UNIVERSITY OF CAPE COAST

EMERGING ISSUES OF STAFF QUALIFICATION IN TAKORADI TECHNICAL UNIVERSITY'S TRANSITION FROM POLYTECHNIC

JOSEPH STANLEY ANNAN

UNIVERSITY OF CAPE COAST

EMERGING ISSUES OF STAFF QUALIFICATION IN TAKORADI TECHNICAL UNIVERSITY'S TRANSITION FROM POLYTECHNIC

BY

JOSEPH STANLEY ANNAN

Thesis submitted to the Institute for Educational Planning and Administration, of the University of Cape Coast in partial fulfilment of the requirements for the award of Master of Philosophy degree in Administration in Higher

Education

NOVEMBER 2023

DECLARATION

I hereby declare that this thesis is the result of my own original research and

Candidate's Declaration

that no part of it has been presented for another degree in this university or
elsewhere.
Candidate Signature Date
Name:
Supervisors' Declaration
We hereby declare that the preparation and presentation of the thesis were
supervised in accordance with the guidelines on supervision of thesis laid down
by the University of Cape Coast.
Principal Supervisor's Signature Date
Name:
Co Supervisor's Signature Date

NOBIS

ABSTRACT

The purpose of this study was to explore the emerging issues of staff qualification in Takoradi Technical University's transition from Polytechnic. A descriptive survey design was employed for the study. The population of the study comprised senior and junior staff at Takoradi Technical University. A sample of 231 were selected via a stratified and simple random sampling techniques for the study. Data were collected with questionnaires (Staff Qualification Questionnaire [SQQ]). Frequencies, percentages, means, and independent samples t-test were used to analyse the data. The study showed that staff qualification characteristics after transition from Takoradi Polytechnic to Takoradi Technical University are important. The emerging staff characteristics include supporting lifelong learning and utilising various programmes, early career, evolving position, further learning, and vocation change, flat and vertical professional movement and portability. The study also revealed that three categories of skills-set (communication, technical, and conceptual) are essential for current and potential staff. The study further revealed that Takoradi Technical University is confronted with recruitment challenges such as limited financial resources to expand services, inadequate staff development programmes, and political influences with regard to staff qualifications. Furthermore, the study revealed that gender is not a significant determinant of the use of certificates to employ staff at Takoradi Technical University. From the results obtained, it is recommended among others that human resource management (HRM) of technical universities should design effective, efficient and transparent skills-set toolkit and development programmes to facilitate staff's competency.

KEY WORDS

Emerging

Issues

Staff qualifications

Staff characteristics

Skills-set

Quality assurance

Technical university

ACKNOWLEDGEMENTS

The success story so far compels me express my honour by offering my true thanks to Prof. (Br.) Michael Amakyi and Dr. Might Kojo Abreh as supervisors for their excitement, enthusiastic direction and guidance, essential feedback, and sharp oversight that pushed me on. They provided important thoughts and directions that help in completing this thesis.

I'm thankful to my better half; Irene Biney, kids; Valentina Ameley, Asheley, Ashokor, Ashikaah, Esinam and my sister; Mrs. Jacqueline Ruby Amissah-Amoah for supporting me to pursue the programme. I likewise stretch out my appreciation to Ebenezer Kobina Mensah for his support and colossal help toward the outcome of this study. I am grateful to Prof. Frederick Boakye Yiadom of Takoradi Technical University's motivation and assistance in the distribution of questionnaires and collection of data. I am similarly thankful to all MPhil students at the Institute for Educational Planning and Administration, UCC, for their recommendations, ideas, and commitments concerning my study.

NOBIS

DEDICATION

To my family for their support.



TABLE OF CONTENTS

Content	Page
DECLARATION	ii
ABSTRACT	iii
KEY WORDS	iv
ACKNOWLEDGEMENTS	v
DEDICATION	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	xi
CHAPTER ONE: INTRODUCTION	
Background to the Study	1
Statement of the Problem	10
Purpose of the Study	12
Research Questions	12
Research Hypotheses	13
Significance of the Study	13
Delimitation	14
Limitations	15
Operational Definition of Terms	15
Organisation of the Study	17
CHAPTER TWO: LITERATURE REVIEW	
Theoretical Review	19
Iceberg Theory of Staff Selection and Competency	20
Social Systems Theory	23
Historical Background of Polytechnics in Ghana	24

University of Cape Coast

https://ir.ucc.edu.gh/xmlui

Overview of Polytechnic Education in Ghana	25
Concept Review	32
Concept of staff qualifications	32
Emerging staff qualification characteristics	35
Staff skills-set	37
Quality assurance of staff qualification	43
Staff development	48
Elements of staff development	49
Effects of staff development on qualifications	51
Staff qualification challenges	52
Summary of Literature Review	54
CHAPTER THREE: RESEARCH METHODS	
Introduction	56
Research Design	56
Study Area	57
Population	58
Sampling Procedure	58
Data Collection Instrument	59
Pilot-testing	60
Validity and reliability	61
Data Collection Procedures	62
Data Processing and Analysis	63
Ethical Consideration	66
Chapter Summary	66

CHAPTER FOUR: RESULTS AND DISCUSSION

	Introduction	67	
	Demographic Characteristics	68	
	Results	71	
	Research Question 1	71	
	Research Question 2	73	
	Research Question 3	75	
	Research Question	80	
	Hypotheses	85	
	Discussion	87	
	Essential qualifications	87	
	Emerging characteristics of staff qualifications	88	
	Categories of staff skills-set	89	
	Quality assurance of staff qualifications	91	
	Staff recruitment challenges	93	
	Differences in quality assurance criteria based on gender	94	
	Chapter Summary	95	
	CHAPTER FIVE: SUMMARY, CONCLUSIONS AND		
RECOMMENDATIONS			
	Introduction	96	
	Summary	96	
	Key Findings	97	
	Conclusion	99	
	Recommendations	100	
	Suggestions for Future Research	100	

REFERENCES	102
APPENDICES	116
APPENDIX A: STAFF QUALIFICATION QUESTIONNAIRE	116



LIST OF TABLES

Table	P	age
1	Results of reliability coefficients	62
2	Gender Distribution of Respondents	68
3	Period of Appointment	69
4	Nature of appointment	69
5	Level of Education	70
6	Age Range	71
7	Essential Qualifications	72
8	Before Transition Staff Qualification Characteristics	73
9	Current Staff Qualifications Characteristics	74
10	Communication Skills	76
11	Technical/Professional Skills	77
12	Conceptual Skills	79
13	Quality Assurance Criteria	81
14	Recruitment Challenges	84
15	Independent Samples t-test of the Views on the Quality Assurance	
	Critaria with regard to Gender	86

NOBIS

CHAPTER ONE

INTRODUCTION

The changes in educational institutions, for example, from polytechnics to technical universities in Ghana, influence resources (both physical and human resources), particularly on issues of staff qualification. Staff qualification may aid staff individually to advance their work and give them the cutting edge to be effective in the workspace. According to the International Labour Organisation ([ILO], 2000), staff qualification highlights the competencies, abilities, information, and skills that propel and boost a staff's capacity to get and embrace a task, advance on the job, and adjust to new developments. Thus, secure one or more jobs if he/she desires them or has been laid off and enter more successfully into the Ghanaian higher education workspaces at several periods of their existence (ILO, 2000). While not mainly explored in Ghanaian higher educational institutions, especially Takoradi Technical University, a focus on staff qualifications presents an open door for instructive training preparations and mediations to upgrade and work on the abilities and skills level of staff to enable them to survive within their transition from polytechnic.

Background to the Study

It is widely acknowledged that higher education with regard to technical universities is the way to innovative development and the attendant financial development and improvement of countries (Omebe & Omebe, 2014; Oyebade, Oladipo, & Adetoro, 2012). It is in acknowledgment of this reality that institutions of quality assurances, colleges, policymakers, researchers, staff, students and the overall population submit enormous funds to guarantee the

preparation and establishment of high standard technical universities (Jacob, Xiong & Ye, 2015). The staff of a higher education institution constitute its scholarly pool of resources and comprise the distinct advantage to the organisation's accomplishment (Arubayi, 2009; Bayissa & Zewdie, 2010; Tella & Daniel, 2013). The accomplishment of quality teaching or training is along these lines reliant upon the type and inspirational levels of the staff in the tertiary institution (Fielden, 1998; Hill, Lomas, & MacGregor, 2003). Indeed, Bowen and Schuster (1988 as cited in Garwe, 2015) offered that greatness in institutions of higher education is an element of individuals they recruit as staff (teaching and non-teaching).

In African countries, state leaders have set up legal instruments and laid out administrative foundations to guarantee quality staff in higher education are employed. However, the application of the necessary principles persists as a challenge in the newly converted technical universities in Ghana. According to European Training Foundation (ETF, 2016), quality assurance as a general rule, momentarily tends to relate ideas like quality ethos (culture), quality administration, and the quality stages and faces. ETF further stressed that important functions and processes of quality assurance of staff qualifications perspective are qualification standards, assessment and certification. According to Mushemeza (2016), universities with technical mission supposed to fulfill the guidelines set for higher education training on appropriate issues like student admittance prerequisites, duration of programmes, education requirements of staff, infrastructure and moral principles by which the staff of universities ought to be directed. Mushemeza further stressed that all tertiary institutions are expected to follow the laws and guidelines for employing, promoting, and

terminating staff appointments. The consistence to this legal instrument empowers tertiary institutions to plan quality assurance on systems and keep up with quality control with regard to staff qualification.

The Act 922 (Technical Universities Act 922, 2016) changed polytechnics over to universities with technical status to give advanced education in science, engineering, and innovation (technology-based) professions, specialised and professional training, and other interrelated programmes. A critical attribute of a technical universities is the prerequisite that the staff ought to have qualification that goes beyond both intellectual and expert capabilities. In Ghana, holding a PhD was not a strict requirement to teach in the Polytechnics. After the transition from Polytechnic to Technical University, an applicant who wishes to lecture in the Technical University must possess a PhD. According to Ministry of Education ([MOE], 2014), institution of higher education with technical status, having just educational qualifications does not warrant the point of qualifying as a faculty. Expert or industry experience is a key necessity. For instance, in Germany, it is required of faculty in the technical universities to have minimum three to five proficient involvement with the industry.

The professional direction and industry-centered nature of the programmes technical universities offer highlight the need for staff and instructors have previous experience in the industry (MoE, 2014). The calibre of staff employed, trained, retrained and retained over the change of polytechnics' status is a major problem that should be resolved. According to MoE, obviously, it could be troublesome at the undeveloped phase of the universities with technical status to demand the previous experience of the said

position as a prerequisite for all staff the transitioning polytechnics. Simultaneously, this necessity cannot be overlooked completely. For instance, the technical committee on Ghana's transformation of polytechnics to technical universities suggested that any institution looking for programme certification in the technical university ought to have a faculty with a minimum qualification of Ph.D at the rank of a senior lecturer and, ideally, with background exposure in the world of work. Likewise, faculty at various departments should have three lecturers employed full-time with pertinent graduate degrees (masters with dissertation or thesis), no less than one of whom should have insight in the industrial space.

The change from polytechnic to technical universities has invested much effort and difficulties on staff among the technical universities. On the grounds that considering the elements of higher education institution with technical status where staff assume crucial part in the accomplishment of those capacities, staff in technical universities have a great work to do (Technical Universities Act 922, 2016). Technical universities have been approached to instruct each student well, keep up with high scholarly norms and perform teaching activities with ease and understand the ramifications of educating as they are responsible for whatever happens in their field. The technical universities have the obligation of instructing the large part of the population as expected of staff to be prepared in the abilities and information in their specialty, stay up to date with the requests of societies and communities, and be familiar with scholarly and scientific informative methodology and on new techniques for showing which will advance the achievement of the overall instructional objectives (Rebore, 2007).

The staff of technical universities need constant and continuous development and training to be current with the changing needs of students enrolled in technical universities. As the job rank and conditions within technical universities become more intricate, the significance of staff development programmes builds up (Rebore, 2007). Rebore is of the view that Human Resource Management (HRM) is worried of staff development thereby giving staff the chances to keep a good attitude toward teaching style and work on their efficacy. It is not just attractive yet additionally a movement to which technical university framework should place greater importance to human resource in addition to financial resources to keep a competent and proficient staff concerning Takoradi Technical University's transition from Polytechnic.

The fundamental significance of staff qualification lies in their impact on the programme content, process of teaching and nature of technical university (Sheridan, 2009). The training of higher education, specifically technical university staff influences the nature of administrations and results principally through the information, abilities and skills that are communicated and energised by professionals. It is additionally viewed as vital that staff have faith in their capacity to coordinate and execute the strategies important to achieve wanted outcomes (Fives, 2003). In the view of Ministry of Education [MOE] (2014), staff qualification as an essential concept is espoused through skills-set and expertise that are accepted as valuable to respond to industrial needs interests. MOE further stressed that these needs and interests concentrate on technological advancement, transfer of innovation and skills-driven or acquisition of employable skills among technical universities in Ghana.

Similarly, it is not the qualification per se that has an impact on learners outcomes but the ability of better qualified staff members to create a high-quality higher education learning environment that makes the difference (Elliott, 2006; Sheridan, Samuelsson & Johansson, 2009). There is strong evidence that enriched stimulating environments and high-quality practice-oriented activities are fostered by better qualified staff; and better quality practice-oriented activities leads to better learning outcomes (Litjens & Taguma, 2010). Key elements of high staff quality are the way staff involve children and stimulate interaction with and between children as well as staff's strategies such as mentoring, practice-oriented, guiding, modelling and questioning. More specialised staff education and training on higher education especially technical universities are strongly associated with stable, sensitive and stimulating interactions (Shonkoff & Philips, 2000).

