.

1.2 Problem Statement

The collaboration existing within the various departments in the University (KNUST) in the development of Professional development programmes is unsubstantial. In as much the Short Courses and Programmes Unit of KNUST has been established under the Office of the Vice Chancellor of the University, the various departments have not been able to realise the existence of the Unit in collaborating and developing Professional Development Programmes.

This study is aimed at addressing this gap by exploring the prospects and challenges of interdepartmental collaboration between different departments within a university as well as gain insights on the processes involved in developing professional development programmes between departments in a University. With this gap, the focus of this study seeks to determine the barriers that are/were present in current or previous interdepartmental collaborations as well focus on how these lessons learned can be of value at developing interdepartmental collaborations on Professional Development Programmes in the Kwame University of Science and Technology.

1.3 Research Questions

To achieve the objectives of the study, the following research questions were set to guide the inquiry of the study.

- What is the nature of interdepartmental collaboration among departments running Professional Development Programmes within KNUST?

- What are the Challenges of interdepartmental collaborations on Professional Development Programmes?
- What are the benefits that will be derived from interdepartmental Collaboration on Professional Development Programmes?
- What are the factors that can influence a successful interdepartmental collaboration on Professional Development Programmes?

1.4 Aim and Objectives

1.4.1 Aim

The aim of this research is to examine the prospects and challenges of interdepartmental collaboration in running Professional Development Programmes (PDPs) in KNUST.

1.4.2 Objectives

In a bid to achieve the above stated aim, the following objectives were set,

- To describe the nature of Interdepartmental collaboration in running Professional Development Programmes within KNUST.
- To investigate the challenges of Interdepartmental collaboration on Professional Development Programmes within KNUST.
- To assess the benefits that will be derived from interdepartmental collaboration on Professional Development Programmes.
- To determine the factors that can influence a successful interdepartmental Collaboration on Professional Development Programmes.

1.5 Scope of Study

Geographically, the scope of this study is restricted to the Kwame Nkrumah University of Science and Technology, Kumasi. The University is the second largest university in Ghana and it is also one of the public universities in Kumasi. The study is restricted to KNUST because it is one of the universities facing challenges with interdepartmental collaboration on Professional Development Programmes.

Contextually, the scope of this study was limited to the Short Courses and Programmes Unit and focused on departmental collaborations on professional development programmes.

1.6 Methodology

A case study design was adopted. Case studies are often done in the subject's real-world context, which gives researchers a good view of what they are really like (Boyd, 2018). The approach for the research was a qualitative case study approach. In line with the study's objective, this approach provided the tools for studying the issues surrounding the Professional Development Programmes (PDPs) run by some departments in KNUST.

The population for this research comprise of all departments, research units and institutes of KNUST. The KNUST 2018 recorder indicates that there are 105 departments, research units and institutes in the university. The sampling frame comprises the department, research units and institutes where PDPs are run.

A sample size of four (4) departments namely Bureau of Integrated Rural Development, Department of Food Science, National Institute of Mathematical Sciences, and The Short Courses/Programmes Unit were purposively selected purposively for the study. Data were collected using interviews, and then analysed using content analysis.

1.7 Significance of Study

This research will be of much significance to the Kwame Nkrumah University of Science and Technology since interdepartmental collaborations is one of the major challenges faced in this University. This study will bring to the fore the benefits of interdepartmental collaborations. Furthermore, the strategies to develop interdepartmental collaborations will be identified. The findings will also serve as an opportunity to stakeholders including future participants of the Professional Development Programmes. This study will ultimately benefit academia as it will serve as a major and critical contribution to knowledge. It will bridge the knowledge gap and stimulate others to engage in more research on interdepartmental collaborations in Universities.

1.8 Structure of Study

This study will be organised in five chapters. Chapter one consists of the introduction, and includes the background to the study, problem statement, aim and objectives, hypothesis, scope, methodology, significance, limitations and the structure of the study. Chapter two is the literature review of the study. Chapter three examines the details of the research methodology. Chapter four is the analysis

and discussion of the data collected for the study. Chapter five is the summary, conclusion and recommendations for the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of the debates and discourses, both conceptual and theoretical, relating to interdepartmental collaborations and professional development programmes. Whereas much has been written on interdepartmental collaborations and equally a lot on professional development programmes, especially in the fields of education and teacher development, no study has so far been found that puts professional development programmes as the focus of interdepartmental collaborations. Owing to this literature and conceptual gap, this review is thus limited in the relationship between interdepartmental collaborations and professional development programmes. The study itself shall bring to light that connection. The focus of the review shall thus be to critically examine the scholarly works and researches that tackled professional development programmes and interdepartmental collaborations. To this end, the concept of professional development, collaboration and collaborative decision making shall be exhaustively reviewed as well as other very important themes pertaining to professional development and interdepartmental collaborations.

2.2 Professional Development Programmes

Professional development as defined by Hassel (1999) is the procedure employed to enhance the existing skills and aptitudes of an organisation's staff in order to achieve impressive results for the organization. Stellar professional development

techniques are strategies are key to organizational success in the globalised world of the 21st century (Guskey, 2000). Studies show that serious attention to professional development strategies go a long way to deepen the knowledge of staff, provide outlets for practice, research, and reflection; and includes efforts that are job embedded, sustainable, and collaborative and with the potential to help the organization stay up-to-date (Sparks, 2002).

Professional development programs are thus avenues created to improve professional skills and enhance the career paths of both employees and employers (Ariza, 2010). There also exist professional development programs designed to equip staff with compulsory or state-required competencies. For instance, journalists who are required to uphold particular ethics and credentials, or workers in technical professions may have to stay abreast of the latest developments in industry especially as regards technological advancements (Easton, 2004).

Sierra (2007) observed that, regardless the premise, the ultimate aim of any professional development programme is to develop the know-how or insight of a staff of an organization such that he is able to better understand a particular job area and thus become more productive at work. They usually take place on the job and so the focus is on improving the edge in a certain aspect of the present profession. It may be a requirement for promotion within the organisation (Guskey 2000). According to Wilde (2010), there are many ways of conducting Professional Development Programmes. Some firms organize their own employee development activities and could have workers who specialise in employee development

schemes. Others hire the services of external specialists in order to develop their Employees.

2.3 Foundation in The Areas of Defining Collaboration

It is very important to define collaboration because it will enable any observer to better understand the inner workings within organisations as well as the external forces. Defining collaboration will also give emphasis to its overarching necessity in interdepartmental relations. Collaboration has been variously defined in the literature, yet, it is still unclear what terms best define collaboration (Patel et al. 2012). They further argued that the term is often defined in a manner that is congruent with the particular environmental and contextual scope. They however itemized some general underlying themes, collaboration involves an interaction between two or more people in an organization, exerting efforts in concert to, to satisfy a collective vision. Because collaboration has not been clearly defined, it is often relegated to the background as a kind of nebulous term (Wildman et al., 2012). These authors see it as a process, not an outcome, and a concerted action to achieve a common goal.

Adding to the inconsistency in defining collaboration is their distinctions as regards verbosity. Collaboration is a complicated phenomenon which deals with the transfer of knowledge as well as the creation of it (Diamond & Rush, 2012). In other circles, the term extends to capture purpose as well as process requirements. Reviewing the works of Mankin et al., 2004; O'Leary & Vij, 2005; Sandow & Allen, 2005; Thomson & Perry (2008), a lot of general themes have emerged in the present attempt to review several definitions of collaboration. Outstanding among

the themes is a group of people contributing to meet a common aim and significantly focusing on proposing solutions to challenges requiring the action of many people (Getha-Taylor, 2008; O'Leary & Vij, 2005). Reciprocal arrangements as well as mutually beneficial agreements featured prominently as themes arising out of the review of the definitions (O'Leary & Vij, 2005; Thomson & Perry, 2006).

Some scholars defined collaboration focusing on the factors of process and outcomes. Others were more inclined to relational features. Many definitions focused on the process and outcomes, while some included relational elements. A case is the definition by Sandow and Allen (2005) collaboration is the social coordination of action and occurs in a social system of relations where social actors accept the state and responsibility of one another as contributing to satisfy a common need. Thomson and Perry (2006) also highlighted the relational elements in their definition; The relational components of collaboration were also added to the explanation given by who described an understanding of shared power arrangements which encompassed respect for others' opinions, agreement on how decisions are made, open platform for sharing information, and the acceptance of lengthy negotiations with the understanding that goals are shared and everyone is equally committed. They also counted trust as one of the five dimensions of collaborative public management. One definition has a particular reference to local government, by emphasising work that transcends organizational borders to involve external persons and units in a highly linked manner which significantly remoulds the procedures of making decisions or delivering services (Warm, 2011). He also distinguished collaboration from networking, coordinating and cooperating, on the

grounds, apart from emphasizing concerted efforts and shared risks and rewards towards achieving a common goal.

In the end, be the focus process or relations, the key elements are a group of people engaged in a partnership to achieve a common aim. A review of the literature significantly revealed that an understanding of the definition of collaboration will bring endless advantages in actually practicing it as it is.

2.4 Collaborative Decision Making and Organisational Factors Necessary for Collaboration

Collaborative decision-making (CDM) is a phenomenon with its focus centred on how decisions can be made on a course of action proposed and intended by members of an organization (ICAO DOC, 9971). If successfully implemented, it will give a platform for information sharing relating to proposed course of action and enable members to use the relevant procedures to yield desired results. The main purpose is to enhance organizational effectiveness in general and also maintain balance at the level of the constituent departments.

i. Communication

Collaboration cannot occur in a vacuum and so, communication is of prime essence in that regard (Sclater et al., 2001). So communication is the transmission and reception of information relating to a process, concepts and ideas as well as the comprehension of these by the receiving end, usually, people of the same or other departments. Studies show that the open and frequent communication is one factor that has been identified to be the most useful ingredient to collaboration in any

organisation (Haire & Dodson-Pennington, 2002; Chisholm, 1996; Gulati, 1998; Mattessich & Monsey, 1992; Child & Faulkner, 1998; Davenport, Grimes, & Davies, 1999). The advent of an appropriate communication mechanism will give enablement to frequent information sharing within an organisation which is key to ensuring collaboration (Davenport et al., 1999; Child & Faulkner, 1998; Gulati, 1998). Good communication ensures that departments perform because of the existing structures and channels inspiring members to action and fuels their active involvement (Haire & Dodson-Pennington, 2002; Sink & Jackson, 2002; Mattessich & Monsey, 1992). Such a platform for free flow of communication is useful in identifying who has the responsibility to communicate with whom and will all the more contribute to active involvement (Mattessich & Monsey, 1992). Efficient organisations value information relating to their vision and mission as well as the statistical targets. This cannot be possible without collaboration, which is also impossible without good communication. This can contribute to conflict resolution and also make it possible negotiate revolving trends. Such communication fosters mutual trust between various departments within an organization and makes it more easy for them to collaborate in common causes (Kanter, 2000).