According to Power, Millington and Bengtsson (2015), it is a challenge for staff to transform the ways of learning and assessment in technical universities as staff capacity is already low. Under investment and limited funding have restricted institutional ability to hire additional lecturers to cope with the rising student numbers, which has resulted in large class sizes at many institutions. As a result, many faculty members find supplementary jobs, which limit their time for teaching, mentoring and research and others opt to leave the sector altogether in search of more highly paid positions (Holm, 2012).

In the view of Power et al. (2015), there is solid proof that staff involvement in technical university activities improves learning outcomes; this presents a benefit in light of their capacity compared with other staff. The quantity of exceptionally taught people will increment, and rivalry inside the

workspace at the more significant levels will develop as polytechnics obtain technical university status in Ghana. Furthermore, Power et al. indicated that as individual staff members reach their higher education targets, they will become hesitant to work in a lower-paying position. To Power et al., the inadequate number of skilled persons in technical universities and actually undermines their potential for socio-economic development, technological catch-up and absorptive capacity. The skills and qualifications of the staff in technical universities have become the key to success of a highly innovative technical universities (Gehrke, Kühn, Rule, Moore, Bellmann, & Siemes, 2015). Gehrke et al.'s assertion resonate with the current GTEC's directive for tertiary institutions to use the minimum requirement to employ staff. For this reason, the higher education institutions should be focused on the development of qualified workforce by the Human Resources Management (Armstrong & Armstrong, 2014). The Human Resources Management is not only focused on selection, staffing and dismissing employees but also on human resource development, i.e., education, learning and training of employees.

The types and levels of qualification found among staff of technical universities in different countries vary considerably (Munton, Mooney, Moss, Petrie, Clark, & Woolner, 2002). Differences are related to a wide range of issues, in particular how the staff and the services themselves are structured, and how technical universities work, and therefore the role of technical universities staff in the higher education context. At the heart of this matter is the fact that Ghanaian technical universities are rethinking their mission in society - a factor mentioned by researchers (Bakah, 2010; Tetteh, 2006; Rasheed, Aslam, Sarwar, 2010; Kwapong, Opoku & Donyina, 2015) in this

section and a process which must be ongoing if higher education is to be at the cutting edge of social change. In addition, the present climate is fiercely competitive regarding funds, students and even the actual right to deliver higher education as alternative systems appear (Barnes as cited in UNESCO, 1994) influencing staff qualifications. For technical universities, recruiting and maintaining high calibre of staff is both internationally recognised and locally relevant which has places great emphasis on qualification of staff to ensure quality outcomes (Technical Universities Act 922).

Ishola, Adeleye and Tanimola (2018) opined that a stall professional certification refers to a qualification conferred by a professional body and the testament that an individual has met the stipulated requisite on the academic, practical and vocational skills-set for a profession. Governmental training institutions or licensing bodies usually inculcate and specify the necessary competencies, skills-set and knowledge needed in certain 'work endeavour' before obtaining its certification (Chen, 2010). According to Chen, certification system is not only used for personnel quality control which ensure the staff have certain level of professional knowledge and are qualified for the job, but it a source of motivation and training for higher education responsibility when acquired by an employee. Education is commonly stipulated as skills-set and measure of potential productivity (Benson, Finegold, & Mohrsman, 2004). It is a commonplace to use educational attainment in employment decisions (Chen, 2010). Certification has been linked to certain positions (accountant job) performance and professionalism in various job outcome and context (He, 2015). He further indicated that, in fact, it was demonstrated as a major source of performance outcome for specific job positions in technical universities.

In a more immediate sense, staff qualification and professional development in technical universities takes place to accomplish two primary objectives (Sheridan, Edwards, Marvin & Knoche, 2009). According to Sheridan et al. (2009), it is anticipated that professional development will advance the knowledge, skills, dispositions, and practices of higher education providers in their efforts to educate learners. A second objective is to promote a culture for ongoing professional growth in individuals and systems (Candy, 1991). The first objective concerns the advancement of practitioner knowledge, skills, and dispositions (Katz, 1995). Practitioner knowledge consists of facts, concepts, ideas, vocabulary, and related aspects of educational culture and best practice. Skills consist of units of action that occur in a relatively discrete period of time and that are observable or easily inferred. The second objective of technical universities staff and professional development involves sustaining high-quality professional practices by enhancing systems and individuals to engage in activities that are self-sustaining and growth producing. In the view of Sheridan et al., this involves ensuring that the responsibility for delivering effective services and facilitating ongoing growth and development among practitioners is transferred from a formal trainer (coach, consultant, group facilitator) to individuals and groups of professionals within technical universities settings.

Staff qualification has been used as a basis of measuring performance in most workplaces. Goad (2002) states that the argument has been that employees with higher academic qualifications perform better compared to those of lower academic qualifications. Academic qualification is one of the main benchmarks in measuring performance. Bartone (2010) suggests that the objective of

employee academic qualifications and performance is to form a basic standard under which employees will be engaged and form a predictable standard of performance. In his study, Robinsons (1997) argues that organisations and managers often use education as a measure or indicator of a person's skills and abilities during the hiring and recruitment process.

Statement of the Problem

Van Der Donckt (1993, as cited in UNESCO, 1994) postulated that one significant deficiency seems to have been the poor readiness of institutions of higher education wherever to deal with is the process of changing from one level to another. Thus, there has been massive interest for preparing specialised and expert labour force which will support the best resource of tertiary educational process for its staff (faculty, practitioners and non-teaching). In this way, development of staff, which reaches out across the HRM training for all categories of staff, including the procurement of explicit abilities and adaptation with major policies and strategies of higher education, has turned into a need objective of which Takoradi Technical University is no exception.

According to Peček (2000), the overall standards for the staff development in higher education ought to follow: the reasonable goals of institutions of higher education, point by point recognisable proof of the staff's training requirements and the necessities of institution, as well as the mission and vision of the management of higher education, who should furnish their staff with training of high quality. This assertion confirms the more itemised cases of Hazelkorn (2004) that the organisations ought to - among other - additionally execute and direct research exploration that are of rigorous, yet in addition the teaching and learning with students' support.

The most striking development in higher education in the last several decades has been the tremendous growth of technical universities. Currently, there are 10 technical universities that are already established in Ghana. Today, well over 50,000 students are enrolled in technical universities in this nation. In the past, there was a real concern over whether the technical universities could attract, enough staff in the numbers that were needed. In recent years, the tone of the writing on technical universities teachers is changing— from one of worrying about quantity (and sometimes quality) to a concern just for the quality of staff (Act 922). This alteration in tone has been caused by a change in the technical universities' situation with respect to recruiting staff. Finding themselves in such a position, technical universities including Takoradi Technical University have the opportunity to start critically reviewing their formal standards for employment and, if necessary, to establish new (higher) criteria for selection of faculty members. But are they doing this? What formal qualifications are necessary for employment as a staff member in a technical university today? What qualifications are considered as important in an application for employment as a technical university staff?

Although the Technical Universities in Ghana now claim to have over 75 Ph.Ds staff and 1366 Master level certificates combined with teaching and other sections (MOE, 2014), there is the necessity to set out on a sped-up programmes of staff development to improve their qualifications and expert abilities of the staff, including the arrangement of chances to function well in the working environment utilising their full abilities and experience. MOE further demonstrated that Government of Ghana's representative body, Ghana Tertiary Education Commission [GTEC] consulted the Polytechnics plan and

carry out a designated programme for the development of staff to help the change of the polytechnics to technical universities. Clause 10 of the Bill (Technical Universities Amendment Bill, 2017) amends subsection (6) of section 42 of Act 922 to apply the requirements of the harmonised Statutes and Scheme of Service for the Technical Universities to persons in the employment of a polytechnic deemed to have been duly employed by the respective Technical University. However, the situation at Takoradi Technical University concerning staff qualifications is unknown.

Furthermore, a careful review of literature on staff qualification indicates less work has been done in Ghanaian technical universities. There seems to be limited research pertaining to staff qualification and technical universities in developing countries especially Ghana, despite calls to expand perspectives (MOE, 2014; Bakah, 2010; Tetteh, 2006). Additionally, the few studies on staff qualification done are focused on staff retention, training as well as different types of organisations and industries like banking and finance, early childhood care, etc. (Mushemeza, 2016; Tetteh, 2006; Bakah, 2010; Benešová & Tupa, 2017). However, it is not certain what the situation in Ghanaian technical universities is. It is against this backdrop that this study was conducted to ascertain the actual situation on the emerging issues of staff qualification in Takoradi Technical University's transition from Polytechnic.

Purpose of the Study

The main purpose of the study was to explore the emerging issues of staff qualification of Takoradi Technical University's (TTU) transitioning from Polytechnic.

Research Questions

The following research question were developed to guide the study:

- 1. What essential qualifications should staff of Takoradi Technical University possess?
- 2. What are the characteristics of the emerging staff qualifications issues at Takoradi Technical University?
- 3. What category of skills-set are relevant to the qualifications of staff at Takoradi Technical University as a result of their transition from Polytechnic?
- 4. What quality assurance criteria are relevant to the current emerging staff qualifications issues at Takoradi Technical University?
- 5. What recruitment challenges are associated with staff qualifications of Takoradi Technical University's transition from Polytechnic?

Research Hypotheses

- H₀: The views of male and female staff on quality assurance criteria of staff qualifications at Takoradi Technical University are significantly not different
- 2. H₁: The views of male and female staff on quality assurance criteria of staff qualifications at Takoradi Technical University are significantly different.

Significance of the Study

The current study provides further awareness of emerging staff qualification issues in technical universities. The current outcomes of the study may support the academic debate on the transition of polytechnics to technical universities in Ghana and share knowledge on the emerging issues of staff qualification. This current study is principally significant, considering that

scholarly discussion regarding the matter, according to a Ghanaian perspective, is restricted.

The findings from this current study will help the management of technical universities to have vital information about staff qualification regarding the required skills-set, professional development form, the extent to which staff meets the minimum qualification, and the challenges associated with staff qualification as a result of their transition from polytechnic.

The results of this study will offer the policymakers of the government's institution (Ministry of Education, Ghana Tertiary Education Commission) a vital understanding and an added dependable plan to supervise the effect of the staff qualifications in Ghanaian technical universities. Additionally, the current study outcomes may provide stakeholders with the essential knowledge to permit them to offer practical recommendations for the enhancement of staff recruitment in the Ghanaian labour market.

The current research will, therefore, add knowledge to existing works relating to staff qualification in Ghanaian higher educational institutions, especially technical universities. This will act as a manual for researchers and provide information upon which further investigations can be conducted.

Delimitation

The study was carried out in Sekondi-Takoradi Metropolis in the Western Region of Ghana. Although, there are ten technical universities in Ghana, the study was restricted to the Takoradi Technical University (TTU). The study was confined to all the staff in Takoradi Technical University. These staff are heterogeneous with varied characteristics. The study focused on staff

qualification, skills-set, quality assurance criteria of qualification, staff recruitment challenges, anything apart from these was not considered.

Limitations

Despite the effort to ensure the validity and reliability of the findings of this study, a number of factors posed as a challenge to this study, thus classifying all the staff as one. This is due to the number, different qualifications, skills and roles of participants which made it impossible to carry out the analysis using individual participant as a unit of analysis. In the conduct of the study, the issue of bias cannot be ruled out completely since questionnaires were used in collecting the data. Questionnaires do not provide an opportunity to collect additional information through observation, probing, prompting and clarification of questions while they are being completed. Again, questionnaire is usually associated with a low return rate. As a result of impact of COVID-19, the return rate of the questionnaire was 88.85% (231). Furthermore, the study was limited with respect to its scope and research methods. Unavailability of literature on staff qualification within Ghanaian Technical Universities was a problem, however it did not affect the findings as similar studies have been conducted in other sectors of Ghana were reviewed and contextualised.

Operational Definition of Terms

Skills-set

Skills-set are the skills an employee brings to the workplace to function effectively. A skills-set embodies an individual's capabilities needed to move progressively among occupations and within the work market. According to the European Training Foundation (ETF, 2016), skills-set are significant,

particularly in proceeding with professional training; however, for somebody to show that they have many skills-set, it requires some versatility to perform a function.

Staff qualification

Staff qualification refers to the credentials an individual must satisfy to meet a job's conditions. Ridoutt, Dutneall, Hummel, and Selby-Smith (2002a) viewed staff qualification as the quality of achievement tied to an individual that meets the requirements and preferred description of an advertised job. Institutions use staff qualifications as a benchmark to determine the quality of their staff.

Certificate

A *certificate* is a formal document attesting to an individual's completing and meeting the goals of a training or professional course. According to Cedefop (2015), conferring a qualification ought to be perceived as giving an authentic certificate that formally confirms that an individual has achieved outstanding learning results.

Technical skills-set

Technical skills-set are solid skills frequently connected with the utilisation of equipment and tools connected with work appropriately and proficiently, as well as every technical or specialised issue of concern. Technical skills-set are specialised abilities that require a mix of explicit information and the abilities of the work done utilising the body to accomplish the objective (Damooei, Maxey & Watkins, 2008).

Communication skills-set

Communication skills-set includes using appropriate and convenient mediums and methods to send information to get one's point across to others. Shrivastava and Prasad (2019) believe that effective communication is essential in the work environment for expanding staff usefulness and institutional performance by using verbal and nonverbal communication methods.

Organisation of the Study

Chapter One provided an introduction to the study along with the background to the study, problem statement, purpose, research questions significance of the study, delimitation and limitations of the study. Chapter Two focused on literature review. Literature was reviewed under three thematic area (theoretical review; conceptual review-concept of staff qualification, professional development, and skills set; and historical antecedents of technical universities in Ghana).