It is thus clear that communication which happens to be the fundamental prerequisite of collaboration cannot by any means be downplayed. If a university can be successful in terms of interdepartmental collaboration in any case, the process must be heavily pushed by good communication which is generally held to be a very important element in that regard. It is also equally significant when it

comes to creating informal networks and information channels (Mattessich et al., 2001).

ii. Commitment

Yet another factor of collaboration within any organization is the commitment of the component units (Santoro & Gopalakrishnan, 2000; Plewa & Quester, 2006). Moorman et al., (1992) gave an apt definition of commitment as an endless quest to sustain a relationship. Dowling et al. (2004), in attempting to conceptualize an effective collaborative model, they posit that, such a model cannot be successfully implemented without a high quality commitment of the parties involved. This extends to the yearning on the part of the constituent units to contribute to the targeted success. Mohr and Spekman (1994) argue that, one very essential feature of successful collaboration is the passionate desire by the partners to take up responsibility because of the value they place on the relationship. Quality commitment creates a platform upon which component units of an organisation are able to achieve both departmental and collective goals. They further argue that increased commitment contributes to an increased understanding of the strategic choices the organization is confronted with and most appropriate decisions to take in such circumstances. Mattessich and Monsey (1992), are of the view that good commitment starts with allocating enough resources like money, staff, materials, and time. There are other researchers who agree that the shortage of such funding and resources will impede any effective intra-organisational networks (Coburn, 1998; Crosswaite & Curtice 1994; Davis & Howden-Chapman, 1996; Huberman, 1983; Johnson, 1980). Several other researches confirm that the level of

commitment of the partners (Gray, 1985; Gee, 1993; Burnham, 1997) and of the high ranking executive members (Geisler et al, 1991; Bonaccorsi & Piccaluga, 1994; Ghoshal et al., 1992; Davenport et al., 1999; Gee, 1993; Mora-Valentin et al., 2004) pose cardinal consequences for effective collaboration within any organization.

iii. Trust

Trust is also another very important factor for collaboration within an organization (Cullen et al., 2000; Hosmer, 1995). Trust is the confidence that a party to a relationship will live up to the agreed upon terms of that relationship in a spirit of responsibility and fairness (Zaheer et al., 1998). Tertiary educational institutions are esteemed to be producers of knowledge and are reputed to be worthy of trust and dependable from all points of view (Mohnen & Hoareau, 2003).

As important as it is for the successful collaboration in the present time, trust is considered to be of greater importance to a successful collaboration in the future. As a matter of fact, the relationship between various departments in the university is uniquely dependent on trust; a critical aspect of successful collaboration which equally gives energy to the advancement of collaboration (Klofsten & Jones-Evans, 1996; Davenport et al., 1999). From the foregoing therefore, trust transcends behavioural to being essential providers of psychological comfort to all sides in an engagement (Plewa & Quester, 2007). The conditions for trust as has been eloquently postulated by Lewis (1999) are: safeguards, mutual need, relationships, organization, joint leaders, continuity, and objectives. These are aspects of social

relationships that result in trust. The contention by Lewis is that when parties to a collaboration abide by the above conditions, it is likely to enhance collaboration.

When there is trust, participants of a partnership are confident that the terms of engagement will be fair, just and reliable. In such collaborations therefore, it is usually easy to resolve any troubles with the tendency to confound the partnership. It can therefore be stated that trust can lessen any seeming blockades to collaboration. When there is a low level of trust in any collaboration, parties would not engage in conjecture regarding what actions need to be taken to ensure successful collaboration (Inkpen & Tsang, 2005).

iv. Level of Conflict

Alter (1990) defines intra-organizational conflict as “the absence of harmony and agreement within an organization”. It is one inescapable aspect of relationships in organizational arrangements, yet, it is possible to have very collaborations which are confronted with conflicts at the same time. Hence, though conflict can never be done away with, efforts ought to be made to regulate it (Van De Ven & Walker, 1984). Conflict resolution efforts can leave either positive or negative results behind (Deutsch, 1969; Assael, 1969). Nevertheless, if conflict is not properly regulated, the contrast of views may foment unease in relationships within an organization and thus obstruct any efforts at ensuring collaboration. It is for this reason that organisations need to make efforts to regulate conflict very well, in spite of the fact that the modalities for resolving the conflict may change in the course of the collaborative relationship (Artz & Brush, 2000). The orientations of conflict resolution have been sorted as accommodating, avoiding, compromising,

competing or collaborating (Hergert & Morris, 1988). There are three very typical sources of conflict, which are: vague roles and expectations, power imbalance, and when there is no progress made (Parkinson, 2006).

The literature abounds that negatively correlates collaborative engagements with conflict. Therefore, if conflict is high in any organization, it would be unfavourable to success in interdepartmental arrangements (Alter, 1990; Merrill-Sands & Sheridan, 1996; Child & Faulkner, 1998; Gulati, 1998; Sanginga, 2006) relationships (Bonaccorsi & Piccaluga, 1994).

v. *Leadership*

From a review of the literature, one common factor for collaboration is leadership (Gomes et al., 2005). Good collaboration is heavily dependent on good leadership. Good leaders are those who have the skill to manage and conduct collaborative networks. Mattessich et al. (2001) describes a good leader as one who influences the collaborative process, is a skilful organizer and executes his duties fairly. Parties in collaboration thus accord such a leader so much respect and naturally confer legitimacy upon the him. Administrators as well as all others in top leadership ought to take keen interest in collaborative initiatives and see to it that they are successful (Essex, 2001). This explains why Provan & Sebastian (1998) contend that a good leader in collaboration with others fosters cohesive networks, motivates the groups, makes the team very effective and ensures free flow of information in the team.

In effect, this style of leadership inspires a culture of cooperation (Cooper, 2003).

In collaborative relationships, leaders likely to succeed are those that are able to

effectively balance power, process and the formal structures within which they act (Alexander et al., 2001).

2.5 Developing Interdepartmental Collaborations

A lot has been written on interorganisational collaboration (Baker, 2003; Beyerlein et al., 2003). This notwithstanding, there is not much scholarship on interdepartmental collaboration within the same organisation as has been observed by Diamond and Rush (2012).

To facilitate the development of interdepartmental collaboration, institutions can adopt particular, varied methods. Ready (2004) suggested some of these measures that could be instrumental to the formation of a system of cross-departmental collaboration. They are: (1) encourage departmental staff

to enhance their skills and vision outside of their departments; though this may be a little discomfiting to them, it will no doubt add immeasurably to their appreciation of different departments' contributions and perspectives (2) fill departmental openings with staff from other departments and give reward to departmental heads who do so; (3) create platforms that bring together high-potential leaders from across the organization; (4) refusing to promote leaders whose prime focus rests solely on the success of their departments rather than the whole.

2.6 Challenges of Interdepartmental Collaboration

One great challenge that is likely to stifle any efforts at interdepartmental collaboration on professional development programmes is individualism. Our idea

of leadership has been linked inextricably with the myth of the triumphant individual. We laud the rugged individualist, the self-reliant hero and the lone ranger (Bennis, 2003). Nonetheless, our organizational frameworks and culture ought to provide the needed support systems, otherwise collaboration will not come naturally.

The second major blockade likely to obstruct collaboration is modern management practice: the tendency to decentralize business units, provide clear lines of responsibility, great autonomy, and rewards to those leaders who deliver on the numbers (Hansen, 2009). The practice makes leaders tend to maximize their own performance units without regard to the success of the whole enterprise (Ready, 2004).

The rarity of leaders with a true collaborative style is thus not surprising. Out of 162 top performing managers who participated in a benchmark study, only 16 percent scored high on

three critical collaborative behaviours: (1) redefining success from a narrow, self-interested agenda to a larger goal and getting others to transcend their own narrow agendas, (2) getting others actively involved, openness to alternative plans and dissenting opinions (3) accountability and responsibility as opposed to blame fixing (Hansen, 2009).

Hansen (2009) further itemized five personal barriers that obstruct collaboration: power hunger, arrogance, defensiveness, fear, and ego. Three of these, he regards as the greatest threats to collaboration. Power hunger confines the definition of

success only to individual terms. Besides, it gives room for hoarding information since special knowledge can augment one's power. Arrogance is against inclusivity just as defensiveness counters accountability. Hansen is of the view that some or many of these characteristics may be inseparably

embedded in the personality of some leaders that it may be quite difficult to change. He however admits that some leaders can limit these personal barriers in order to support an atmosphere of collaboration.

2.7 Benefits to Be Derived from Interdepartmental Collaboration

Researchers have given a great deal of attention to the benefits of interdepartmental collaboration. According to Weiss & Hughes (2005), interdepartmental collaboration allows an organization to leverage employees' talents, to coordinate knowledge, and to respond more quickly to global opportunities. Because customers increasingly demand more integrated and global solutions, organizations that synchronize the activities and goals of constituent departments can go far in the marketplace (Ready, 2004). Given that corporate competitiveness depends on expertise often distributed across divisions, interdepartmental collaboration thus becomes a very critical source of competitive advantage (Adler, 2001).

Studies show that interdepartmental collaboration can greatly benefit companies in measurable extents. Tsai and Ghoshal (1998) found that social capital facilitated product innovation. Along similar lines, Khoja (2009) observed that strong interdepartmental networks were useful in getting business units to gain and profit from intellectual capital. Interdepartmental collaborative practices allow complex,

global cross-functional teams to share knowledge and workloads and succeed in their collective goal (Gratton & Erickson, 2007).

As competitive pressures have forced firms to do more with less, organisations that foster a collaborative spirit have their employees sharing resources and getting work done in conjunction with others over whom they have no direct authority (Weiss & Hughes, 2005).

From a research assessing 40 networks in 23 organizations, Cross et al. (2002) reached the conclusion that interdepartmental networks provided strategic and operational benefits by enabling members to collaborate effectively while Nelson (1989) further states that such an arrangement reduces organizational conflicts. Because interdepartmental networks promote knowledge and perspective sharing, Mohrman et al., (2003) argue that, they contribute greatly to organizational change. In the nutshell, the literature uniformly agrees that organizational capabilities accruing from interdepartmental collaboration augment a firm's value and competitive advantage (Jones & George, 1998).

2.8 Factors That Can Influence Successful Interdepartmental Collaboration

Much attention has been given in the literature to the role of organizational culture as a factor influencing the success of interdepartmental collaboration. Culture is the sum total of the beliefs, values, and assumptions of an organization which serves as a guide to workplace behaviour (Rosenberg & Trevino, 2003). Hence, if collaboration must survive in an organization, then the culture of the organization must be conducive to that effect. Forms of collaboration could be snuffed out like

an immune system attacking a foreign body if the predominant culture in an organization is characterized by excessive bureaucracy and authoritarianism. A culture that is supportive of collaboration has the following features: (1) open as against closed leadership processes like free information flows versus closed-door decision making; (2) reward workers who think differently versus silence them; (3) flexible systems versus rigid hierarchical structures; (4) clear core values versus expedient ones; (5) rewards for collaboration versus strictly individualism (6) accountability; (7) low level decision making versus up the chain of command (Allen et al., 1999).

Seven aspects of organizational culture shall here be reviewed as critical factors influencing collaboration within an organization. These are: shared goals, shared identities, accountability, promotion and hiring.

Shared goals: By shared goals, it means that all workers have an appreciable understanding of them and are willing to align themselves with them (Detert et al., (2000). Several studies have examined the potential of shared organizational goals in facilitating collaboration. Pinto et al., (1993) researched the positive effects of superordinate goals on cross-functional collaboration. According to them, there is a positive correlation between superordinate goals and cross-functional collaboration and project task outcomes. Pinto et al. (1993) arrived at the conclusion that leaders who want to increase collaboration among interdepartmental units should define and follow an all-embracing organizational goal.

Tyosvold and Poon (1998) are also of the view that cooperative goals (goals shared by managers) encourage greater open-mindedness in spite of the pressure of resource constraints and budgetary challenges leaders may be dealing with. Buttressing this is the argument of Rosenberg and Trevino (2003) that superordinate goals can reduce bias and encourage collaboration within institutions, almost the same way as incongruent departmental goals can increase bias and competition. Thompson (2007) agrees that institutions that place premium on superordinate goals stand a higher chance of effective collaboration than those that focus solely on departmental goals.

Finally, Lencioni (2006) makes the point that, institutional leadership ought to formulate a sort of a thematic goal he calls the ‘rallying cry’ that gives an inexcusable cause to collaborate across departments. The goal, Lencioni says, must have a common fate where all departments buy into the necessity of contributing towards the realization of the goal. The goal must be concrete, simple, clearly understood and measurable. It must stir up the passion of employees put the competition on the *outside* (Hansen, 2009).

Goals should not only be driving forces for collaboration, but equally importantly, collaboration has to be driven by the goals of the organization. Both Hansen (2009) and Beyerlein et al. (2003) agree that collaboration is not an end in itself but ought to be ultimately targeted at the achievement of business success.

Shared identity: Closely following the idea of shared goals is the factor of shared identity, which also helps to foster interdepartmental collaboration.

Deriving from the social identity theory, this factor inclines employees to relate more closely with group characteristics and take on group norms as guidelines for workplace behaviour. Ellemers et al., (2004) studied the implications of social identity theory on organizational behaviour. They posit that identification in collective terms helps to orient employee behaviours toward the goals of the collective. Institutional heads thus have the task to foster a high sense of shared identity among constituent departments and their employees.

However, if departmental goals are not aligned with the broader institutional goals, workers may identify only with their departments and be less willing to network with other group, regardless whether doing so would be to the benefit of the institution as a whole (Ellemers et al., 2004). Houston, Walker et al., (2001) in their research into business units made interesting discoveries that perfectly corroborate the findings of the scholars discussed afore. They realized that very strong social ties and social identification within business units hampered collaboration with other business units because those units did not identify with the organization. As a matter of fact, the units had developed a rather serious competitive culture against each other, and this was a great inhibition to inter-unit collaboration and information flow.

Accountability: Yet another important factor for successful collaboration is accountability. Members of an organization owe a responsibility to be accountable for their own commitments, their commitments to their co-members as well as the organization as a whole.

It is highly expected in any collaborative relationship that each party delivers on assigned tasks and responsibilities and does so effectively and efficiently as this would increase the value of the process and make the person responsible for contributing to organizational goals. According to Beyerlein et al. (2003), it is essential in collaborative relationships that partners subjugate their personal agendas for the common good, such as assuming roles outside of normal scope, opting out to help colleagues, and accepting responsibility for failures as against blame-fixing.

Promotion: An institution builds its collaborative culture through the caliber of people it promotes and recognizes. Through promotion, institutional managers can build the capacity of its staff by promoting them from within and encouraging cross-departmental transfers so that employees can broaden their perspectives and build powerful interdepartmental networks (Hansen, 2009).

Hiring: One way to foster collaboration within an organization is to hire people who have an orientation for networking and prosocial behaviour. Based on the Myers-Briggs test and social network analysis, Cross et al. (2002) discovered that one's personality and position in the network were not as correlated as one might assume; that even highly introverted people had strong networks. Interestingly, Nauta et al., (2002) found evidence that pro-social behaviour (as opposed to sociability) as a personality trait did increase the likelihood that employees would care for their own department's goals and also the goals and interests of other departments. Individuals with high pro-social orientation were able to engage in constructive win-win solutions when faced with dilemmas between their own and

other departments and could be distinguished from those with a highly competitive or individualistic orientation.

2.9 Chapter Summary

This chapter examined the scholarly works and researches that tackled professional development programmes and interdepartmental collaborations. The concepts of professional development, collaboration and collaborative decision making have been exhaustively reviewed. The review further looked at some organizational factors necessary for collaboration such as good communication, commitment, trust, low level of conflict and good leadership. Besides the challenges of interdepartmental collaborations were reviewed, some of which include individualism, the defects of modern management practice, power hunger, arrogance, defensiveness, fear, and ego.

Through the review, it was found that interdepartmental collaborations come with several benefits such as allowing an organization to leverage employees' talents, to coordinate knowledge, and to respond more quickly to global opportunities. Lastly, the chapter discussed some factors that can influence collaboration, some of which are (1) encourage departmental staff to enhance their skills and vision outside of their departments (2) fill departmental openings with staff from other departments and give reward to departmental heads who do so; (3) create platforms that bring together high-potential leaders from across the organization; (4) refuse to promote leaders whose prime focus rests solely on the success of their departments rather

than the whole; (5) Create a supportive organizational culture to foster collaboration.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodology used for the study. It entails the research strategy, design and process. It throws light on the study population, sample size and sampling techniques adopted, the data collection instruments and methods of data analysis.

3.2 Research Design and Approach

A research design is the outline or plan for a study used as a guideline in accumulating and interpreting data (Al-Moghany, 2006). According to Polit and Hungler (1999), the research design usually specifies which research approach to use and how the researcher intends to put into practice scientific controls to improve the interpretability of the outcomes. In this study, case study design was adopted. A case study is defined as a detailed analysis of a single person or group and its relationship to a phenomenon. Case studies are often done in the subject's real-world context, which gives researchers a good view of what they are really like (Boyd, 2018). Information for case study are mainly from documents, observations and interviews.

The approach for the research was a qualitative case study approach. In line with the study's objective, this approach provided the tools for studying the issues surrounding the professional development programmes (PDPs) run by some departments in KNUST. The benefits, challenges and success factors of

departmental collaboration in running PDPs are explored. A qualitative case study is useful when one wants to cover contextual conditions relevant to the phenomenon under study (Baxter and Jack, 2008). Philosophically, qualitative case study approach is being underpinned by the constructivist paradigm (Stake, 1995; Yin, 2003). According to constructivists, truth is relative and that it is dependent on one's perspective. Under the constructivist paradigm, the importance of the subjective human creation of meaning is recognized but doesn't reject outright some notion of objectivity (Baxter and Jack, 2008).

3.3 Study Location

The study was conducted in the Kwame Nkrumah University of Science and Technology (KNUST) in Kumasi, Ghana. KNUST is located in the Kumasi metropolis on the Kumasi-Accra highway. The university has six colleges namely College of Agriculture and Natural Resources, College of Arts and Built Environment, College of Humanities and Social Sciences, College of Science, College of Health Sciences and College of Engineering. There are about 100 departments across these colleges, research centres and institutes in the university. For the purpose of this study, six units were selected because they run PDPs in addition to their academic programmes. The departments are Bureau of Integrated Rural Development, Department of Food Science, The National Institute of Mathematical Sciences and The Short Course and Programmes Unit.

3.4 Study population

A research population is the total number of individuals or units for whom the researcher wishes to draw conclusion. It is generally a large collection of individuals or objects that is the main focus of a scientific research. The population for this research comprise of all departments, research units and institutes of KNUST. The KNUST 2018 recorder indicates that there are 105 departments, research units and institutes in the university. The sampling frame comprises the department, research units and institutes where PDPs are run.

3.5 Sampling Technique and Sample size

Sometimes due to large population size and limited duration for a research, it becomes difficult to reach all the individuals making up the population for the study. In this sense, sample become relevant. Using a sample is much practical and cost effective when the target population is large. A sample is defined as a section of the population that is selected for the study and from which a generalisation is made for the population.

A sample size of four (4) departments namely Bureau of Integrated Rural Development, Department of Food Science, National Institute of Mathematical Sciences, and The Short Courses/Programmes Unit were purposively selected for the study. Purposive sampling is a type of non-probability sampling approach whereby the researcher selects a sample based on the judgement that they are the key people with capacity to provide the needed responses. According to Tong (2007) Purposive sampling indicates the strategies where the researcher applies discretion as to who will best provide answers concerning field of study, and then

deliberately requests those definite viewpoints into the study. Purposive sampling is very useful for instances where one needs to contact a targeted sample fast.