Chapter Three detailed the research methods. This focusd on the research design, population, sampling procedures, and data collection instrument with validity and reliability issues of the instrument to be discussed. Furthermore, data collection procedures and data processing analysis were discussed. Chapter Four presented results and discussion of the data retrieved. Chapter Five highlighted the study summary, conclusions, recommendations and suggestions for further studies.

CHAPTER TWO

LITERATURE REVIEW

Introduction

Takoradi Technical University's (TTU) upper hand rests with its quality staff. With well-organised HRM, it permits workers to up their expertise for their own advantage and the advantage of others. The notion of staff qualification is principal to institutional restoration and as a main thrust behind essential change. Schooling assumes a vital part in encouraging self-improvement as well as the advancement of human resources for the development of the country. The need for common sense and talented human capital for Ghana's general improvement cannot be over stressed. Hence, specialized (technical) and professional (vocational) training as an essential sector creates the fundamental specialized experts and proficient human capital that is satisfactorily reasonable for national development.

Apparently, the nation's efficiency is straightforwardly impacted by the specialized and professional schooling and instructional classes in the Polytechnics (Manuh, Gariba, & Budu, 2007). Even though the Polytechnic train a significant main part of labour force which decides the nation's employable skills and function effectively around the world, there is a public knowledge of which people think about these educational institutions as inferior in contrast with colleges and universities (MoE, 2014). August 2013 saw the seat of government accentuated those polytechnics have the ability to be changed into technical universities as they would be advised to be develop infrastructural facilities than a portion of the private colleges licensed to offer degree programmes (MoE, 2014). This part explored documented evidence of

related relevant literature. The review of literature section was divided into the accompanying subjects: theoretical review, historical antecedent of technical universities in Ghana, reviewed concepts on qualifications, skills-set, emerging characteristics of staff qualifications, quality assurance of qualifications, staff development, challenges associated staff qualification, and summation of main themes that occurred from the literature review.

Theoretical Review

Staff qualification is perceived differently by every institution in respect to the required competences. Thus, capabilities of staff worldwide market struggle and battle to recruit the best is inescapable (Albayyari & Lahidji, 2002). The TTU's transitioning is imperative for staff to be developed constantly to sustain and enhance the institution's creativeness. The transition from polytechnic to technical university to full tertiary level additionally requires the need to continually work on the abilities and capabilities of staff to empower them to meet the difficulties at workplace, technology and innovative ideas and worldwide patterns of advancement in our contemporary social spaces of work. Staff (instructing and non-educating) perform basic responsibility in ensuring technical education is of highest standard and valued at each degree of instructive area. Staff implement technical educational policies, carry out interventional approaches and ensure the effective utilisation of limited resources to guarantee standards outlined (Candy, 2009). The study impinges on the philosophical framework of iceberg's theory staff selection and competency. Thus, the next section discusses iceberg's theory staff selection and competency relating to this research work.

Iceberg Theory of Staff Selection and Competency

The theory of iceberg symbolises a connected frameworks of ideas intended to assist an organisation or individual to uncover the forms of people's conduct and emotive patterns that lie beneath a specific situation. The work David McClelland is credited with the theory of iceberg staff selection and competency that focuses on tests of knowledge, predisposition tests and individual frame of references that are ineffectual and incapable ways of deciding if an individual performs his/her assign roles well (McClelland, 1973). McClelland reasoned that the variables that permitted a staff to dominate were not evident on a superficial level, and sometimes were not known to the worker. Rather than zeroing in on knowledge or inclination, McClelland zeroed in on abilities and skills. The model of iceberg theory that underpins staff select is a perspective about the qualities that could settle on somebody to be awarded or employed in an institution making the person a good match for a specific job (Thompson, 2019). The apparent piece of the iceberg model is a lot more modest than the part that stays stowed away submerged. Likewise, the empirical realities about a prospective staff are frequently considerably less significant than immaterial individual characteristics he/she could bring to the institution.

As indicated by Iceberg model of staff selection and competency, it lays out that numerous individual attributes that impact what staff do: social responsibilities, competence, knowledge, mental self-view, characteristics and thought processes (Akoo, 2017). These different qualities happen at various degrees of awareness. The model of iceberg staff selection and competency demonstrates that the most cognizant individual attributes are those visible

pieces above water on the noticeable glimpse of something larger, while the qualities that are less cognizant or oblivious are beneath water, on the lowered piece of the iceberg (Thompson, 2019). The attributes which are most cognizant are staff information and abilities, portrayed as a hint of something larger. Competences address what staff can do and information is what you know, including staff's insight of things and circumstances. The model of iceberg staff selection and competence was deemed appropriate for the study since it shows that the abilities and information of staff are essential during the staff determination and selection stage at TTU. It essential to note that individual attributes assume huge part during the staff selection and recruitment considering the time frame of it influences staff performance. The skills of staff can be generally obvious during the recruitment process, and this will direct the interviewers or human resource personnel to decide that best reflect the right calibre of people that meets the goals and visions of the institution as well as accomplishing desired results.

Selecting the ideal individual for the specific job position is challenging yet critical assignment for many institutions of which TTU is no exception, especially, their value of inventive reasoning and creative ways of solving problems over repetition execution of normalised assignments. Unfortunately, a resume may portray the competences and background information the potential or current staff may possess and make good use at a workspace in view past academic achievement and career insight. Similarly, TTU transitioned as a fully-fledged tertiary institution cannot talk in relation to the more profound and possibly more huge qualities staff might have, like individual traits or inspiration (Thompson, 2019). In the model of iceberg staff

selection and competency, capabilities and information are addressed as a glimpse of something larger, the part that is apparent over the water. Individual characteristics, mental self-view, social responsibilities and inspiration are addressed by the piece of the iceberg that is concealed underneath the water.

The model of iceberg staff selection and competency reflects five kinds of ability: information (abilities), social responsibility, mental self-view, character, and inspiration (Zhao, 2013). Among the abovementioned, information is the noticeable part of the iceberg over the water, is the easiest to change; social responsibility, mental self-view, character, and inspiration, concealed beneath the surface, is more challenging to get, modify or create. To Zhao, when the skill on the outer layer of iceberg is challenging to make sense of the unrivalled exhibition of achievement, the ability underneath iceberg is regularly the critical element of individual's accomplishment. Also, that, the more deeply skill stows away on a deeper level, the harder it is to be noticed and estimated as it has future implications on meeting performance targets of institutions.

In iceberg model of staff selection and competency, the required abilities required for a specific job position is the clearest skill, trailed by information (Thompson, 2019). There is the need to ascertain the required skills-set of TTU as transitioned higher education institution required of its staff based on their current status. Thompson further highlighted that staff's insight of his/her position in social spaces is more subtle on a superficial level yet a more critical indicator of his/her accomplishment or disappointment in the position. Even more significant, the hidden traits that less obvious

including the mental self-view, individual attributes and inspiration are the most profound thought processes of the staff at the workplace.

Social Systems Theory

Luhmann's social system theory serves as a guide to a better understanding of staff employed in an organization and contributes to better practices (Hernes & Bakken, 2003). Without a shadow of a doubt, social systems theory is one of the essential theories of the last thirty years. According to Mayrhofer (2004), social systems theory offers a cohesive framework for investigating social reality at a macro level of abstraction. There is general agreement that systems are composed of at least two components (skills-set of staff) distinct from one another and the environment. Furthermore, several theoretical traditions have evolved systems of theoretical ideas that are both broadly similar and fundamentally distinct.

Social systems theory provides theoretical concerns at a sufficiently high degree of abstraction to be applicable to a wide range of staff and levels of investigation (Mayrhofer, 2004). The fundamental contribution of such a theoretical approach is mainly to serve as a framework for HRM and technical institutions. The opportunity to reconstruct a technical university's reality along these lines is provided by social systems theory, which formulates basic expectations about core characteristics of social systems (Mayrhofer, 2004), identifies crucial elements (such as skills-set with emphasis on communication or action or decision between individual staff and institution as the system or environment interface.

This illustrates the need for additional theoretical notions to enable the full use of social systems theory in human resource management. These ideas

do not reveal a big picture and a clear path forward. However, their strength comes in their narrower scope, allowing them to offer an analytical and practical framework for a particular circumstance (Mayrhofer, 2004). For instance, communication skills-sets in social systems can be better understood with power notions (Pfeffer, 1992). However, it is unclear which forms of communication are recognized by various social structures. Furthermore, not all communication initiatives have the same opportunity to go through the systems.

It is difficult to see through and control social structures in their entirety. A good understanding of the system is insufficient for TTU management's attempts to steer the system in the desired direction. As a result, there is an insurmountable gap between those systems and the organization itself (Willke, 1987 as cited in Mayrhofer, 2004). This calls for logical interventions using mental and social process to bridge the gap between staff qualifications and TTU's expectations.

Historical Background of Polytechnics in Ghana

The early established polytechnics in Ghana were mandated to train people in crafts (Baiden, 1996). The early 1960s in Ghana witnessed technology and industrial development, emphasizing later turning the polytechnics into specialized training institutions and framing it from a policy perspective (MoE, 1993). Since these specialized institutions (polytechnics) were offering second-cycle courses while the colleges were offering higher tertiary courses, the country's labor supply deficit affected various sectors of the economy. Some specialised training institutions (polytechnics) were established to prepare lower-middle-level skills to solve the labour deficit in Ghana. Nyarko (2011)

pointed out that three cities, namely Accra, Kumasi, and Takoradi, were the initial focus of establishing these specialised training institutes (polytechnics).

Following progress made in 1963, these specialised training institutes were re-assigned to assume the status of polytechnics to offer programmes that are non-tertiary based. Similarly, 1987 saw the institutionalisation of a University Rationalization Committee (URC) in Ghana by the government to foster recommendations for improving the administration, instructional activities, and financing of tertiary institutions in Ghana. The government provided a white paper in 1991 on the Reforms to the Tertiary Education System. The report gave unmistakable quality to the polytechnic form of education. This report gave birth to the proclamation of PNDCL 321 in 1992 (Polytechnic Law), the technical colleges (polytechnics) elevated up to tertiary status. Following the policy of the government, polytechnics were regionalised across the country. According to Atakora and Yeboah (2012), the polytechnics initiated and commenced Higher National Diploma (HND) programmes in 1994. The white paper explicitly expresses the development of a middle-level labour force as an unmistakable and significant job these polytechnics need to carry out throughout all programmes and courses offered, prompting the award of an HND certificate after completing a programme. The delivery of such courses and programmes should augment the pattern of technical training and offer skills that elevate the level of expertise and provide a platform for practical exploration (MoE, 1993).

Overview of Polytechnic Education in Ghana

Polytechnics as higher education institutions in Ghanaian context quite young with respect to been moved up to the status of tertiary institution in the

early 1990s. Even though the then specialized technical training institutes at Accra, Takoradi and Kumasi were re-assigned as polytechnics in 1963, they kept on working basically as non-tertiary, second-cycle organizations, offering generally progressed and a couple of professional level courses until 1992. Comparably, Tamale and Ho technical training institutes were raised to polytechnic status in the 1980s as well as Sunyani and Koforidua all have tertiary status (polytechnic) in 1997. Cape Coast Polytechnic followed similar path though it was the primary technical training institute which was designed and laid out as a polytechnic in 1986; nonetheless, similar to the wide range of various polytechnics, it officially gained the status of tertiary institution in 1992. Just Wa and Bolgatanga Polytechnics were imagined as tertiary organizations yet and still, at the end of the day, they became polytechnics basically by government proclamation.

The PNDC law 321 raised the polytechnics to the situation with public tertiary organizations (Polytechnics Act, 1992 as cited in Nyarko, 2011). The redesigning of the polytechnics presented on them the position to grant Higher National Diplomas (HND) and award different certificates. From that point forward, the technical universities have had their assigned mandates fortified and extended under another Law, the Polytechnics Act, 2007 (Act 745) to offer capabilities in a wide scope of 'applied arts' and 'science disciplines' at a degree, certificate and postgraduate certificate levels. In particular, the primary mission of the polytechnics as technical institutions is to, in addition to other things, offer:

- A. Instruction in tertiary in the fields of applied art, manufacturing, science, applied sociology, innovation, commerce or business and some other field supported by the Minister of Education.
- B. Prospects for competence development, scientific research exploration and dissemination scientific research findings.

A few of the technical training institutes (polytechnics) had begun offering Bachelor of Technology (BTech) degree programs in chosen disciplines in association for certain state funded universities before Act 745 was enacted. A segment of the general populace viewed the starting of degree programmes as untimely since the BTech programmes were supposed to develop the useful direction of the HND requirement and give HND graduates cutting-edge specialized information and abilities in addition to providing them an avenue to be more intelligent for scholastic and career advancement. It imperative to note that the introduction of such programmes sought project the face of polytechnics in the country.

HND programmes recorded an enrolment of 97% of total polytechnic students in 2012, with BTech programmes recording 2% and the remaining for courses in Technician Certificates. Data available shows that about 60% students read programmes in business and management in polytechnics as evidently known by the courses these institutions offer, even though most of programmes they offer aligns with science and technology. The present circumstance does not advance the expansion of specialized human resources' skills in Ghana. There was a 43,113 students' complete enrolment in the ten polytechnics in Ghana as indicated by GTEC, thus, each polytechnic has a total of 4311 students. According to GTEC, this data demonstrates that against a

60:40 norm of science/humanities proportion as against 55:45 in 1996/1997 among polytechnics. From 1996/1997 onwards, this figure consistently dropped throughout the years to 2007/2008 reaching 30:70, then in 2009/2010 went further down to the point of 24:76 and improved in 2010/2011 to 33:67. In 2012/13, the science/humanities proportion was 37:63 for an absolute understudy populace of 53,078. The 2012/2013 academic witnessed an astronomical increase in students' enrolment at 53,078 with proportion 37:63 for science/humanities.

Education in the polytechnic section emphasizes the utilisation of knowledge instead of the quest for new information. The push of polytechnic education is obtaining relevant skills-set that is expected of graduates to use in performing their roles explicitly in expert manner without overlooking the basic knowledge vital for performing appropriate assignments.

Technical Universities

The Government of Ghana in August 2013 laid out a specialized committee to work out modalities to transform polytechnics into degree granting universities. Government envisioned September 2015 to be the primary admission of students to seek programmes at the transitioned polytechnics to technical universities. The committee comprising of eight members officially begun work in August 2013 led by Dr George Afeti of the National Inspectorate Board with previous experience as a Rector of Ho Polytechnic (Amegashie-Viglo, 2014).

Rationale Behind Technical University Implementation

A nation's pace of financial advancement is resolved not just by its material assets and the size of its inner market yet in addition by its 'mental ability' that is by its outcome in creating and in uitising the knowledgeable capabilities of its populace. The depletion of human resource competence through joblessness or inability to foster adequately the scholarly capability of people, is a drag on advancement as well as a significant social issue (Adjibolosoo, 1995). It is thus a fundamental objective of the Government of Ghana to guarantee that the country's human resource is well developed and utilised in such a way as to tie down their most noteworthy conceivable commitment to economic development of the country (Aryeetey, 2000). The government upon realising the role of Technical and Vocational education's contribution to economic giants like Singapore, Malaysia, China and others in their economic development saw the need to place more emphasis on Technical and Vocational Education so as to foster middle level skilled manpower to assist alleviate the economic predicament the country faces lately.

Also, Technical and Vocational Education (TVET) should not be viewed as subsequent choice courses, comparatively well-established economics like Germany, Singapore and Korea that had come to where they are currently is a direct result of accentuation on the applied sciences including TVET Government underlined that the polytechnics had the ability to be changed into colleges as they would do well to offices than a portion of the private colleges authorize to run degree programs. Due to the above factors, the Government is trying to work out modalities that will help them realize this vision. Accordingly, the Government has communicated the expectation that the advisory group which would be set up to look into this thought to design a guide to improve infrastructural facilities including exceptional libraries. The Government has additionally entrusted the Minister of Education to draw up a

guide towards the change of Polytechnics into specialized technical colleges. A delegation led by the Deputy Minister of Education was sent to Germany to study how it converted its polytechnics into technical universities. Again, the government was prepared to help redesigning of infrastructural facilities at the polytechnics as far as libraries, lecture rooms, resident halls, labs and structured str concerned.

Lessons Learnt in Upgrading the Polytechnics to Tertiary Status

MoE (2014) opined that the improvement of the polytechnics to tertiary status depended on a strategy of elevation of technical institutes because of government's proclamation. There were two ways to deal with the elevation of the polytechnics indicated no measures or qualifying benchmarks (as far as physical, human and scholarly resources expected) for their rise to technical universities status. Nor was any arrangement done for them to be coached throughout within a specific time frame by tertiary universities that are well-established. The shortfall of an unmistakable change methodology was one of the basic challenges of the polytechnic elevation process, the repercussions of which are as yet obvious in the polytechnic framework today (MoE, 2014).

The historical backdrop of polytechnic education sector in Ghanaian context is patterned. For instance, Nsiah-Gyabaah (2005) highlighted that during the initial decade of their updating, not a solitary year passed without one type of fomentation or the other by the lecturers, the students, or the non-teaching staff. Several strikes, demonstrations, activism and boycott by students regarding lectures to back their requests for acknowledgment of the Higher National Diploma, roads for academic advancement and appropriately place graduates of polytechnic in the Public Service spaces were high. The service

conditions of lecturers were poor as it troubled them, regularly putting together their discontent with respect to pay aberrations among them and their partners in the college who have something similar or comparative scholastic capabilities and qualifications (Nsiah-Gyabaah, 2005). A large part of the discontent and tumults saw in the polytechnics in the early years could be to some extent ascribed to the shortfall of a reasonable order and a typical comprehension among all partners of the position of the polytechnics in the development of the nation.

One more essential framework improvement failure in the polytechnic amendment practice was the shortfall of lucidity in the command of the polytechnics contrasted and that of the other established universities. To be sure, there are still certain individuals at management levels in the country today who do not get the way of thinking and direction of polytechnic training. The polytechnics are regularly viewed as junior colleges. Indeed, even some students of these polytechnic buy into this thought. It is this absence of knowledge of the nature and scope of the profession of polytechnic programmes on that has been generally liable for tumults by a portion of the students and staff.

The polytechnics in the early years were confronted by different challenges which includes unfortunate financing or poor funding, inexperience of administrative and management staff and a lethargic managerial structure (MoE, 2014). The perceived poor funding was difficult issue which arised because of minimal allocation of resources by government as against other tertiary institutions. This was evident through the 1990s, government expense

per student in colleges was multiple times the sum spent on a student in polytechnic.

In spite of these system development constraints, some positive transformations have taken place in the polytechnics. In 1989/1990, just before the upgrading exercise, only 2% of the teaching staff held post-graduate qualifications while 21% possessed a first degree. By 2002/2003, 28% of the teaching staff held second degrees with the majority of the rest possessing first degrees. Today, more than two-thirds of the teachers possess post-graduate qualifications including PhDs. Management of the institutions has also improved with the appointment of qualified Rectors and senior management staff, while coordination and consultation among the polytechnics have been strengthened through the activities of the Conference of Rectors of Polytechnics (CORP).

However, there are various challenges that should be addressed to enhance the quality and relevance of polytechnic educational framework and training of students in the country. By a long shot the best test confronting the polytechnics is their capacity to enroll and hold qualified staff with pertinent reasonable or proficient experience (MoE, 2014). This is on the grounds that the sort of skilled experts that the polytechnics require are additionally those profoundly pursued by industry. In such manner the polytechnics cannot vie for staff with industry which can offer better compensation bundles.

Concept Review

Concept of staff qualifications

Institutions are developing qualification benchmarks since they need quality staff. Staff with exceptional qualifications essential for institution

because they employ different approach and shocase their skill to complete task assigned to their position (European Training Foundation [ETF], 2016). According to ETF (2016), effective qualification systems are effective if educational institutions' framework and benchmarks which include that an institution cooperate to guarantee that more people approach and can be picked and acquire capabilities or skills-set that are good fit with a stated goal, address the issues of society, and create open doors for work, lifelong learning, professional development and acknowledgment.

The word qualification is utilised by scholars like its significance was generally perceived (Ridoutt et al., 2002a). Ridoutt et al. (2002b) opined that those research about employer-employee recruitment required qualifications specifically show that no such agreement in discernment can be accepted. According Ridoutt et al. (2002a), a standard but yet an expansive meaning of the word qualification is the quality of achievement tied to an individual and is by and large thought to be a condition that must likewise be satisfied before a job office can be obtained. Standard explanations permit that this may likewise infer credentials validating the satisfying of the required job conditions. In the view of Sargent (1998), employers are progressively making documentation a fundamental trait of staff qualification.

Qualifications are the primary measure of schooling or educational outcomes. Unquestionably, qualifications are substantial results of educating people and human resource managers for institutions in a country (Ridoutt et al., 2002a). According to Varanasi (1999), essential qualifications conveyed against an unmistakable norms system permit common acknowledgment of knowledge and skills-set across wide geographic, jurisdictional, and global

limits. From a certain perspective, this can work with work versatility across institutions or organisations, industrial sectors and geographical limits, by presenting some proof of expertise that is generally acknowledged.

In countless examples, human resource management utilise qualifications to assess job-related attributes and qualities of potential employees or job candidates. For instance, qualities of individual employees, for example, inspiration, ingenuity and extensively related specialized technical abilities are regularly applicable when institutions settle on work-related choices or determination of promotional issues. It tends to be contended that qualifications address a proper framework of information which works in labour sectors to help human resource management settle on their human asset choices. Keating (2002, as cited in ANTA, 2005) recommends that the utilisation of these data or information frameworks is connected with the accompanying elements:

- 1. the skills-set type in need or demand
- 2. the expected match or correlation between qualifications' skills-set the individual possesses and the required skills-set being looked for by the institution.
- 3. the dependability of qualifications as far as the particular objectives for which the data is being looked for and the subsequent level of trust that the human resource management or recruiters have outlined.

Wooden and Harding (1997)'s study of staff recruitment and selection criteria additionally took a glimpse at qualifications of a job of capabilities based on the processes human resource managers utilises during recruitment and promotion. The authors observed that previous experiences, mindset,

resilience, appearance and skills-set were significant determinate of staff selection and were regularly stressed on than educational accomplishments. Though, there were additionally contrasts between areas of work; for instance, white-collar jobs tend to place more significance educational attainment during recruitment and promotion. Human resource management ought to decide functionally with respect to minimum qualifications required of all staff and guests that work in institution (National Research Council [NRC], 2003). Accordingly, minimum confidence in the qualification is significant for new staff as well as for current staff as they become expertise and participate in additional difficult roles.

Emerging staff qualification characteristics

Qualification characteristics are significant in present day cultures as a medium communication and worth (monetary forms), widely impacting the manner in which careers and experts are characterized and controlled (Cedefop, 2013). Cedefop stressed that by characterising the base degree of information, abilities and skills expected by employee of a specific job, qualifications manage entry to, and lead of a career. The authors additionally characterize, in a roundabout way as well as straightforwardly, the status or potentially privileges of the current staff holding a specific career position. Qualifications can in this way be viewed as a significant instrument of administration, ascribing significant impact and capacity to those industrial partners (stakeholders) governing them (Kogan & Unt, 2008).

Qualifications can be utilised as administrative instruments. In a few career spaces, limited admittance conditions are placed down to guarantee that main individuals who have obtained the particular capabilities (licenses, certificates) can be used to work the specified workspace (Cefefop, 2013). Qualifications are viewed as the need should arises, however not generally adequate, models for determination of potential staff, thus, decide a base degree of skill for every single word related staff.

The European Commission characterised staff qualifications as a conventional result of an appraisal and approval process which is acquired when a skillful body establishes that an individual has accomplished learning results to a given norm (European Commission, 2013c). Per the definition above, a conferred qualification is granted through a declaration, recognition or other record. This concept may pertain to a wide range of verification of capability at all levels, from beginning to proceeding with schooling, and covering both programmes as well as fractional or modularised results. According to Cedefop (2013), the majority of nations are progressively zeroing in on the importance of qualification in the workforce market, utilising results of learning to portray the desired requirement of competence for which qualifications were obtained.

Qualifications play many parts and implications credited to them. Their conspicuous objectives extend towards documenting results, for instance, abilities or information or capabilities (Cedefop, 2010). Be that as it may, the down to earth task of staff qualifications might differ greatly from one institution to another. Employees may play individual parts by giving status to the holder of a capability, yet in addition in giving a feeling of inspiration and individual increase for students and direction for job and learning (Skillsbase, 2010). Staff can play economic parts in signalling the degrees qualification and abilities regarding the workforce market. Also, they may assume a part in decision-making, as a device to impact the school system and labour bodies.

Staff skills-set

There is a rising interest for consistency in the defining the requisite skill sets and standards of determining skills of staff (Sargent, 1998). In determining skills of staff, an appraisal of essential or minimum skills-set is frequently a decent spot to begin in assessing the qualification of staff. Human resource management ought to take notice of staff's demonstration of minimum or essential skills-set important to performing an assigned task through document review and observation (NRC, 2003). In the wake of laying out a staff's fundamental abilities HRM can solidify qualification by the process of assurance through evaluation of behavioural observations as compared to already outlined minimum staff qualifications. By way of behavioural observations, the employer will actually want to notice a staff illustrating (or failure to illustrate) their expertise, knowledge, and manner expected to perform specified task effortlessly (NRC, 2003). It is critical to evaluate behaviour in specific-task-related context.

A skills-set appraisal may be helpful massively from information exchange among the employer and staff. Nicely built discourse can assist with recognizing required skills-set or deficiency of information and determine the requirement for beginning and prepare in-service training for current staff and job candidates (NRC, 2003). Managers ought to constantly check the composed and outlined qualifications of each staff with careful perception. This action will assist with guaranteeing that the information and abilities that an individual professes to have similar with the assignment that necessities. According to ETF (2016), skills-set are significant, particularly in proceeding with professional training, however for somebody to show that they have a lot of skills-set

requests some type of versatile cash in the form of capability (qualification). ETF further highlighted those great qualifications asset describe what skills-set, competence and information individuals need to be prepared for the future work market. Such capabilities are a need when individuals progressively move among occupations and within the work market.

Green and Sakamoto-Vandenberg (2000) contend that, among economies high skills, there is an elevated degree of interest from institutions for their employees to have accomplished capabilities or qualifications, and that qualifications of employees will in general be a serious level of confidence for the economy. This confidence or trust can be contended to be a result of both the institutional connections among the professional education system and industry, and the result of a more extensive work culture of high confidence (Keating, 2002, as cited in ANTA, 2005). Staff skills-set are fundamental for the outcome in the work environment. The term skills-set encompasses a capacity and limit gained through conscious, precise and supported work to without a hitch and adaptively do exercises or occupational task including thoughts, things, or potentially individuals. A skills-set as a capacity or capability in a particular area is significant at any level a staff does at in an institution.

Technical skills-set

Medina (2010) postulated that technical skills-set are range of abilities, skill or specialised capability connected with the field of the staff, whether specialised or engineering. Technical skills-set are solid skills that is frequently connected with the utilisation of equipment and tools connected with work appropriately and proficiently, as well as every technical or specialised issue of

concern. Technical skills-set are specialised abilities that require a mix of explicit information and abilities of the work done utilising the body to accomplish the objective (Damooei, Maxey & Watkins, 2008). In the workspace, technical skills-set regularly allude to technical methodology or pragmatic assignment that are normally simple to notice, evaluate and measure. In other view, technical skills-set are the capacity and skill to perform work in an in fact equipped way and furthermore to screen it in a free and basic way (Mohd Fauzi, 2000).