Purposive sampling is useful when a researcher seeks to gain information from a particular unit or group due to their experiences and expertise. These 4 departments were selected because they run or have run PDPs in the past. The sample size of 4 is considered adequate since the study is a qualitative case study. In qualitative case study a small unit is studied in depth from multiple lenses therefore giving a broader understanding of the phenomenon under study.

3.6 Data sources and collection method

Primary data were used for the study. The Data were obtained from heads of departments (HODs) of the selected departments. The HODs served as representatives for the departments in the study. Data were collected using interviews. Face-to-face interviews were conducted with the HODs to solicit their responses to the research questions the study seeks to address. The interview guide was structured in three section. Section one inquired for data on respondents' profile in relation to their years of service, education attainment etc. Section two concentrated on the benefits and challenges of departmental collaboration and section three was focused on the factors that made departmental collaboration achievable.

Pretesting of interview guide was done using 3 of the respondents to identify grammatical mistakes, check accuracy and logical flow of questions. After pretesting, identified issues were addressed and instrument was sent for data

collection. Responses from the respondents were recorded and then transcribed for analysis. This was done in order to avoid spending much time in writing all the words respondents say and also to ensure every information said is captured.

3.7 Ethical Considerations

Since the HODs are known by their identity, it was not possible to ensure confidentiality. The HODs were not given the chance to opt whether to participate or not. Rather, they were informed about the relevance and the keen demand for their responses to make this study a success. This was because if perchance a good number of them opt out, adequate data could not be obtained for the study. Prior to visiting the HODs, a letter of consent requiring HODs to participate was sought from the School of Graduate Studies. Appointments were booked with HODs for interview sessions to ensure they have ample time for the study.

3.8 Analysis of Data

Data obtained were analysed using content analysis. Recorded data were first transcribed and thematically coded for analysis. Tables are used for presentation of results. Some of respondents' sayings are quoted in support of certain observations.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.1 Introduction

In this fourth chapter of the study, the data collected from the study participants on the nature, challenges and benefits of Interdepartmental collaboration in the running of Professional Development Programmes (PDPs) within KNUST have been presented and analysed. Again, data on the conditions under which a successful operation of Interdepartmental collaboration in the running of Professional Development Programmes (PDPs) within KNUST can be achieved have also been presented and analysed in this chapter.

4.2 Demographic Information

Four units out of the six selected participated in the study. They are Bureau of Integrated Rural Development (BIRD), National Institute of Mathematical Sciences (NIMS), College of Science (COS) and Short Courses Unit of KNUST. From these units the various heads who have comprehensive knowledge of their departments and the programmes run responded to the interview sessions. For BIRD, the respondent was the Director who happened to be a male, with a PhD degree as his educational achievement. He was within the age bracket 41 to 50 years and have served in the unit for between 6 to 10 years.

The respondent for NIMS was the Director - a male - who doubles as the Head of Department of Mathematics. He holds a PhD as his educational qualification. He

falls within the age bracket 31 to 40 years and has served at the University for 11 to 15 years. In the College of Science, there was a female respondent also a PhD holder in the age bracket 41 to 50. She happens to be the Provost of the College with more than 15 years of service within the University. The one who responded for the Short courses unit was the coordinator. A male with a Master's degree, within the age bracket 31 to 40 years, and 11 to 15 years work experience. The calibre of the respondents in term of their academic qualification and years of service gives an indication that they are very knowledgeable and experienced in their various units.

4.3 Summary of interview responses

Table 4.1 below presents the summary of the responses obtained from the interview with Key informants of various units. Detailed discussions are presented in the subsequent sections.

Table 4.1 Summarised Responses of the Field Data Collected

Unit/Department Pseudonyms	Nature Of interdepartmental collaboration in the running of PDPs in KNUST	Challenges of interdepartmental collaboration in the running of PDPs in KNUST	Benefits of interdepartmental collaboration in the running of PDPs in KNUST	Factors that can influence a successful interdepartmental Collaboration on PDPs
DB	“We used to run short courses on Adaptive Management, Governance, Forestry, Value Chain and Rural Entrepreneurship with other Universities.”	“Some of the departments fail to collaborate effectively and efficiently due lack of effective communication”	“It would shock you that a whole lecturer is not aware of the kind of programs the next department is running... But because of this, they know about us and we also know about them”	“There should be a training for all Heads of Department to introduce them to the benefits of collaborating in a University because I don't know if everyone is aware of these things”

Table 4.1 continued

Unit/Department Pseudonyms	Nature Of interdepartmental collaboration in the running of PDPs in KNUST	Challenges of interdepartmental collaboration in the running of PDPs in KNUST	Benefits of interdepartmental collaboration in the running of PDPs in KNUST	Factors that can influence a successful interdepartmental Collaboration on PDPs
DFS	“We are in the process of developing new PDP’s to be run by the department...”		“We are now together... We do not fight among ourselves or do the usual interdepartmental backbiting and the attitude of painting other departments black”	“Departments who collaborate to run PDP must be celebrated and acknowledged. You know, people feel motivated when they know their efforts are being noticed by people who matter”
DM			“...when we meet with people from other departments and they make their inputs, you would understand and see things differently.”	
DS	“To develop the knowledge of the participants, ... increase their knowhow on the chosen of study by making available the needed resources and support we could offer.”		“...while some of us were giving the theories that would help the program, others gave very practical inputs that helped to develop a program that would properly equip the beneficiaries.”	When you consider the private intuitions, who are becoming our greatest competitors, one thing they do well, is to think constructively and with vision as a group. If we learn from them, our programs would succeed”

Source: Researcher’s Own Construct, 2018

4.4 Nature of departmental collaborations

The nature of departmental collaboration was examined in relation to kind of PDPs run, department or units in collaboration, collaborative role of partnering departments or units and aims of collaboration (Table 4.1). Respondents were asked to describe the nature of the PDPs their units run or have run in the past years in their units. It came out that BIRD does not run any PDP currently, however, they have run some in the past years collaborating with some universities in the country Ghana. In description, the respondent for BIRD said this:

“We used to run short courses on Adaptive Management, Governance, Forestry, Value Chain and Rural Entrepreneurship with other Universities.”

Like BIRD, NIMS does not currently run PDPs. The respondent mentioned that they have also not run any in the past but have collaborated with the departments of Mathematics and Biochemistry in running their PDPs. The respondent mentioned that they are now in the process of rolling out some PDPs to be run in their department. The respondent expressed his response as this:

“We are in the process of developing new PDP’s to be run by the department. However, we have tried collaborating with some departments to run their courses.”

Asked the kind of collaboration they provided to those departments, the respondent indicated they provided the departments with facilitators, logistics as well as course organisation and support. Adding to this, he mentioned their aim of collaborating as follows:

“To develop the knowledge of the participants as well increase their knowhow on the chosen of study by making available the needed resources and support we could offer.”

Unlike the earlier mentioned units, BIRD and NIMS, the College of Science Provost who responded to this interview mentioned that their unit currently run PDPs. She mentioned that among the PDPs they run include extraction technology, food hygiene, chocolate making technology, sweet potato courses, cyber forensics, nutrition and dietetics. Asked the kind of collaboration and the departments they collaborate with, the respondent listed Department of Biochemistry, Department of Computer Science, Department of Planning and the Faculty of Agriculture as the departments which provide services such as facilitation, monitoring and logistics as collaborative roles. Departmental collaboration is usually encouraged for sharing knowledge and resources for the benefit of all stakeholders. On this note, the Provost had this to say about their aim of collaborating with other departments for running PDPs:

“We collaborate with others in our PDPs in order to give maximum benefit to the participants; gain and

appreciate diversity from different expertise, and allow participants to be able to benefit from different experiences.”

Similarly, the respondent for Short Courses Unit also made mention that they run PDPs such as Oil and gas resource management, occupational health and safety, rural entrepreneurship and solid waste management. He clarified that his unit collaborate with other departments such as Department of Food Science and Department of Sports and Exercise Science within the university as well as external entities such as Wageningen Centre for Development Innovation and Zoomlion Ghana Limited in running their PDPs. The collaborative roles among the units were mentioned to include course facilitation, logistical support and organisational support. Asked of the aim of collaboration, the Coordinator had this to say:

“Our aims are to increase the visibility of our unit/department within and outside the University; to provide the participants with various experiences from different field of study and help them to manage for change in their respective area of work, to study through collaboration in running PDPs, and to take the department to another level of academic achievement through collaboration with departments and various Institutions.”

The perspectives of the Short Courses Unit and College of Science are in line Tsai (2001) who opined that if a department is highly related to other departments, it will be relatively easy to gain new knowledge.

4.5 Challenges of Interdepartmental Collaboration

In collaboration, an organisation transcends its borders and involve other external organisations in its services and activities for a shared benefit, but doing this does not come to fruition without encountering some barriers. As an important concept in the business environment motivated by certain benefits that an organisation could derive, there are barriers that obstruct organisations toward achieving this goal. The study examined challenges faced by various units in their collaborative efforts with other departments (Table 4.1). Respondent were asked to identify the challenges they face and how it affects their efforts. All the respondents except the Director of NIMS indicated they do face challenges. NIMS does not face any collaborative challenges because they do not run and have not run PDPs before, and since they are not the facilitators of the PDPs they collaborate on they are less likely to face any challenge.

With BIRD, it was indicated that two challenges hinder their collaborative effort. They are, lack of institutional support and lack of understanding within departments in the University. This suggest that their mother institution KNUST does not support them in rolling out PDPs, and departments to collaborate with on running PDPs do not come on same page of their agenda. This could be linked to why the unit is no more running PDPs again.

Similarly, the respondent from College of Science made mention of: the lack of teamwork, limited benefit to the person leading the collaboration and lack of institutional support as the challenges that hinder the progress of collaborating with other departments. The Short Courses Unit was also faced with challenges such as ineffective collaborative efforts from other departments and selfishness. The respondent expressed the challenges as follows:

“Some of the departments fail to collaborate effectively and efficiently due lack of effective communication. Some departments wanting to benefit individually fail to collaborate effectively to bring out the desired results.”

The above expression suggests that communication channels that facilitate collaboration are ineffective. And that some of collaborating departments come with mentality of competition which is a great hindrance to interdepartmental collaboration. This is in agreement with Lozano (2013) who opines that competition with other teams/units leads to departments not wanting to share equally and thus hinder the progress of interdepartmental collaboration.