Indisputably, technical skills-set are at the center of each staff skills' domain and contain the staff's affinity or capacity to finish jobs connected with the inescapable ICT knowledge. Their substantial structures are the fundamental marks of the staff 's ability (Tokarčíková et al., 2020). Technical skills-set are normally extremely concrete and quantifiable, it is not difficult to educate and learn them and even to examine them. The abilities are substantial, explicit, and normally practicable, for example, typing or composing 50 words each moment or replacing tires (Roselina, 2009). Staff's technical skills-set can be extended by the employers by means of encouraging them to learn and build the worth of their human resources. Most HRMs say that technical skills-sets are the hardest ones to find yet it is more straightforward to educate and further develop them as they are fundamental and necessitate all job task.

Technical skills-set are fundamental information to any job in any institution. The capacity of a skilled employee to utilise the technical or specialised skills gained in an advanced educational institution to the genuine workspace was exceptionally respected (Nasir, Ali, Noordin, & Nordin, 2011). Regular involvement is expected at the workspace on the technical knowledge

in the field so that staff's skills are continually improved (Medina, 2010). To achieve quality and productive work, there is the need for staff to apply and relate facts, ideas, knowledge and technology to maximise output. According to Katz (as cited in Mukarromah, Mudjito, & Purbaningrum, 2019), technical skills-set are the mental prowess of strategies, methodology, cycles, systems and procedures in completing extraordinary task, and the abilities in working with hardware and machines which are applicable to these tasks. Terry (2004 as cited in Mukarromah et al., 2019) explained that technical specialised skills-set comprises of capacities involving a particular action through a systematic process, methods and procedures; likewise, specialised abilities permit the execution of the systems expected to complete specific assigned task. According to Handoko (as cited in Mukarromah et al., 2019), specialised or technical abilities are capabilities in utilising hardware, strategies and procedures in a specific field, like sales, bookkeeping, production, deals, so forth.

Communication skills

Compelling communication is an expertise that should be practiced successfully at work environment for better work result and outcomes. A few research recognise that a communication that is effective is basic at the work environment for expanding staff usefulness and institutional performance (Shrivastava & Prasad, 2019). It is a central need to every management capacity. Working environment communication is a method for sending information so that one can get one's point across to other people (Guo & Sanchez, 2005). The significance of compelling communication in the working environment is irrefutable. More along these lines, since the 21st century working environments

are institutions with individuals in a same place with various sociocultural beliefs, skills and educational background meeting up to work for similar objectives (Shrivastava & Prasad, 2019). Hence, HRMs, supervisors, directors and colleagues should communicate skilfully so their work objectives and results are reached in a reduced period.

According to Striven (as cited in Shrivastava & Prasad, 2019), good communication as an expertise in a language form is a significant ability for administrators or HRMs to have to do assignments effectively at the work environment. In the workplace contexts, employees need verbal and non verbal communication skills to find success in their positions as they should do different open assignments like negotiations, meetings and presentations (Shrivastava & Prasad, 2019). Clutterbuck and Lazidou (2001) states that the smooth working in an environment is reliant upon the participation among coworkers and to coordinate well, as staff should have the option to effectively communicate well.

Co-worker connections and relations blossom with effective communication. It's obviously true that for an staff or co-workers to find actual success achieve desire outcomes, it should have all staff equipped for sending and getting information rapidly, effectively, obviously and precisely (Boone & Kurtz, 2002). An adjustment of the manner in which we convey information now has developed and transformed over a somewhat brief period-changing from regular in-person or face to face discussion to the utilisation of virtual gatherings utilising modern innovation intended to expand proficiency and adequacy.

Conceptual skills

Katz (as cited in Mukarromah et al., 2019) expressed that conceptual skills-set known as applied abilities are generally analytical capacities, rational contemplation, familiarity with forming ideas and conceptualisation of complicated and equivocal connections, innovativeness in thought making and critical thinking, and the capacity to break down occasions and feel patterns, to expect change, and to perceive open doors and likely issues. As indicated by Danim (2010), he expressed that conceptual skills-set applied abilities are the capacity to arrange thoughts, to get different speculations or assumption in their fields, to make a move and to see patterns in view of hypothetical capacities required.

The work of Stoner and Freeman (as cited in Mukarromah et al., 2019) showed that conceptual skills-set are the abilities to arrange and to incorporate every single institutional interest, goals, activities and mission. That incorporates the abilities of employers or HRMs to consider an the institution as an interconnected network, to see all interrelated hierarchical components and to guess all types of progress that can happen in each part connecting all component of an institution.

Conceptual skills-set are the capacity to see a diversity of issues universally and connect with the necessities and objectives of an institution, these abilities are vital in light of the fact that they relate straightforwardly to the decision-making, preparation and dynamic interaction of the institution (Mukarromah et al., 2019). It is imperative to note that great conceptual abilities likewise add to endeavours to further develop an institution's effectiveness.

However, running against the norm, on the off chance that staff's conceptual abilities are trim, the degree of institution's effectiveness will reduce.

Conceptual skills-set the capacities that permit a person to all the more likely get complicated situations understood and foster innovative solutions (Indeed Editorial Team [IET], 2021). According to HMR viewpoint, these abilities are important in light of the fact that the individuals who have them can move toward muddled working environment circumstances in a wide range of ways. IET (2021) highlighted those conceptual skills-set or applied abilities give the capacity to foster resolutions with respect to significant level hypotheses, thoughts and subjects. This quality likewise includes tending to testing situations with an imaginative, inventive methodology. With applied abilities, it becomes more clearly unique or confounded thoughts.

Quality assurance of staff qualification

Setting higher levels of quality dimensions are needed to achieve TTU's mission and vision. Quality as element of an institution, a wellspring of upper hand, ought to stay a sign of TTU's services and graduates. Setting high quality standards as excellent is definitely not an additional worth; it is a fundamental essential prerequisite (Manghani, 2011). Quality doesn't just relate exclusively to the finished results and administrations an institution provides yet additionally connects with the manner in which the staff go about their business and the work practices they follow to deliver outcomes. The work procedure ought to be all around as proficient as could be expected and persistently getting to the next level. According to Manghani (2011), staff constitute the main asset for working on quality. Each staff in all institution units is liable for guaranteeing that their work processes are effective and continuously

advancing. Therefore, definitions of quality assurance vary somewhat between various settings, and are generally associated with ideas of value control and quality administrative services (ETF, 2016). ETF further stressed that quality assurance for quality staff qualifications comprises of two wide cycles; qualifications guaranteed are pertinent and have worth; and those individuals who are certificated meet the stated or requisite qualifications.

Assuring the quality of current or potential staff in an institution demands conversation among a scope of stakeholders, proportionate regulations or laws, and clearer institutional job description with detailed functions. According to ETF (2016), it essential to note that nations guarantee qualifications specification used are important and have worth in the work market; and how nations should rest assured that individuals getting certificates are meeting the states of these capabilities (as such, they have exhibited that they fulfil the guidelines). Specifically, the quality assurance (QA) systems used to control the incorporation of competence involves a national benchmark as a gatekeeping, and how evaluation is quality guaranteed. This might incorporate, for example, the degree of outer assurance and the competence of the appraisers, and how approval of non-formal learning is guaranteed. It imperative to check how far various nations' practices of appraisal and certification depend on confidence and self-initiated guidelines and whether they utilise more helpful models or employ more firmly controlled frameworks (ETF, 2016).

A quality culture intentionally targets reflections about all outcomes or achievement and collect response and data to improve quality always (ETF, 2016). It depends on shared beliefs and values, convictions, assumptions, and obligation to quality service delivery and simultaneously contains a component

of well-scheduled processes pointed toward improving quality (Cedefop, 2009). This is regularly alluded to as persistent advancement and ought to be the goal for any quality assurance framework. According to ETF (2016), unequivocal input or feedback systems, embarking on self-appraisal, eagerness to gain from failures, and going beyond external assessment for development are a few instances of techniques for supporting a quality assurance culture. A substantial model could be that staff qualification need normal assessment and refreshing of standards, job relevance and certification requirement of staff (ETF, 2016). The responsibility, everything being equal, to this, as a characteristic piece of a qualification framework, proposes a perspective on quality as something beyond a control instrument.

Relevant systems

Manghani (2011) characterised quality system as an institutional structure, obligations, methodology, techniques, assets and processes in fulfilling quality supervision. Managing quality incorporates those parts of the general administration work that decide and execute institutional policy and targets of quality. Both quality control and assurance are portions of value-added role of managing quality. According to Manghani (2011), both quality control and assurance frameworks are equivalent with the institutional model, mission and goals. The two together comprise the critical quality assurance systems.

Quality control is centered around satisfying quality prerequisites and related services. It includes the functional strategies and tasks embraced inside the quality assurance framework to confirm that the necessities for quality staff with regards activities that have to be fulfilled (International Conference on

Harmonisation [ICH], 2001). Quality control is by and large the obligation of the divisions as quality is imbued into the services. Therefore, quality control is a fundamental piece of the everyday activities happening inside relevant systems of departments established by the institution (Manghani, 2011).

Some quality assurance framework necessities to track down the right harmony between quality control and quality enhancement. Systems or frameworks that are excessively inflexible will often center more around control and less on progress. To ETF (2015), encouraging a culture of quality through quality administration, comprehended as the exercises utilised by associations to direct, regulate and harmonise quality, including planning a quality strategy and setting quality targets, is significant for all stakeholders based on qualification system or framework. Managing quality ought to include, in corresponding to control, quality preparation, assurance and progress (ETF, 2016).

Standards behind qualifications

Standardisation is characterised as an action that brings about answers for redundant application to issues in different disciplines including science and it is pointed toward accomplishing the ideal level of request in a given setting. By and large, the task comprises of the most common way of laying out (deciding, figuring out, and giving) and carrying out established standards. Along these lines, standards are a definitive consequence of a standardisation roles and inside the setting of quality frameworks comprising of reports connected with the quality frameworks or systems (Manghani, 2011).

In the view of Manghani (2011), the quality documentation or archives comprise of supervision strategies, quality administration plan, standard

operating plans, working directions, shows, rules, structures, formats, logs, labels and names. They are laid out by agreement and supported by management, and they accommodate normal and repetitive usage, regulations, rules or attributes of a task or their outcomes so as to advance consistency, transparency, reproducibility, compatibility and to work with effective communication.

To ensure effective standards of staff qualification, it should be either dependent upon guidelines or it should address an assignment significant inside quality frameworks or between quality frameworks and other useful units (ISO, 2008). Quality frameworks connected with staff qualifications catch the centre of quality control and quality assurance tasks and methods. Generally, quality systems cover essential areas, for example, the commencement and support of faculty documents including organisation and content of educational program vitae, expected set of responsibilities, preparing records and individual, proficient improvement plan, appraisal of staff and ensuring outcome-based results.

Verification of certificates

Regularly, the term conferring of qualification is utilised to incorporating both the most common way of evaluating learning and the giving of an authenticated certificate that the student meets the predetermined learning results (ETF, 2016). Certificate is characterised as including evaluation, confirmation and reviewing, and conferring (European Commission, 2013c). Grading and evaluation are part of the procedural segment that follows assessment and is the piece of evaluation where the aftereffect of that appraisal is confirmed against the significant requirement. According to Cedefop (2015),

conferring a qualification ought to be perceived as giving an authenticate certification that formally confirms that an individual has accomplished the distinguished learning results. This is the last advance during the time an individual spent in accomplishing a specific qualification.

Certificate as an academic recognition can be towards a full or preferential qualification (the last more frequently because of a course of approving non-formal and casual learning; [ETF, 2016]). According to ETF (2016), the certificate itself can be a diploma or first or higher degree given after the finishing of a programme, it very well may be as a permit to use learning experience of a particular career field, or it can be a certificate that is specific to an institution and a piece of their work force preparing plan. Certificate should be possible in various ways, the distinction primarily relying upon who has the power to give certification. In state funded higher education, for what we ordinarily allude to as official qualifications tends to be done in either a concentrated or de-brought together way; with one body authenticating educational institutions authority to confer certificates (Cedefop, 2015).

Staff development

Any institution operating needs two significant assets to work with: human beings and capital (Pityn & Helmuth, 2007). The authors further clarified that numerous institutions offer huge consideration for the monetary issues of activities however while funding is fundamental, it is just an apparatus in the possession of labourers/staff in the organisation or institution. This clarification by the authors shows that staff in each institution assumes basic part in the accomplishment of institutional objectives realisation. Funds and different

assets HMRs put into institutions do not oversee themselves; however, human capital oversees them.

For educational institutions to find a lasting success, employees or staff inside the institution should be equipped to become useful, proficient and viable. Building strong and enduring institutions rely upon the development and improvement of staff inside the foundations, thus, intending to institutional objectives achievement, staff improvement can't be isolated from factors that add to that objective's fulfilment. Examining the vivid impact of staff improvement in institutional objectives accomplishment, for clearer command of this staff advancement, exertion ought to be made to discuss the idea of staff improvement, history of staff improvement, models of staff advancement, factors that impact staff advancement and challenges.

Elements of staff development

It is important to perceive that faculty wouldn't practically expect to utilise most refined way to deal with students except if they have the abilities to do so and yearning to fulfil it. Those abilities which could be acquired through staff improvement programmes are impacted by many elements. Such issues establish when to perceive and execute development programmes for staff, where to direct staff advancement programme and which groups of employees to take part and expected outcomes that aims to be improve staff.