4.6 Benefits That Will Be Derived from Interdepartmental Collaboration on Professional Development Programmes

There is the expectation that when departments within the university collaborate even in the face of the challenges that they may face in their quest to collaborate, some benefits would accrue to the collaborating parties (that is the departments

collaborating). In this section of the study, enquiry was made on some of the perceived benefits from the study participants on the benefits that derive from departmental collaboration (Table 4.1). From the responses gathered from the respondents in this regard, there are indeed some benefits that accrue to departments which collaborate within the university in running PDPs.

The themes that emerged from the data collected from the study participants through the in-depth interviews in this section of the study among other things are that when departments collaborate with other departments in running PDPs, ‘it enables the departments to become more visible’, they (that is the collaborating departments) are able to benefit from ‘knowledge sharing with other departments and enjoy strategic alliance’, creates room for partnerships beyond the running of PDPs. As well, capacity building was one of the thematic benefits identified from the careful perusal of the interviews conducted for the study. Again, the responses showed that collaboration between departments in running PDPs makes these departments to become a unit that is pursuing broader goals which help in developing the university as a whole.

4.6.1 Visibility of the Department

The responses gathered showed that the respondents were of the view that collaborating with other departments in running PDPs was very essential in projecting the department to the whole university and also beyond the university.

This was found in the statement of one of the study participants who said,

“I don’t know all the departments in the school. Most of us, even faculty members are not aware of what

other departments do. It would shock you that a whole lecturer is not aware of the kind of programs the next department is running. We cannot speak for each other because we don't even know what other departments are running. Let me confess, until this PDPs and the need to collaborate with other departments came, I was not aware of what some of the other departments specialized in. But because of this, they know about us and we also know about them".

Interdepartmental collaborations therefore give the opportunity for departments within the university to know about each other, for faculty members to know and be able to speak about programs run about other departments should the need be. It is therefore an opportunity for every department to present their specialties to each other within the university community.

Beyond the confines of the university community, it was found that when departments collaborate in running PDPs, they are able to benefit from what could be described as free adverts by those who take part of the programs that are being run for the school. When participants who are mostly from the corporate world come to experience the programs being run by the university, they tend to serve as ambassadors for the university to the outside world by speaking about it to their colleagues who get to hear and eventually apply for and come to experience and

learn from such programs for themselves. This idea was captured by the response of one of the study participants who said,

“When I meet them, I normally ask how they heard about the programs being run by the department. And what I have come to find out by time is the fact that participants as result of their experience are able to sell the department and University to the world. I remember one of the saying that, I noticed my colleague started approaching work differently after taking the program. There are several stories like that. You just need to ask the students. They are our best advertisers”

The school is therefore seen to benefit from what could be described as the ripple positive effect of a satisfied customer. That is, when people who have come for the programs being run by the departments leave satisfied, they tend to speak to their workmates about it. The university therefore benefits from becoming visible through the running of PDPs.

4.6.2 Knowledge Sharing with Other Departments and Strategic Alliance

Another theme that was identified when the benefits of running PDPs through collaborations with other departments is that the departments that come together share knowledge from their specific fields on the programs they run, how they are run and so there is mutual learning between collaborating departments. On this, one study participant said,

“We learn from the people we collaborate with and of course they also learn from us. Sometimes, you are thinking of the situation or a program with a biased mindset because of your specialty and background, but when we meet with people from other departments and they make their inputs, you would understand and see things differently. You know what they say that ‘two heads are better than one’, it is very true”

This comment underscores the ever important need to learn from the departments being collaborated with. Because the collaborators are drawn from different but related departments within the university, they are able to offer insights beyond what individual departments could have been able to do. The varied inputs tend to shape, reshape and sharpen the programmes being run for their efficiency. The biases of single departments in running such programmes are catered for through the intellectual discourses held by the collaborating departments that come into play for running PDPs in KNUST. Because of the diverse backgrounds from which the facilitators and parties running these programs are drawn from, they are able to refine their thoughts and every suggestion proffered before they are taken up for eventual implementation. The programs are therefore made better by the establishment of a healthy synergy that comes from interdepartmental collaborations.

Another respondent for example said,

“You know, sometimes, we don’t want to hear people criticize us. But when we come together and have our colleagues from different departments shoot down some of our ideas and offer excellent ones, it improves the program. Sometimes, accepting corrections from people is not easy but, it helps to improve things in the long run. In the development of the programs that that we run now, people from different academic backgrounds other than what our department alone has were on board. So, while some of us were giving the theories that would help the program, others gave very practical inputs that helped to develop a program that would properly equip the beneficiaries.”

Because of interdepartmental collaboration in the running of PDPs, the programs are made to become better through learning from people from other backgrounds and makes the programs to not only have a good blend of theory and practice but renders it more diversified and apt to meet the myriad of needs for which most professionals may subscribe to the programs.

Again, it was identified that when departments collaborate in the running PDPs, they tend to form Strategic Alliances that help them share cost, leverage on how they contribute resources for achieving same results.

“Already, the workload on individual staff members in the faculty is irksome. So, you can imagine if you are adding a new program and you are going to man it alone as a department. That would make things more difficult. Even the workforce needed for its proper facilitation would be difficult to get, let alone the cost of making things work out. Coming together helps to ease the cost that must be borne in the situation where only one department runs a PDP. ...joining forces helps us in running the programs properly in different ways. We can accept more applicants because the facilities that would be needed increases depending on the number of collaborating entities who run the PDPs”

This shows that the departments are able to share the duties that may be otherwise too cumbersome for a single department to effectively manage. Also, when they (departments) collaborate in the running of PDPs, the cost of running such programs becomes bearable since there is cost sharing among collaborating departments. Capacity of the departments in terms of how many programs could be run and the number of program participants or students that can be admitted also tends to increase when they collaborate with other departments because of the increased capacities fostered by collaboration with other departments.

4.6.3 Avenue for Interdepartmental Partnerships Beyond the collaborative Running of PDPs

The study further identified from the data collected that, interdepartmental collaboration in the running of PDPs carries with it benefits that go beyond the running of PDPs successfully. It was found that staff members who partook in collaborative meetings tend to have the opportunity to collaborate with people from other departments and fields either for their academic career development, business acumen growth among others.

“I didn’t know our fields were that related. I was working on a research paper before that meeting. I was trying to make use of a model that I struggled to figure out. I found out that a colleague staff member who was on the board has applied the very model in some earlier work. So, he was on hand to help me. Had it not been that meeting about collaborative running of PDPs between my department and his, I doubt that we would ever meet. Since then, we have published two research papers together and we are working on the third one. I mean, this might not directly be for the programs being run but, I see it as a benefit”

People who get the chance to be a part of the collaborative group that run PDPs in the university tend to have opportunities to collaborate with those on the board beyond the purpose of interdepartmental collaboration.

Another study participant stated with satisfaction that,

“I met a lady there who introduced me to a business that has helped my financial fortunes. You know, sometimes, some of us are too busy thinking about and doing our work that we fail to explore other areas of life that could help us change our fortunes. I think for the past two years or so, I would say I don’t rely solely on my salary. I have learned to invest and do other things that are helping to bring income to the table more regularly than my monthly salary and allowances. I always say that, it was God that made me agree to be part of this program and even to meet that day. Her idea has been my financial game changer”

The opportunity to collaborate with other departments in running PDPs therefore tends to grant the staff members who facilitate this to get the chance to learn from each other either as academics or business people who can share ideas. They are therefore able to collaborate in their respective academic career works and business ventures as has been indicated in the statement above.

4.6.4 Removal of Unhealthy Competitions and Uniting to Achieve Broader Goals for the Development of the University at Large.

Because the various departments are coming together to work for the success of these programs, any unhealthy competition emerging from the situation of two or more separate departments running similar programs individually is curtailed. Forces are rather joined to achieve the greater good of the university. Aside the fact that these collaborations bring about a stronger force and a prospect of the achievement of better results in the running of these PDPs, it also provides the university the benefit of working together with concerted efforts toward the realisation of broader goals that would help in the development of the university at large. Again, these new programmes that have been collaboratively carved out ted to give the school an opportunity to venture into new areas of learning. And again, because it is a collaborative work with a more organised and united front, it helps the university to overcome competition from other universities where these programs may be run by single departments and expectedly inefficient. One of the respondents said that,

“We are now together. If the students come and they like the programs, the benefits accrue to both departments. We do not fight among ourselves or do the usual interdepartmental backbiting and the attitude of painting other departments black”

The adoption of interdepartmental collaboration in running PDPs is a way of making the university become a stronger unit for the attainment of success as an institution.

4.7 Factors That Can Influence a Successful Interdepartmental Collaboration on Professional Development Programmes.

Considering the benefits that have been reported from interdepartmental collaboration in the running of PDPs within the university amidst the challenges of collaboration, the study proceeded to find out from the study participants on what they believed or have found out to be the way forward for departmental collaboration without hitches. The question was asked on what the study participants who happened to be people in the forefront of the formulation and running of the PDPs from the departments on what they have identified to be the necessary conditions for successful interdepartmental collaboration in the running of PDPs.

Among other things, the study identified that when there is strategic thinking within and between departments that collaborate interdepartmental collaboration in the running of PDPs would become more successful. Essentially, when departments make decide on issues together for the way forward, there are prospects for greater successes.

A respondent to this regard said that,

“Ideas are in people’s minds. We just have to come together as departments to think through things for the way forward. When you consider the private intuitions,

who are becoming our greatest competitors, one thing they do well, is to think constructively and with vision as a group. If we learn from them, our programs would succeed”

The comment suggests the need to think innovatively and with foresight as a group of departments collaborating to run PDPs. This strategic thinking approach would help the programs not only to run well but would also grant the collaborating departments the opportunity to identify possible opportunities they can take advantage of and as well the challenges that may come and ways through which they can be overcome.

Similar to the above, there is the need for the facilitation of consistent communication amongst various departments within the university by the University management. Continuous communication among departments is essential for them to identify the avenues for collaboration and possible short courses in the form of PDPs that they can run together. This was communicated by one of the respondents who said that,

“The university needs to create opportunities and platforms that would make various departments to have continuous dialogues. ...we should go beyond that time when we used to see ourselves as islands within the university. They must make it possible for departments to regularly meet and examine the possible options and opportunities that may be available to them”

There is therefore the need for the management of the university to create then needed room or atmosphere that would foster healthy dialogues between various departments within the university as a way of helping to improve the effectiveness and efficiency of the collaboration of departments in the running of PDPs.