Staff advancements and development programmes are impacted by the accompanying elements such as motivators (rousing staff improvement in both financial and non-financial related things to urge staff to take part and advantage from staff development programmes that mirrors their work outcomes (Cottrell, 1991 as cited in Larbi, 2008). Cottrell (1991 as cited in Larbi, 2008) stressed

that resources to be given for programmes of staff development should include proposals and need to training staff, however, in the event that the resources to direct such projects isn't accessible, it can't be carried out. With the assets, Cottrell (1991as cited in Larbi, 2008) alluded those specialists work with the programmes that development in nature being organised face-to-face inside the institution or remotely coordinated as well as funds to managed staff developmental programmes and different services. Another element that influences staff development is support (backing to both individual staff taking an interest in the developmental programmes and the department coordinating the advancement programme. According to Larbi (2008), Cottrell was of the view that staff are encouraged to embrace formative or expert improvement programmes as most staff should be compelled to partake in the training programme.

Assuming institutions are encouraged to lead developmental programmes for their staff to be updated in various section of the job, this may be a project that can be done frequently by the institution as conceivably coordinated for staff all the time. Avalos (as cited in Tetteh, 2008) argued that the development of staff are impact certain factors:

- 1. Type, scope and structured activity of the institution
- 2. Climate demonstrating an outlined strategies, policy and institutional system reforms
- 3. The working conditions staff.

Examining challenges of developing staff is of no exception to the substitution of faculty, particularly assuming the method of designing development programmes is off-the – on-the-work training makes up a

significant difficulty confronting a large number of the higher education institutions in Ghana.

Effects of staff development on qualifications

The development of staff has generally been known for the significant job it performs in maintaining the operationalisation of an institution. Carrell, Elbert and Hatfield (2000) reflected on the effect of staff development, the authors shared their view that the arising pattern in HRMs is plainly towards the transformation of human capital method, such that institutions may be favoured in two huge outlines, thus an expansion of the effectiveness of an institution and fulfils the desires of every staff as it necessities. The development of staff assists with working on the characteristics of staff to make them more useful. The effect or the result of development of staff is vital in light of the fact that it decides the planned, policies, missions and content of the advancement programmes technical universities.

A successful and compelling organised programmes on the development of staff ought to yield the accompanying outcomes, raise expediency; work on the nature of work and elevate the tenacity of staff; foster innovative abilities, information, understanding and perspectives; utilise new instruments accurately, machines, interaction, strategies, or alterations thereof; lessen waste, mishaps, and other upward expenses (Olaniyan & Ojo, 2008). The authors further stressed that such programmes lead to carry out new or changed arrangements or guidelines; carry officeholders to that degree of outputs which meets the established benchmark of outcome of the institution, further develop staff g and guarantee congruity of authority or sustenance of institutional leadership; and guarantee the endurance and development of the institution.

Olaniyan and Ojo (2008) framed effect of staff development show that the success and progress of an organisation rests enormously on the type of staff who make up and work inside such organisation. Subsequently, it means that staff in institutions should be well-developed to cut across all sections to empower them to perform their obligations for the accomplishment of the institutional goals.

Staff qualification challenges

No institution is immune to challenges. In an all-around soaked work market, where the practices like recruiting and maintaining staff are picking up speedily, as human resource experts continuously confront new difficulties in one of their most significant qualification issues (Nagarajan & Fathima, 2014). HRMs or employers need to confront and overcome different difficulties to track down the best potential staff for their institution. Institutions demonstrate a picture to the local area and it decides the brand or appeal of the institution to qualified candidates or potential staff. It might either be a likely obstruction or a critical benefit contingent upon the capacity of the HRM to really publicise its work opportunities (Buhasio, 2012). The subsequent element is engaging quality of the work which appeals to the set of working responsibilities and conditions.

The subject of financing and especially government's assistance of staff at different higher education institutions in Africa have been at the focal point of a progression of strikes since 1990s (Mushemeza, 2016). According to Mushemeza (2016), insufficient compensation including monthly pay has come about into a few sad outcomes especially leading to low confidence and renunciation to join better paying organisations subsequent to being supported

for postgraduate educations. Another important challenge is connected with financing as raising functional expenses in higher education settings which require reasonable utilisation of assets got and cost control. Institutions should participate fund raising campaigns from both inner and outside sources. Additionally, judicious utilisation of assets calls for sufficient preparation, candour, inspirational conduct and a gallant spending plan for the institutions (utilisation of a well-designed spending plan system).

Mushemeza (2016) highlighted that higher education institutions are confronted with weighty infrastructural needs/requests (both physical and innovative). The growth in number of enrolment of students many years requires more classrooms, extended libraries, ICT labs, staff workplaces, and sporting structures and offices. The fact that faces higher education institutions makes the leadership of these institution a question one more of a test. Higher education Institutions have clear administration bodies; the college committee, and senior administration as they are limited by forces (Mushemeza, 2016). The management system is significant for investment in democratic form administration, notwithstanding, however, both internal and external influences hamper their decision making in staffing. Feng (2007) put it that the basic and unpreventable truth is that tertiary institutions should be overseen determinedly, judiciously and expertly in a decent context to save and give over guiding principle to new ages.

According to Nagarajan and Fathima (2014), HR managers are supposed and expected to stay on top of the evolving times, i.e., the progressions occurring around the world. Thus, it is essential to note that employers must maintain the timeliness of the process, maintaining work ethic and review

recruitment demands and highlighting the responsibilities to see the changes in the work setting. According to MoE (2014), the professional direction and career-centered nature of the review programmes presented by specialised or technical colleges request that the faculty have modern openness. MoE stressed that enrolling, retraining, preparing such type of staff for the changed over polytechnics is a key problem that should be tended to. Clearly, it could be troublesome at the undeveloped phase of the specialised or technical higher education institutions to demand the modern experience prerequisite for all faculty in the changed polytechnics status. Simultaneously, this prerequisite cannot be totally disregarded.

The changes in educational institutions, for example, from polytechnics to technical universities in Ghana influence human and capital assets, particularly on matters of staff qualifications. Staff qualification refers to the academic achievements of a tutor which warrants him/her to teach a subject/course at a particular level of the education sector (Bayissa & Zewdie, 2010;). While not particularly explored in Ghanaian higher educational institutions especially, and Takoradi Technical University for this case, it is a focus on staff qualification and offer open doors for instructive preparation and mediations to advance and boost the abilities and skill level of staff to enable them to survive within their transition from Polytechnic.

Summary of Literature Review

The above literature uncovers that staff qualifications is an essential component that contribute to the attainment institutional goal. Given these real factors in the 21st century, different partners in technical universities should be aware of the awkward nature between what is required and what is accessible;

what is required and what is plausible given the asset limitations; and what is great and reality. With respect to the assertion of the issue, it was evident in the literature as the gaps identified determined from the staff, the degree to which the idea of the above scholarly work was done in these institutions. The essential qualifications and competence and thoughts in the substance of the write-up likewise helped in setting up the right procedures and showed lacks into the extent that recruitment and showed deficiencies in as far as recruiting and improving current staff qualification to meet the institution's current status as technical university

It is critical to note here that, even though many works have been done on staff qualifications and related themes, some space actually exists. The gap originates from the manner in which not much work has been done with regards to staff qualification issues at technical universities in Ghana. There is, therefore, the need to ascertain the effectiveness of emerging characteristics of staff employed and to be employed at Takoradi Technical University. Once more, failure of previous research to consider quality assurance criteria of qualifications and categories skills-set required of current and potential staff is a conspicuous space which this work will in general fill.

NOBIS

CHAPTER THREE

RESEARCH METHODS

Introduction

The main purpose of the study was to explore the emerging issues of staff qualification in Takoradi Technical University's transition from Polytechnic. This chapter will describe the phenomenal concerns in the review, which are pertinent to the suggested study. It likewise explained on the proposed research plan, population used, techniques used in selecting samples, as well as the proposed instrument for data collection and how quality of the instrument was guaranteed. Moreover, how data was collected, and statistical tools used in analysing the data obtained were examined.

Research Design

The study employed a descriptive survey design to describe the emerging issues of staff qualifications at Takoradi Technical University's transition from polytechnic. The study design was considered fitting since the researcher expects to portray the peculiarity as it exists without controlling study members, circumstances, or facts. The descriptive survey design is study which determines the idea of assumed phenomenon. It defines and reports the status quo. It includes gathering information to resolve inquiry-based issues (questions) concerning the flow status of the subject of the review (Gay, 1992). The design fundamentally involves the present despite the fact that it frequently considers previous occasions and impacts as they connect with current circumstances. The researcher adopted the design since it is one of the best helpful and dependable study design for the review.

Even though the design is deemed proficient, shortcomings recognised in utilising this design were guaranteed that research questions or objectives or data collection instrument items were clear and not misdirecting, getting respondents to address questions insightfully and truly (Fraenkel & Wallen, 2000). Besides, scholars in the field of research whine that their advancement is deferred by their reliance on others for data. The information or data gathered during the survey is probably not going to be just about as wide running as those gathered by other exploration techniques (Saunders, Lewis & Thornhill, 2007).

Study Area

The study used the Takoradi Technical University (TTU) based on its transition from a polytechnic to a Technical University. TTU is one of the unique seashore technical universities in the world. Formerly known as Takoradi Polytechnic, TTU has been a Government Technical Institute under the Ghana Education Service since April 1954. As part of a government initiative to elevate Takoradi Polytechnic and five other polytechnics to the level of a technical university, the Takoradi Technical University was founded that September.

TTU is a public tertiary institution in Takoradi, the smallest part of the Sekondi-Takoradi twin city, serving as the Western Region's capital. TTU serves as a mechanism to drive the industrial hub of the Western Region. Effia Kuma (Takoradi), Butumagyebu (Sekondi), and Akatakyi are the current locations of Takoradi Technical University (Agona-Nkwanta). With 152.3 acres, the Akatakyi Campus is much larger than the other two.

The TTU's original mandate included awarding craft and technical certificates. TTU's mandate has expanded to include degrees, diplomas,

certificates, and other qualifications; Offer Higher National Diploma programmes approved, accredited, examined, and certified by the national bodies; increase access to career-focused tertiary education in general; promotion of industrialization through relevant research, consultancy, and linkage programmes; and equip students with basic information technology and entrepreneurial skills for industries. Full-time and certificate programmes are available in engineering, business, science, technology, the arts, and applied social sciences at TTU.

Population

The target population of this study included all staff at the Takoradi Technical University in the Sekondi-Takoradi Metropolitan Area of the Western Region during the 2019–2020 academic period. The study's estimated target population was 795 respondents, comprising 529 senior and 266 junior staff (TTU Division of Human Resources, 2021).

Sampling Procedure

The study used stratified and simple random sampling techniques to select the sample from the population. These techniques gave all groups of the target population an even likelihood of being picked (Mensah, 2019). The stratified sampling procedure entails partitioning the populace into various similar strata or groups. That is, the population was divided into two groups: senior staff and junior staff. A simple random technique was used to choose participants from each similar stratum. The lottery method was used to select participants from Takoradi Technical University. The initial phase of taking a random sample from the population was to give every individual a particular, recognisable number. The numbers of the members of the population (senior

and junior staff) were written on slips of paper, folded up, mixed up in a container, and drawn without replacement. This exercise was repeated the same way until each group's required sample size was obtained.

The study used the Krejcie and Morgan (1970) table to determine the sampling size to draw the total sample size from Takoradi Technical University. According to Krejcie and Morgan's sample determination index, a population figure of 795 requires a sample size of 260. The equation below articulates how samples were selected from each group (senior and junior staff):

Sample size
$$(Staff) = \frac{Total\ population\ of\ senior/junior}{Total\ population\ of\ staff} \times$$

sample size required

The study used a total sample size of 260 (senior staff = 173, junior staff = 87). The negative impact of COVID-19 hampered the effort of the research to get the stipulated sample, as highlighted by Krejcie and Morgan (1970).

Data Collection Instrument

The study used questionnaires to collect data. The researcher designed the instrument for this study, the Staff Qualification Questionnaire (SQQ). The SQQ was used to elicit information from senior and junior staff at Takoradi Technical University. The justification behind utilising the questionnaire was that it is a speedy approach to gathering information. It is likewise known to be very legitimate and dependable if all-around built. It is likewise conservative regarding cash and time. According to Robson (2002), utilising the survey (questionnaire) aids the research in gaining a reasonable amount of contact with numerous respondents, mainly where the geological region is vast. It is also commonly considered to be understanding. Nonetheless, the questionnaire is generally associated with a low return rate.

Questionnaire items uncover the nature and degree of the issue to be addressed. The questionnaire items were developed for data collection during the review of related literature. The SQQ instrument was partitioned into two sections. The initial segment contained five items and evoked segment data from respondents such as age, sex, nature of the appointment, period of appointment, and educational level. The second part was divided into five sections with 40 closed-ended items, with the first four sections on a four-point Likert scale and the last on a two-point Likert scale. Section A contained three items and elicited information on the essential staff qualifications at Takoradi Technical University. Section B contained 12 items and covered emerging staff characteristics at Takoradi Technical University. Section C contained 11 items and elicited the skills-set (communication, technical and conceptual) required of staff at Takoradi Technical University. Section D covered eight items and obtained data from respondents on the quality assurance criteria at Takoradi Technical University, Section E contained six items and elicited information on the challenges associated with staff qualification of Takoradi Technical University's transition from Polytechnic.

Pilot-testing

The study conducted a pilot test of the research instrument (SQQ). Pilot testing assists the researcher in concluding whether the study is plausible and beneficial to proceed. Furthermore, it gives a chance to measure the suitability and soundness of the instrument (SQQ) for the data collection exercise. The research instrument (SQQ) was pilot tested on 30 staff (senior staff=20, junior staff=10) at the Cape Coast Technical University in the Central Region, distinct from those engaged with the actual study.

The principal reason for the pilot test was to test the legibility and coherence of the items, the period provided, and the uniformity and substance of the items' content. The pilot testing assisted with evaluating the sample and the procedure for obtaining information. A section of the items was adjusted for the arrangement and request of the assertions.

Validity and reliability

The study's data collection instrument was presented to my thesis supervisors to establish the face validity of the instrument, especially since they have a comparative exploration involving staffing issues in education settings. The supervisors' remarks and ideas strengthened the content of the instrument. Thus, uncertain, one-sided, and inadequate items were rethought, and unimportant items were appropriately removed. The instrument's reliability (SQQ) was estimated using Cronbach's alpha to establish if items in the questionnaire were connected after the pilot-testing exercise. The reliability estimate after the pretesting of the overall instrument was 0.825. Table 1 introduces the outcomes of the reliability coefficients.

NOBIS

Table 1: Results of reliability coefficients

Description	Cronbach's	Cronbach's Alpha	N of
	Alpha	(Standardised)	Items
		Items	
Essential qualifications	.611	.637	3
Staff characteristics	.760	.760	12
Skill-sets categories	.811	.820	11
Quality of assurance of staff	.805	.795	8
qualification			
Recruitment challenges	.678	.681	6
Overall	.825	.807	40

Data Collection Procedures

The researcher used an introduction letter from the Director General at the Institute for Educational Planning and Administration, University of Cape Coast to requesting for the of sectional/department heads and staff (both senior and junior) for the success of the study. The researcher went to the Takoradi Technical University to seek permission and then set up for accessible days and time for the distribution of the questionnaires. During the distribution, staff were informed on the study purpose and the need to answer honestly to the items on the questionnaire. The instruments (SQQ) were then be circulated to staff at their offices. The concerns of staff were attended to after which they were chance to respond to the items on SQQ instrument. The negative impact of COVID-19 hampered the effort of the research to get the stipulated sample

highlighted by Krejcie and Morgan (1970). The return rate of the SQQ instrument was 88.85% representing 231 participants.

Data Processing and Analysis

The study used SPSS software to analyse the data. Data were analysed based on research questions. The first research question sought to determine the essential qualifications underpinning staff qualifications at Takoradi Technical University. The information acquired from the respondents on the data collection instrument (questionnaire) was scored for individual staff, after which specific item means and standard deviation were calculated. The answers were encrypted (coded) to ascertain the path of participants, that is, whether they have a positive or negative perspective of the essential qualifications staff should possess. The answers acquired from the data collection exercise process were encrypted from 1-4 for decidedly phrased items from 'Strongly Disagree' to 'Strongly Agree' on that scale. This showed the overall position of the individual's elements from their standpoint on the instrument. The means of individual items were discussed and noted.

Research Question Two sought to determine the emerging characteristics of staff qualification issues at Takoradi Technical University. The information acquired from the respondents on the data collection instrument (questionnaire) was scored for individual staff, after which specific item means and standard deviations were calculated. The answers were encrypted (coded) to ascertain the path of participants, that is, whether they have a positive or negative perspective on the emerging characteristics of staff qualifications. The answers from the data collection exercise process were encrypted from 1-4 for decidedly phrased items, from 'Not at all Important' to

'Very Important' in that scale. This showed the overall position of the individual's elements from their standpoint on the instrument. A higher individual item means above the benchmark, showing that most respondents agreed with such characteristics before or after transitions. The mean class that fell within highlights the level of importance (1-2.32= Not at all Important, 2.33-2.79= Somewhat Important, 2.80-3.25= Important, 3.26-4.00= Very Important) of each period. The means of individual items were discussed and remarked on.

Research Question Three sought to ascertain what category of skills-set is required of staff at Takoradi Technical University's transition from Polytechnic. The information acquired from the respondents on the data collection instrument (questionnaire) was scored for individual staff, after which specific item means and standard deviation were calculated. The answers were encrypted (coded) to ascertain the path of participants, that is, whether they have a positive or negative perspective of the required skills-set category. The answers acquired from the data collection exercise process were encrypted from 1-4 for decidedly phrased items, from 'Strongly Disagree' to 'Strongly Agree' on that scale. This showed the overall position of the individual's elements of their standpoint on the instrument. The means of individual items were discussed and commented on. A model for passing judgment on the degree is that a mean of means score of 2.50 or higher shows that staff meets the required qualification, while a score less than 2.50 indicates that staff does not meet the required qualification.

Research Question Four sought to establish quality assurance criteria relevant to the emerging staff qualifications issues at Takoradi Technical University's transition from Polytechnic. The data obtained from the

respondents were scored for individual staff, after which specific item means and standard deviations were calculated. The answers were encrypted to ascertain whether respondents have a positive or negative perspective on the quality assurance criteria relevant to the emerging staff qualifications issues. The responses were encrypted from 1-4 for items from 'Strongly Disagree' to 'Strongly Agree' on that scale. This showed the overall position of the individual's viewpoint on the instrument. The means of individual items were discussed and noted. A mean of means score of 2.50 or higher showed that TTU staff meets the required quality assurance criteria, while a score less than 2.50 indicated that TTU staff do not meet the required quality assurance criteria.

The fifth research question sought to ascertain the recruitment challenges associated with staff qualifications of Takoradi Technical University's transition from Polytechnic. The answers were encrypted (coded) to ascertain the path of participants, that is, whether they have a positive or negative perspective of staff qualifications and recruitment challenges. To do this, the answers acquired from the data collection exercise process were encrypted from 1-2 for worded items from 'Yes' to 'No' in that scale. The frequencies and subsequent percentages were commented on to address the research question.

The research hypothesis was on whether there is no significant difference in the views of the male and female staff regarding quality assurance criteria of staff qualifications at Takoradi Technical University. At a 0.05 level of significance, the independent sample t-test was used to assess this research hypothesis.

Ethical Consideration

Ethical issues in research are exceptionally pertinent and require genuine contemplations. Along these lines, to make a common regard and shared benefit connection with the study respondents before the beginning of the data collection, an introductory letter was acquired from the Institute of Educational Planning and Administration demonstrating the motivation behind the study and its importance to the staff of TTU. Study members were guaranteed of privacy, security, confidentiality, risk free and participation by volunteerism was evoked.

Chapter Summary

The research methods section was illustrated and arranged within a descriptive design perspective. It itemised the descriptive design and target population with staff categories. Expanding on the descriptive design, this section additionally talked about the sampling procedures with sample size, data collection instrument (SQQ), data collection procedures and data processing and analysis.

NOBIS

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

The study sought to explore the emerging issues of staff qualification in Takoradi Technical University's transition from Polytechnic. This section describes the study results by providing brief overview of the analytical process and discussion of the study. The analytical process was based on the outlined research question. Descriptive statistics (percentages, frequency, mean and standard deviations) were used in analysing the research questions. The research hypothesis that states that the views of male and female on quality assurance criteria at Takoradi Technical University are significantly not different was tested using the independent samples t-test. The results after an analytical process are presented the following order:

- 1. Demographic Characteristics
- 2. Research Question One: What essential qualifications should staff of Takoradi Technical University possess?
- 3. Research Question Two: What are the characteristics of the emerging staff qualifications issues at Takoradi Technical University?
- 4. Research Question Three: What category of skills-set are relevant to the qualifications of staff at Takoradi Technical University as a result of their transition from Polytechnic?
- 5. Research Question Four: What quality assurance criteria are relevant to the current emerging staff qualifications issues at Takoradi Technical University?

- 6. Research Question Five: What recruitment challenges are associated with staff qualifications of Takoradi Technical University's transition from Polytechnic?
- 7. Hypothesis H₀: The views of male and female on quality assurance criteria at Takoradi Technical University are significantly not different.

Demographic Characteristics

The study utilised a sample of 231 respondents from the Takoradi Technical University in the Sekondi-Takoradi Metropolis. The background information of the respondents includes their gender, period of appointment, nature of appointment, educational qualifications and age range. The demographic data were analysed using frequencies and percentages. The results are presented in Tables 2, 3, 4, 5 and 6.

Table 2: Gender Distribution of Respondents

Description	Frequency	Percentage
Male	135	58.4
Female	96	41.6
Total	231	100.0

Source: Field survey (2021)

Table 2 demonstrates that the most (58.4%) of the respondents are males as against 41.6% of the respondents who are females. Taking into an account the unequal responses forming the gender distribution, the study suggested that the grouped reactions about the emerging issues of staff qualification in Takoradi Technical University's transition from Polytechnic were more representative of the male perspective.

Table 3: Period of Appointment

Description	Frequency (f)	Percentage (%)
Before transition	162	70.1
After transition	69	29.9
Total	225	100.0

Table 3 reveals that the majority (70.1%) of the respondents had their appointment before transition while 29.9% were employed after transitioning from polytechnic. The study concluded that the aggregated responses about the emerging issues of staff qualification in Takoradi Technical University's transition from Polytechnic were more representative of the staff employed before transitioning to technical university.

Table 4: Nature of appointment

Description	Frequency (f)	Percentage (%)
Full-time	199	86.1
Part-time	32	13.9
Total	231	100.0

Source: Field survey (2021)

Table 4 indicates that the majority [199(86.1%)] of the respondents at Takoradi Technical University are employed full-time. Next, to this, part-time staff recorded 13.9% of the respondents representing 32. The study inferred that TTU is using a blended workforce approach, thus, the usage of part-time staff is to cut down costs and improve efficiency in their hiring processes.

Table 5: *Level of Education*

Description	Frequency (f)	Percentage (%)
PhD	25	10.8
Masters	119	51.5
Bachelor	72	31.2
HND	12	5.2
Diploma	3	1.3
Total	231	100.0

Table 5 demonstrates that the most (51.5%) of the respondents have obtained master's degree to enhance their practices and duties. Bachelor's degree as a level of educational qualification recorded 31.2%, PhD (10.8%), HND (5.2%) and Diploma (1.3%). The current educational entry requirement for various staff positions have changed because of TTU obtaining a Technical University status. This may have accounted for the increase in staff having more masters, bachelors and PhD degrees. It is imperative to note that the initial educational benchmark for recruiting some staff positions was Certificate recorded zero, however, the change in status has impacted the minimum educational requirement for recruiting staff.

NOBIS

Table 6: Age Range

Description	Frequency (f)	Percentage (%)
30 years and below	31	13.4
31-40 years	97	42.0
41-50 years	74	32.0
51 years and above	29	12.6
Total	231	100.0

In Table 6, the data reveal that most of the participants are young as they fell between the ages of 30 and 51 years. It is evident that majority (74.0%) of the staff fell within the age ranges of 31-40 and 41-50. Next, to this, age range 30 years and below recorded 13.4% of the respondents. Age range 51 years and above recorded 12.6%. As TTU transition from polytechnic, it appears that this may account for new recruits leading to a younger population.

Results

Research Question 1: What essential qualifications should staff of Takoradi Technical University possess?

The main purpose of this research question was to explore essential qualifications of staff at the Takoradi Technical University. The information gained from participants were examined utilising means. A higher mean shows that the majority of the respondents indicated that such essential qualification is important for Takoradi Technical University to possess. The outcomes of the analysis are shown in Table 7.

Table 7: Essential Qualifications

Statement	X	SD
Staff require a certain level of education to be eligible to	3.49	.73
work		
Working with a specific field or related role or in a specific	3.10	.54
industry or employment sector with during a time		
Ability to use both hard and soft skills to perform certain	3.52	.57
tasks		
Mean of means	3.37	.45

It is evident that participants highlighted the essential qualifications staff should possess. Table 7 revealed that the item 'Ability to use both hard and soft skills to perform certain tasks' recorded the highest mean of 3.52. Next, to this, staff require a certain level of education to be eligible to work (M=3.49) and working with a specific field or related role or in a specific industry or employment sector with during a time (M=3.10).

Table 7 shows that the overall mean score of the essential qualification categorisation is 3.37. This figure is higher than 2.50 and this shows that ability to use both hard and soft skills to perform certain tasks, staff requires a certain level of education to be eligible to work and working with a specific field or related role or in a specific industry or employment sector with during a time accounts for essential qualifications staff are required to possess at Takoradi Technical University.

Research Question 2: What are the characteristics of the emerging staff qualifications issues at Takoradi Technical University?

The purpose of this research question was to explore the characteristics of the emerging staff qualifications issues at Takoradi Technical University. The information taken from the respondents were investigated using means and mean class. A higher individual item mean above the benchmark shows that the majority of the respondents agreed with such characteristic before or after/current transitions. The mean class that fell within highlights the level of importance (1-2.32= Not at all Important, 2.33-2.79= Somewhat Important, 2.80-3.25= Important, 3.26-4.00= Very Important) of each period. The outcomes of the analysis are shown in Table 8 and 9.

Table 8: Before Transition Staff Qualification Characteristics

Statement	X	SD
Focused on initial training	3.00	.73
Used for first job entry	2.89	.77
Focused on young employees	2.57	1.00
Mainly vertical progression	2.80	.69
Overseen by a single authority, often led by education	2.68	.86
ministries		
Only full qualifications recognised	2.78	.85
Mean of means	2.79	.82

Source: Field survey (2021)

Table 8 illustrates the level of importance of staff qualification characteristics before transition at Takoradi Technical University. It is shown on Table 8 that the statement 'focused on initial training' recorded the highest

mean of 3.00. This finding may account for the high increase in participants with furthering their education. Next, to this, used for first job entry (M=2.89), mainly vertical progression (M=2.80), only full qualifications recognised (M=2.78), Overseen by a single authority, often led by education ministries (M=2.68) and focused on young employees (M=2.57). Table 8 reveals that the mean class or overall mean score of before transition staff qualification characteristics is 2.79. This figure fell within the mean class of 2.33-2.79 and this depicts that staff qualification characteristics before transition at Takoradi Technical University was somewhat important. Thus, a small degree or moderate extent of importance was placed on the characteristics of staff employed.