Another study participant added that,

“There should be a training for all Heads of Department to introduce them to the benefits of collaborating in a University because I don’t know if everyone is aware of these things”

This suggests the possibility that some of the Heads of Departments and for that matter departments may not be aware of the existence of PDPs and the need to collaborate with other departments in running them. The training of all Heads of Departments would therefore create awareness and make it easier for collaborations to be carried out.

Other responses showed that some departments are not likely to contribute or participate in the Interdepartmental Collaboration to run PDPs because they do not feel any obligation for it.

“You know, most of us know the right thing. But maybe, just maybe because it would take some extra effort to accomplish, we don’t want to do it. So, I think until the university makes it a matter of policy and demands that every department makes efforts to join other departments

in the running of PDPs, some of the departments would not do it”

According to the study participants therefore, the university needs to make it a matter of policy for all departments to engage in the running of PDPs. That is, unless some amount of compulsion comes into place and the university enshrines it in its policy for all departments to do so, the collaborators would be limited to a few departments.

Again, other respondents suggested the need for the school management to appreciate the efforts of the departments that are engaging in interdepartmental collaboration in the running of PDPs as a way of motivating performance of other departments. It is also a means of making new departments make the choice to either design or collaborate with other departments in the running of PDPs. This can be seen from one of comment below from on participant who said,

“Departments who collaborate to run PDP must be celebrated and acknowledged. You know, people feel motivated when they know their efforts are being noticed by people who matter”.

There is need to award the departments who collaborate in the running of PDPs if there is going to be success in the running of PDPs in the long run.

CHAPTER FIVE

SUMMARY OF KEY FINDINGS, CONCLUSION AND RECOMMENDATIONS OF THE STUDY

5.1 Introduction

In this chapter, the major findings realised from the study under the various objectives have been summarily presented. Also, the conclusion made by the study based on these findings have been also presented here. Based on the major findings and the conclusions drawn on them, recommendations have been proffered to improve the success and operations in Interdepartmental collaboration in the running of Professional Development Programmes (PDPs) within KNUST. Three of the four respondents were males. All the respondents were experienced and highly educated. The lowest educational qualification amongst them was a Master's degree and the least number of years of service was 6 to 10 years.

5.2 Summary of Major Findings of the Study

The findings obtained from the study have been summarised in this subsection of the study.

5.2.1 Nature of Departmental Collaborations

It came out that BIRD does not run any PDP currently, however, they have run some in the past years collaborating with some universities in the country Ghana. Among the PDPs they run in the past are Adaptive Management, Governance, Forestry, Value Chain and Rural Entrepreneurship. The respondent for NIMS

indicated they do not currently run PDPs and have also not run any before. However, they have collaborated with the departments of Mathematics and Biochemistry in running their PDPs by providing facilitators, logistics as well as course organisation and support.

Unlike the earlier mentioned units, BIRD and NIMS, the College of Science Provost who responded to this interview mentioned that their unit currently run PDPs. Among them are extraction technology, food hygiene, chocolate making technology, sweet potato courses, cyber forensics, nutrition and dietetics. The aim of collaboration was to give maximum benefit to the participants; gain and appreciate diversity from different expertise and allow participants to be able to benefit from different experiences as indicated by COS respondent.

Similarly, the respondent for Short Courses Unit also made mention that they run PDPs such as Oil and gas resource management, occupational health and safety, rural entrepreneurship and solid waste management by collaborating with the Department of Food Science and Department of Sports and Exercise Science within the university as well as an external entity such as Wageningen Centre for Development Innovation and Zoomlion Ghana Limited. The respondent mentioned that the various units they collaborated provided services such as course facilitation, logistical support and organisational support. The aims of the collaboration was specified as to increase the visibility of our unit/department within and outside the University; to provide the participants with various experiences from different field of study and help them to manage for change in their respective area of work, to study through collaboration in running PDPs, and to take the department to another

level of academic achievement through collaboration with departments and various Institutions.

5.2.2 Challenges of Interdepartmental Collaboration

All the respondents indicated they face challenges except for NIMS. This is because NIMS does not run PDPs but act as collaborators to others in their PDPs. With BIRD, it was indicated that two challenges hinder their collaborative effort. They are, lack of institutional support and lack of understanding within departments in the University. This was attributed to the linked to why the unit is no more running PDPs again. With College of Science the challenge was mainly related to lack of teamwork, limited benefit to the person leading the collaboration and lack of institutional support.

The Short Courses Unit was also faced with challenges such as ineffective collaborative efforts from other departments, selfishness of some departments and lack of effective communication.

5.2.3 Benefits That Will Be Derived from Interdepartmental Collaboration on Professional Development Programmes

On the benefits of collaboration between departments in the running of PDPs in KNUST, it was found that when departments collaborate with other departments in running PDPs, it makes the departments more visible. That is, collaborating with other departments in running PDPs was very essential in projecting the department to the whole university and also beyond the university. It is therefore an opportunity for every department to present their specialties to each other within the university

community. Beyond the confines of the university community, it was found that when departments collaborate in running PDPs, they are able to benefit from what could be described as free adverts by those who take part of the programs that are being run for the school.

Evidence was also found that interdepartmental collaboration in the running of PDPs brings about opportunities for knowledge sharing since the participants and facilitators of the programs are experts drawn from different backgrounds. Because the collaborators are drawn from different but related departments within the university, they are able to offer insights beyond what individual departments could have been able to do.

Again, it was identified that when departments collaborate in the running PDPs, they tend to form Strategic Alliances that help them share cost, leverage on how they contribute resources for achieving same results. That is, departments are able to share the duties that may be otherwise too cumbersome for a single department to effectively manage.

It was further identified that when departments collaborate, staff members who partook in collaborative meetings tend to have the opportunity to collaborate with people from other departments and fields either for their academic career development, business acumen growth among others.

Another notable benefit that derives from the interdepartmental collaboration in the running of PDPs is that any unhealthy competition emerging from the situation of two or more separate departments running similar programs individually is curtailed. Rather, they join their arsenals to achieve the greater good of the university.

5.2.4 Factors That Can Influence a Successful Interdepartmental Collaboration on Professional Development Programmes

The study identified that when there is strategic thinking within and between departments that collaborate interdepartmental collaboration in the running of PDPs would become more successful. That is there is the need to think innovatively and with foresight as a group of departments collaborating to run PDPs. It was further found that, when departments make decide on issues together for the way forward, there are prospects for greater successes.

Also, it was found that continuous communication among departments is essential for them to identify the avenues for collaboration and possible short courses in the form of PDPs that they can run together.

5.3 Conclusion of the Study

This study focused on examining the nature of Interdepartmental collaboration in the running of Professional Development Programmes (PDPs) within KNUST, its challenges, benefits from it and the conditions under which a successful operation of Interdepartmental collaboration in the running of Professional Development Programmes (PDPs) within KNUST can be achieved.

The study therefore concludes that the interdepartmental collaboration in the running of PDPs in KNUST is fraught with challenges such as lack of institutional support, lack of teamwork, ineffective collaborative efforts from other departments, selfishness of some departments and lack of understanding within departments in the University. Notwithstanding, these challenges, the programs come with benefits to the individuals involved in the facilitation of it, the departments that are engaged in it and the university at large. It was therefore strongly recommended that the university makes it a matter of policy for all departments to engage in the running of PDPs.

5.4 Recommendations of the Study

There is the need for the management of the university to create then needed room or atmosphere that would foster healthy dialogues between various departments within the university as a way of helping to improve the effectiveness and efficiency of the collaboration of departments in the running of PDPs. There should be a training for all Heads of Department to introduce them to the benefits of collaborating in a University since not all departments may be aware of the existence of these programmes (PDPs).

Also, some departments are not likely to contribute or participate in the Interdepartmental Collaboration to run PDPs because they do not feel any obligation for it. There is therefore the need for the university to make it a matter of policy for all departments to engage in the running of PDPs.

5.5 Recommendations for future studies

The main limitation to this study was time constraints due to the short structure of the semester. Due to this some departments running PDPs could not be attended to for interviews. Future studies on the subject should be conducted within a relatively longer time period to accommodate for the possibilities of delays in meeting and conducting interviews with the study.

Future researchers should seek to examine the same problem using mixed method approaches as a way of making the findings not only peculiar but with a general orientation.

REFERENCES

- Adler, P. S. (2001). Market, hierarchy, and trust: The knowledge economy and the future of capitalism. *Organization science*, 12(2), 215-234.
- Alexander, J. A., Comfort, M. E., Weiner, B. J., & Bogue, R. (2001). Leadership in collaborative community health partnerships. *Nonprofit Management and Leadership*, 12(2), 159-175. <http://dx.doi.org/10.1002/nml.12203>
- Allen, K.E., Stelzner, S.P., & Wielkiewicz, R.M. (1999). The ecology of leadership: Adapting to the challenges of a changing world. *Journal of Leadership & Organizational Studies*, 5, 62-84.
- Al-Moghany, S. S. (2006). Managing and minimizing construction waste in Gaza Strip. *Palestine: Islamic University of Gaza*.
- Alter, C. (1993). *Organizations working together*. Sage Publications (Newbury Park, Calif.).
- Ariza, J., & Ramos, D. (2010). *The pursuit of professional development through a teacher study group* (Unpublished master's thesis). Universidad de Caldas, Manizales.
- Artz, K. W., & Brush, T. H. (2000). Asset specificity, uncertainty and relational norms: An examination of coordination costs in collaborative strategic alliances. *Journal of Economic Behavior & Organization*, 41(4), 337-362. [http://dx.doi.org/10.1016/S0167-2681\(99\)00080-3](http://dx.doi.org/10.1016/S0167-2681(99)00080-3)
- Assael, H. (1969). Constructive role of interorganizational conflict. *Administrative Science Quarterly*, 573-582. <http://dx.doi.org/10.2307/2391595>

Baker, W. (2003). Building collaborative relationships. *Leader to Leader, Spring 2003*(28), 11-15.

Bayona, C., Garcia-Marco, T., & Huerta, E. (2001). Firms' motivations for cooperative R&D: An empirical analysis of Spanish firms. *Research Policy*, 30(8), 1289-1307. [http://dx.doi.org/10.1016/S0048-7333\(00\)00151-7](http://dx.doi.org/10.1016/S0048-7333(00)00151-7)

Bennis, W. (2003). *On becoming a leader*. New York: Basic Books.

Beyerlein, M., Freedman, S., McGee, C., & Moran, L. (2003). *Beyond teams: Building the collaborative organization*. San Francisco, CA: Jossey-Bass/Pfeiffer. Retrieved from: <http://library.books24x7.com.ezproxy.royalroads.ca/assetviewer.aspx?bkid=5338&destid=341#341>

Bonaccorsi, A., & Piccaluga, A. (1994). A theoretical framework for the evaluation of university-industry relationships. *R&D Management*, 24(3), 229-247.

Burnham, J. B. (1997). Evaluating industry/university research linkages. *Research Technology Management*, 40(1), 52-55.

capitalism. *Organization Science*, 12(2), 215-234.

Child, J., & Faulkner, D. (1998). *Strategies of cooperation: Managing alliances, networks, and joint ventures*: Oxford University Press, USA.

Chisholm, R. F. (1996). On the meaning of networks. *Group & Organization Management*, 21(2), 216. <http://dx.doi.org/10.1177/1059601196212006>

Coburn, A. F. (1998). The role of health services research in developing state health policy. *Health Affairs*, 17(1), 139.

Cooper, S. J. (2003). An evaluation of the leading an empowered organization programme. *Nursing Standard*, 17(24), 33-39.

cooperation and teamwork. *The Academy of Management Review*, 23(3), 531-543.

Cross, R., Nohria, N., & Parker, A. (Spring 2002). Six myths about informal networks and how

cross-functional cooperation. *Management Science*. 39 (10), 1281-1297.

Crosswaite, C., & Curtice, L. (1994). Disseminating research results-the challenge of bridging the gap between health research and health action. *Health Promotion International*, 9(4), 289.
<http://dx.doi.org/10.1093/heapro/9.4.289>

Cuijpers, M., Guenter, H., & Hussinger, K. (2011). Costs and benefits of inter-departmental innovation collaboration. *Research Policy*, 40(4), 565-575.
doi:10.1016/j.respol.2010.12.004

Cullen, J. B., Johnson, J. L., & Sakano, T. (2000). Success through commitment and trust: The soft side of strategic alliance management. *Journal of World Business*, 35(3), 223-240. [http://dx.doi.org/10.1016/S1090-9516\(00\)00036-5](http://dx.doi.org/10.1016/S1090-9516(00)00036-5)

Davenport, S., Grimes, C., & Davies, J. (1999). Collaboration and organisational learning: A study of a New Zealand collaborative research program.

- International Journal of Technology Management*, 18(3), 173-187.
<http://dx.doi.org/10.1504/IJTM.1999.002768>
- Davis, P., & Howden-Chapman, P. (1996). Translating research findings into health policy. *Social Science & Medicine*, 43(5), 865-872.
- Detert, J.R., Schroeder, R.G., & Mauriel, J. (2000). A framework for linking culture and
- Deutsch, M. (1969). Conflicts: Productive and Destructive. *Journal of Social Issues*, 25(1), 7-42.
- Diamond, J., & Rush, L. (2012). Intra-organizational collaboration in one UH university: potential for change or missed opportunity, *International Journal of Public Sector Management*, 25(4), 287–300. doi: 10.1108/09513551211244115
- Dooley, L., & Kirk, D. (2007). University-industry collaboration: Grafting the entrepreneurial paradigm onto academic structures. *European Journal of Innovation Management*, 10(3), 316-332.
<http://dx.doi.org/10.1108/14601060710776734>
- DuCroix, T. (2015). Improving Interdepartmental Collaboration at the Regional Municipality of York. An unpublished thesis submitted to the faculty of Social Science, Royal Roads University, Victoria, British Columbia, Canada.
- Easton, B. L. (2004). *Designs for professional learning*. Powerful Oxford, OH. National Staff Development Council.

- Ellemers, N., De Gilder, D., & Haslam, S.A. (2004). Motivating individuals and groups at work: A social identity perspective on leadership and group performance. *Academy of Management*, 29(3), 459-478.
- Essex, N. L. (2001). Effective school-college partnerships, a key to educational renewal and instructional improvement. *Education*, 121(4), 732-736.
- fundamental organizational change: A grounded analysis. *Journal of Applied Behavioral Science*, 39, 301-323.
- Gee, R. E. (1993). Technology transfer effectiveness in university-industry cooperative research. *International Journal of Technology Management*, 8, 6(7), 652-668. <http://dx.doi.org/10.1504/IJTM.1993.025802>
- Geisler, E., Furino, A., & Kiresuk, T. J. (1991). Toward a conceptual model of cooperative research: Patterns of development and success in university-industry alliances. *Engineering Management, IEEE Transactions on*, 38(2), 136-145. <http://dx.doi.org/10.1109/17.78410>
- Getha-Taylor, H. (2008). Identifying collaborative competencies. *Review of Public Personnel Administration*, 28(2), 103–119. doi 10.1177/0734371X0831434
- Ghoshal, S., Arnzen, B., & Brownfield, S. (1992). *Learning alliance between business and business schools: Executive education as a platform for partnership*.
- Gomes, J. F. S., Hurmelinna, P., Amaral, V., & Blomqvist, K. (2005). Managing relationships of the republic of science and the kingdom of industry. *The Journal of Workplace Learning*, 17(1/2), 88-98. <http://dx.doi.org/10.1108/13665620510574487>

Gratton, L., & Erickson, T.J. (November 2007). Eight ways to build collaborative teams.

Gray, B. (1985). Conditions facilitating interorganizational collaboration. *Human Relations*, 38(10), 911. <http://dx.doi.org/10.1177/001872678503801001>

Gulati, R. (1998). Alliances and networks. *Strategic Management Journal*, 19(4), 293-317.

Guskey, T. R. (2000). *Evaluating Professional Development* (Thousand Oaks, CA, Corwin Press).

Haire, C. M., & Dodson-Pennington, L. S. (2002). Taking the road less traveled: A journey in collaborative resource development. *Community College Journal of Research & Practice*, 26(1), 61-75.
<http://dx.doi.org/10.1080/106689202753365016>

Hansen, M. (2009). When internal collaboration is bad for your company. *Harvard Business Review*, April 2009, 83–88.

Hardwick, J., Anderson, A. R., & Cruickshank, D. (2013). Trust formation processes in innovative collaboration: Networking as knowledge building practices. *European Journal of Innovation Management*, 16(1), 4–21. doi: 10.1108/14601061311292832
Harvard Business Review, 85(11), 101-109.

Hassel, E. (1999). *Professional development: Learning from the best*. Oak Brook, IL: North Central Regional Educational Laboratory (NCREL).

Hosmer, L. T. (1995). Trust: The connecting link between organizational theory and philosophical ethics. *Academy of Management Review*, 379-403.

<http://dx.doi.org/10.5465/AMR.1995.9507312923>

Houston, M.B., Walker, B.A., Hutt, M.D., & Reingen, P.H. (April, 2001). Cross-unit competition for a market charter: The enduring influence of structure. *Journal of Marketing*, 19-34.

[http://dx.doi.org/10.1002/\(SICI\)1097-0266\(199804\)19:4<293::AID-SMJ982>3.0.CO;2-M](http://dx.doi.org/10.1002/(SICI)1097-0266(199804)19:4<293::AID-SMJ982>3.0.CO;2-M)

Huberman, A. (1983). Improving social practice through the utilization of university based knowledge. *Higher Education*, 12(3), 257-272.

<http://dx.doi.org/10.1007/BF00154422>

identity-based approach. *Journal of Managerial Issues*, 15(2), 154-174.

improvement initiative in organizations. *The Academy of Management Review* 25(4), 850-863.

Inkpen, A. C., & Tsang, E. W. K. (2005). Social capital, networks, and knowledge transfer. *The Academy of Management Review*, 146-165.

<http://dx.doi.org/10.5465/AMR.2005.15281445>

Johnson, K. W. (1980). Stimulating evaluation use by integrating academia and practice. *Science Communication*, 2(2), 237.

<http://dx.doi.org/10.1177/1075547080000200205>

Jones, G.R., & George, J.M. (1998). The experience and evolution of trust: Implications for

- Kanter, R. M. (1994). Collaborative advantage: The art of alliances. *Harvard Business Review*, 72(4), 96-108. <http://dx.doi.org/10.1225/94405>
- Kezar, A. J., & Lester, J. (2009). Organizing higher education for collaboration: a guide for campus leaders. *San Francisco: Jossey-Bass*.
- Khoja, F. (2009). The power of intrafirm networks. *Academy of Strategic Management Journal*, 8, 51-70.
- Klofsten, M., & Jones-Evans, D. (1996). Stimulation of technology-based small firms-A case study of university-industry cooperation. *Technovation*, 16(4), 187-193. [http://dx.doi.org/10.1016/0166-4972\(95\)00052-6](http://dx.doi.org/10.1016/0166-4972(95)00052-6)
- Lozano, R. (2013). Are companies planning their organisational changes for corporate sustainability? An analysis of three case studies on resistance to change and their strategies to overcome it. *Corporate Social Responsibility and Environmental Management*, 20(5), 275-295.
- Lencioni, P. (2006). *Silos, politics and turf wars: A leadership fable about destroying the barriers that turn colleagues into competitors* (Vol. 17). John Wiley & Sons.
- Lewis, J. D. (1999). *Trusted partners: How companies build mutual trust and win together*. Simon and Schuster.
- Mankin, D., Cohen, S., & Fitzgerald, S. P. (2004). Developing complex collaborations: basic principles to guide design and implementation. In M. Beyerlein, D. Johnson, & S. Beyerlein, (Eds.), *Complex collaboration: Building the capabilities for working across boundaries*. (pp. 1–26). Oxford, UK: Elsevier. doi:10.1016/S1572-0977(04)10001-0

Mattessich, P. W., & Monsey, B. R. (1992). *Collaboration: what makes it work. A review of research literature on factors influencing successful collaboration*. Amherst H. Wilder Foundation, 919 Lafond, St. Paul, MN 55104.

Mattessich, P. W., & Monsey, B. R. (2001). *Collaboration: What makes it work*. Amherst H. Wilder Foundation St. Paul, MN.

Merrill-Sands, D., & Sheridan, B. (1996). Developing and Managing Collaborative Alliances: Lessons from a review of the literature. *Organizational Change Briefing Note, 3*.

Mohr, J., & Spekman, R. (1994). Characteristics of partnership success: Partnership attributes, communication behavior, and conflict resolution techniques. *Strategic Management Journal, 15*(2), 135-152.
<http://dx.doi.org/10.1002/smj.4250150205>

Mohrman, S.A., Tenkasi, R.V., & Mohrman, Jr., A.M. (2003). The role of networks in

Mora-Valentin, E. M., Montoro-Sanchez, A., & Guerras-Martin, L. A. (2004). Determining factors in the success of R&D cooperative agreements between firms and research organizations. *Research Policy, 33*(1), 17-40.
[http://dx.doi.org/10.1016/S0048-7333\(03\)00087-8](http://dx.doi.org/10.1016/S0048-7333(03)00087-8)

Nauta, A., De Dreu, C.K.W., & Van Der Vaart, T. (2002). Social value orientation,

Nelson, R.D. (1989). The strength of strong ties: social networks and intergroup conflict in Networks. *Academy of Management Journal, (41)* 4, 464-476.

- O'Leary, R., & Vij, N. (2012). Collaborative public management: Where have we been and where are we going? *The American Review of Public Administration*, 42(5), 507–522. doi: 10.1177/0275074012335780
- organizational goal concerns and interdepartmental problem-solving behavior. *Journal of Organizational Behavior*, 23, 199-213.
- organizations. *The Academy of Management Journal*, 32(2), 377-401.
- Parkinson, C. (2006). *Building successful collaborations: A guide to collaboration among non-profit agencies and between non-profit agencies and businesses*. Cambridge & North Dumfries Community Foundation.
- Patel, H., Pettitt, M., & Wilson, J. (2012). Factors of collaborative working: A framework for a collaboration model. *Applied Ergonomics*, 43, 1–26. doi:10.1016/j.apergo.2011.04.009.
- Pinto, M.B., Pinto, J.K., & Prescott, J.E. (1993). Antecedents and consequences of project team resolving budget conflicts. *Group Organization Management*, 23(3), 237-255
- Plewa, C., & Quester, P. (2006). Satisfaction with university-industry relationships: The impact of commitment, trust and championship. *International Journal of Technology Transfer and Commercialisation*, 5(1), 79-101. <http://dx.doi.org/10.1504/IJTTC.2006.008654>
- Polit, D. F., & Beck, C. T. (2004). *Nursing research: Principles and methods*. Lippincott Williams & Wilkins.

- Provan, K. G., & Sebastian, J. G. (1998). Networks within networks: Service link overlap, organizational cliques, and network effectiveness. *Academy of Management Journal*, 453-463. <http://dx.doi.org/10.2307/257084>
- Ready, D. (2004). How to grow great leaders. *Harvard Business Review*, 82(12), 92-100.
- Tsai, W. (2001). Knowledge transfer in intraorganisational networks: Effects of network position and absorptive capacity on business unit innovation and performance. *Academy of management journal*, 44(5), 996-1004.
- Ring, P. S., & Van de Ven, A. H. (1992). Structuring cooperative relationships between organizations. *Strategic Management Journal*, 13(7), 483-498. <http://dx.doi.org/10.1002/smj.4250130702>
- Rosenberg, A.S., & Trevino, L.K. (2003). A proposed model of between –group helping: an
- Sandow, D. & Allen, A. M. (2005). The nature of social collaboration: How work really gets done. *Reflections, the SoL Journal*, 6(2-3), 1–13.
- Sanginga, P. (2006). Enhancing Partnerships for Enabling Rural Innovation in Africa: Challenges and Prospects for Institutionalizing Innovation Partnerships. *Innovation Africa Symposium, Kampala*, 20-23.
- Santoro, M. D., & Gopalakrishnan, S. (2000). The institutionalization of knowledge transfer activities within industry-university collaborative ventures. *Journal of Engineering and Technology Management*, 17(3-4), 299-319. [http://dx.doi.org/10.1016/S0923-4748\(00\)00027-8](http://dx.doi.org/10.1016/S0923-4748(00)00027-8).

- Sclater, N., Grierson, H., Ion, W. J., & MacGregor, S. P. (2001). Online collaborative design projects: Overcoming barriers to communication. *International Journal of Engineering Education*, 17(2), 189-196.
- Sierra, A. M. (2007). Developing knowledge, skills, and attitudes through a study: A study on teachers' professional development. *Íkala, Revista de Lenguaje y Cultura*, 12(18), 277-306.
- Sink, D. W., & Jackson, K. L. (2002). Successful community college campus-based partnerships. *Community College Journal of Research and Practice*, 26(1), 35-46.
- Sparks, D. (2002). Designing powerful professional development for teachers and principals. Oxford, OH: National Staff Development Council.
- Thompson, L. (2008) *Making the team: A guide for managers* 3rd ed. Upper Saddle River, New Jersey: Pearson Prentice Hall.
- Thomson, A. M., & Perry, J. L. (2006). Collaboration processes: inside the black box. *Public Administration Review*, 66, 20–32.
- to overcome them. *MIT Sloan Management Review*, 43(3), 67-75.
- Tsai, W., & Ghoshal, S. (1998). Social Capital and Value Creation: The Role of Intrafirm
- Tyosvold, D., & Poon, M. (1998). Dealing with scarce resources: open-minded interactions for
- Van de Ven, A. H., & Walker, G. (1984). The dynamics of interorganizational coordination. *Administrative Science Quarterly*, 598-621.
- <http://dx.doi.org/10.2307/2392941>.

- Warm, D. (2011). Local government collaboration for a new decade: Risk, trust and effectiveness. *State & Local Government Review*, 43(1), 60-65. doi: 10.1177/0160323XI
- Weiss, J., & Hughes, J. (2005). Want collaboration? *Harvard Business Review*, 83(3), 93-101.
- Wilde, J. (2010). Guidelines for professional development: An overview. In C. J. Casteel & K. G. Ballantyne (Eds.), *Professional development in action: Improving teaching for English learners* (pp. 5-11). Washington, DC: National Clearinghouse for English Language Acquisition. Retrieved from http://www.ncela.gwu.edu/files/uploads/3/PD_in_Action.pdf
- Zaheer, A., McEvily, B., & Perrone, V. (1998). Does Trust Matter? Exploring the Effects of Interorganizational and Interpersonal Trust on Performance. *Organization Science*, 9(2), 141-159. <http://dx.doi.org/10.1287/orsc.9.2.141>.

APPENDIX I: INTERVIEW GUIDE

PROSPECTS AND CHALLENGES OF INTERDEPARTMENTAL COLLABORATIONS IN RUNNING PROFESSIONAL DEVELOPMENT PROGRAMMES IN KNUST

I am an M.Sc. student at Kwame Nkrumah University of Science and Technology, Department of Construction Technology and Management. I am presently conducting a study on ‘prospects and challenges of interdepartmental collaborations in running professional development programmes in KNUST’

As a requirement of the research, I am undertaking an interview to look for input from the Heads of Department within KNUST. Your knowledge and opinions on the subject are vital to this research. The research will provide information on the challenges of interdepartmental collaborations, benefits of interdepartmental collaborations and the factors that can influence a successful interdepartmental collaboration on Professional Development Programmes at KNUST.

Your responses will be handled as strictly confidential. This information will be utilized for academic purposes only. Upon your request, a summary of the findings will be made accessible.

I understand that this will take some of your precious time, however, please try and participate, as your input is very important towards the accomplishment of this research. I wish to take this opportunity to express gratitude to you in advance for your involvement.

Yours Sincerely,

Eva Puorideme
MSc. Student
Mobile:0267122221
Email: evapuorideme@gmail.com

PART ONE: RESPONDENT'S PROFILE

Please, respond to the questions by ticking (✓) the appropriate box for each item.

1. Gender

i. ☐ Male ii. ☐ Female

2. What is your highest level of education?

i. ☐ First degree iii. ☐ Second degree iv. ☐ PhD

v. ☐ Others please specify_____

3. Age of respondent

i. ☐ 30 years and below ii. ☐ 31-40 years iii. ☐ 41-50 years iv. ☐ 51
years and above

4. Please indicate your current position

i ☐ Head of Department

ii. ☐ Other Please Specify

5. How long have you been working in the University?

i. ☐ 5 years and below ii. ☐ 6-10 years iii. ☐ 11-15 years iv. ☐
16 years and above

PART TWO: NATURE OF PDP'S RUNNING IN THE DEPARTMENT.

Please, kindly respond to the questions by ticking (✓) the appropriate box for each item.

6. Does your Department **currently** run Professional Development Programmes (PDPs)?

i. ☐ Yes ii. ☐ No

7. If **Yes**, what are the programs that are being run?

8. If **No**, has your department run PDP(s) in the past?

i. ☐ Yes ii. ☐ No

9. *Give reasons for your answer*

above _____

10. Has Your Department collaborated with any Department in the University to run PDP's?

i. ☐ Yes ii. ☐ No

11. If Yes, which Department (s) did your Department collaborate with to run the PDP's.

12. What kind of collaborations exist between your department and other departments?

13. What were your objectives for collaborating with these departments?

**PART THREE: CHALLENGES OF INTERDEPARTMENTAL
COLLABORATION IN RUNNING PDPs**

14. Do you encounter any challenges in collaborating with these departments?

i. ☐ Yes ii. ☐ No

15. If **Yes**, please specify the challenges of Interdepartmental collaboration in running Professional Development Programmes_____

Check List for Examining Challenges (*in case these have not been mentioned, ask if these are challenges they face*).

	CHALLENGES	
1	Poor relations network with stakeholders	
2	Poor relations network between Departments	
3	Lack of information about collaborations on PDP's	
4	Lack of Departmental support	
5	Lack of administrative support	
6	Lack of motivation	
7	Lack of shared vision	

16. In general, would you say Interdepartmental Collaboration in running Professional Development Programmes is beneficial?

i. ☐ Yes ii. ☐ No

17. If Yes, what are some of the benefits of Interdepartmental Collaboration in running Professional Development Programmes?

18. In your opinion, what are the conditions under which a successful Interdepartmental collaboration in running PDP's can be achieved?_____

THANK YOU