Table 9: Current Staff Qualifications Characteristics

Statement	X	SD
Supporting lifelong learning	3.05	.79
Used for different purposes, including job entry, changing	3.24	.80
jobs, further learning, and career change		
For all types of employees	3.00	.83
Horizontal and vertical progression and mobility	3.09	.70
Involve different institutions and stakeholders	3.14	.83
Partial recognition (unitisation) is a key principle,	3.05	.74
including to facilitate the validation of non-formal and		
informal learning		
Mean of means	3.10	.79

Source: Field Survey (2021)

The status Takoradi Technical University parallels the current staff qualification characteristics. This is evident as Table 9 shows that the statement 'used for different purposes, including job entry, changing jobs, further learning, and career change' recorded the highest mean of 3.24. Next, to this, involve different institutions and stakeholders (M=3.14), horizontal and vertical progression and mobility (M=3.09), partial recognition (unitisation) is a key principle, including to facilitate the validation of non-formal and informal learning (M=3.05), supporting lifelong learning (M=3.05) and for all types of employees (M=3.00). Table 9 indicated that the overall mean or mean class score of after transition staff qualification characteristics is 3.10. This figure is higher and fell within the mean class of 2.80-3.25 and this shows that staff qualification characteristics after transition at Takoradi Technical University is important. Thus, great significance or value is placed on the characteristics of staff employed and to be employed. This may be as a result of the change in status emanating from the Technical University Act 922, thus, to apply the requirements of the harmonised Statutes and Scheme of Service to persons deemed to have been employed by the Technical Universities and to provide for related matters.

Research Question 3: What category of skills-sets are relevant to the qualifications of staff at Takoradi Technical University as a result of their transition from Polytechnic?

The reason behind research question three was to ascertain the categories of skills-set relevant to the staff qualifications at Takoradi Technical University. The information gained from the staff were examined by employing descriptive statistics (means) as a statistical tool. A higher mean shows that the

majority of the respondents indicated that each category of skills-set is relevant to the qualifications of staff at Takoradi Technical University. The outcomes of the analysis are shown in Table 10, 11 and 12.

Table 10: Communication Skills

Statement	X	SD
Conveying of the ideas and the message through written	3.25	.72
text		
The ability to express ideas clearly and confidently in	3.44	.69
speech		
Good listening ability is as a vital element for interpersonal	3.67	.51
communication		
Ability to understand and comprehend a message and drive	3.47	.58
out the relevant information from written text		
Mean of means	3.46	.46

Source: Field survey (2021)

Table 10 reveals that communication skills as a relevant category of skills-set of staff qualification. It is evident from the table that the item 'good listening ability is as a vital element for interpersonal communication' recorded the highest mean of 3.67. Next, to this, ability to understand and comprehend a message and drive out the relevant information from written text (M=3.47), the ability to express ideas clearly and confidently in speech (M=3.44) and conveying of the ideas and the message through written text (M=3.25).

From Table 10, the mean of means score of communication skills is 3.46. The obtained overall mean is greater than 2.50 and this describes that communication skills is a relevant category of skill-set for recruiting staff at

Takoradi Technical University. This suggests that Takoradi Technical University requires staff to be good listening ability is as a vital element for interpersonal communication, ability to understand and comprehend a message and drive out the relevant information from written, can express ideas clearly and confidently in speech and conveying of ideas and messages through written text.

Table 11: Technical/Professional Skills

Statement	X	SD
The ability of inspecting, cleaning, transforming, and	3.26	.64
modeling data for the purpose of obtaining and		
assimilating useful information, suggesting conclusions,		
and supporting decision making		
The ability to perform certain tasks in a specific discipline	3.39	.66
or department		
Using academic knowledge obtained through formal	3.34	.50
education or apprenticeship to further delve into specific		
domain skills		
The competency to do a certain kind of work at a certain	3.04	.73
level that is considered as talent		
Mean of means	3.26	.47

Source: Field survey (2021)

Table 11 depicts the means of technical/professional skills as an important component of skills-set Takoradi Technical University requires staff to possess. The table shows that the statement 'the ability to perform certain tasks in a specific discipline or department' recorded the highest mean of 3.39.

It is shown also that the respondents agreed that using academic knowledge obtained through formal education or apprenticeship to further delve into specific domain skills (M=3.34). The statement 'the ability of inspecting, cleaning, transforming, and modeling data for the purpose of obtaining and assimilating useful information, suggesting conclusions, and supporting decision making' recording a mean of 3.26. Finally, the statement 'the competency to do a certain kind of work at a certain level that is considered as talent' obtained a mean of 3.04.

From Table 11, the overall mean score of the technical/professional skills is 3.26. The overall mean is greater than the 2.50 benchmark and this illustrates that those technical/professional skills is an essential component of the skills-set Takoradi Technical University requires staff to possess. This implies that staff should have the ability to perform certain tasks in a specific discipline or department, use academic knowledge obtained through formal education or apprenticeship to further delve into specific domain skills, the ability of inspecting, cleaning, transforming, and modeling data for the purpose of obtaining and assimilating useful information, suggesting conclusions, and supporting decision making and the competency to do a certain kind of work at a certain level that is considered as talent.

NOBIS

Table 12: Conceptual Skills

Statement	X	SD
The mental ability to coordinate and integrate the entire	3.27	.66
interests and activities of the institution		
The ability to apply information and concepts to practice	3.51	.67
The ability to quickly get at the true cause of a certain	3.42	.49
situation through a maze of data, observation and facts		
within an institution		
Mean of means	3.40	.49

This section shows conceptual skills as a relevant category of skills-set of staff qualifications. Table 12 shows that the item 'the ability to apply information and concepts to practice' recorded the highest mean of 3.51. Next, to this, the ability to quickly get at the true cause of a certain situation through a maze of data, observation and facts within an institution (M=3.42) and the mental ability to coordinate and integrate the entire interests and activities of the institution (M=3.27).

Table 12 presented the overall mean score of the conceptual skills domain to be 3.40. The overall mean is greater than 2.50 and this illustrates that those conceptual skills is a relevant category of skill-set for recruiting staff at Takoradi Technical University. This suggests that Takoradi Technical University requires staff to have the ability to apply information and concepts to practice, ability to quickly get at the true cause of a certain situation through a maze of data, observation and facts within an institution and the mental ability to coordinate and integrate the entire interests and activities of the institution.

Research Question 4: What quality assurance arrangement criteria are relevant to the current emerging staff qualifications issues at Takoradi Technical University?

The main purpose of this study question was to establish the quality assurance arrangement criteria that are relevant to the current emerging staff qualifications issues at Takoradi Technical University. The information gathered from the staff were examined using means. A higher mean shows that the majority of the respondents indicated that such essential qualification is important for Takoradi Technical University to possess. The outcomes of the analysis are shown in Table 13.

Table 13: Quality Assurance Criteria

Statement Statement	X	SD
Standard		
All standards set are outcome-based	2.78	.82
All standards behind staff qualifications relate to skills and	3.47	.62
competence requirements for a job description or a group of		
descriptions		
Involvement of labour market actors in defining the standards	3.00	.76
of a qualification		
Mean of means	3.08	.53
Certification		
Fulfill requirement and increase employee quality	3.10	.56
The certification has national value and is awarded by a	3.42	.83
competent body (Ghana Tertiary Education Commission, MoE,		
institutions of higher education, etc.)		
Using certificate to allow for progression and for further	3.62	.59
education or training		
Mean of means	3.38	.48
Relevance		
Involvement of labour market actors in defining needs for a	3.06	.66
qualification		
Justification that the sector and the occupation have a relevance	3.10	.75
for a specific department or unit		
	3.08	.66
Mean of means		

Source: Field survey (2021)

This section presents the means of quality assurance arrangement criteria that are relevant to the current emerging staff qualifications issues at Takoradi Technical University. In the standards criterion, the Table shows that the statement 'all standards behind staff qualifications relate to skills and competence requirements for a job description or a group of descriptions' recorded the highest mean of 3.47. It is shown also that the respondents agreed that involvement of labour market actors in defining the qualifications of staff (M=3.00). The statement 'All standards set are (learning) outcome-based' record a mean of 2.78. The mean of means under the standard section was 3.08.

Similarly, the certification section showed that the statement 'using certificate to allow for progression and for further education or training' recorded a mean of 3.62. Next to this, the respondents agreed that the certification should have a national value and awarded by a competent body [Ghana Tertiary Education Commission, MoE, institutions of higher education, etc.] (M=3.42) and fulfill regulatory requirement and increase employee quality (M=3.10). The total mean of means of the certification element is 3.38. Finally, the respondent agreed that relevance for the labour market and individual is an important criterion for their current status with total mean of 3.08. This is seen in the statement 'justification that the sector and the occupation have a relevance for a specific department or unit' recording the highest mean of 3.10. Next to this, the relevance of involving labour market actors in defining basic requirement of a qualification (M=3.06).

Table 13 shows that the mean of means score of the quality assurance arrangement criteria is 3.19. The figure is higher than 2.50 same as the sectional means and depicts those set of criteria as imperative components of ensuring

quality staff qualification at Takoradi Technical University requires staff to possess. This implies that quality assurance arrangement criteria include standard benchmark (all standards behind staff qualifications relate to skills and competence requirements for a job description or a group of descriptions, involvement of labour market actors in defining the qualifications of staff and all standards set are outcome-based), certification benchmark (using certificate to allow for progression and for further education or training, certification should have a national value and awarded by a competent body [Ghana Tertiary Education Commission, MoE, institutions of higher education, etc., and fulfill regulatory requirement and increase employee quality) are the benchmark for controlling and ensuring quality, efficient and resourceful staff.

Research Question 5: What recruitment challenges are associated with staff qualifications of Takoradi Technical University's transition from Polytechnic?

This research question sought to ascertain recruitment challenges that are associated with staff qualifications of Takoradi Technical University's transition from Polytechnic. The information gained from the staff were examined through the use of percentages and frequencies. The outcomes of the analysis are shown in Table 14.

NOBIS

Table 14: Recruitment Challenges

Statement	Yes		No	
	F	%	F	%
Limited financial resources to expand services	205	88.7	26	11.3
and provision of staff development				
programmes				
Lack of qualified applicants	64	27.7	167	72.3
Applicants who do not demonstrate adequate	170	73.6	61	26.4
work ethic				
Political influences (both internal and	180	77.9	51	22.1
external)				
Inadequate infrastructural facilities (both	168	72.7	63	27.3
physical and technological)				
Inadequate staff development programmes	190	82.3	41	17.7

This section describes the recruitment challenges that are associated with staff qualifications at Takoradi Technical University as revealed by the staff. In Table 14, most [205(88.7%)] of the staff responded constructively with a 'Yes' response to the statement 'Limited financial resources to expand services' and 26 (11.3%) for 'No'. Likewise, there were 190 (82.3%) of the staff who responded constructively with a 'Yes' response to the statement 'Inadequate staff development programmes' and 17% for 'No' response. Again, 'Political influences (both internal and external)' recorded 180 (77.9%) for 'Yes' responses and 51 (22.1%) for 'No' responses. Applicants who do not demonstrate adequate work ethic was selected 170 times representing 73.6% for

'Yes' responses and 61 (26.4%) for 'No' responses. Additionally, 'Inadequate infrastructural facilities (both physical and technological)' recorded 72.7% for 'Yes' representing 168 respondents and 27.3% (63) of 'No' responses. On the other hand, the statement 'Lack of qualified applicants' recorded the least responses of 'Yes' (64[27.7%]) and 72.3% (167) of 'No' responses indicating that as not a recruitment challenge to staff qualification. The current finding suggests that Takoradi Technical University is confronted with recruitment challenges with regards to staff qualifications. These challenges include limited financial resources to expand services, inadequate staff development programmes, political influences (both internal and external), applicants who do not demonstrate adequate work ethic, and inadequate infrastructural facilities (both physical and technological).

Hypotheses

H₀: The views of male and female staff on quality assurance criteria of staff qualifications at Takoradi Technical University are significantly not different.

H₁: There views of male and female staff on quality assurance criteria of staff qualifications at Takoradi Technical University are significantly different.

The study assumption sought to discover the significant difference with regards to the views of male and female respondents on quality assurance criteria of staff qualifications at Takoradi Technical University. The study used the independent samples t-test based on appropriateness of data obtained. The outcomes of the analysis are shown in Table 15.

Table 15: Independent Samples t-test of the Views on the Quality Assurance

Criteria with regard to Gender

Criteria	Gender	N	Mean	SD	t	df	Sig.(2-tailed)
Standards	Male	135	3.0198	.49502	-	229	.026
					2.234*		
	Female	96	3.1771	.57012			
Certification	Male	135	3.3679	.48914	433	229	.665
	Female	96	3.3958	.47465			
Relevance	Male	135	2.9593	.75075	-	229	.001
					3.450*		
	Female	96	3.2552	.44718			

Source: Field survey (2021)/*Significant, p < 0.05

This section shows the outcomes of the independent samples t-test performed to distinguish the views of participants on three quality assurance arrangement criteria centred on gender. It is evident that the views of male and female staff regarding relevance systems criterion are significantly different (t= -3.450, df= 229, p= .001). Additionally, Table 15 showed that the views of male and female staff regarding the standards behind qualification criterion are significantly different (t= -2.234, df= 229, p= .026). Inversely, it is evident that the views of male and female staff regarding the certification criterion are not significantly different (t= -.433, df= 229, p=.665). The results imply that their thoughts in terms of the certification criterion as a quality assurance criterion do not differ significantly. In summary, gender is not seen as a significant determinant of the use of certificate to employ staff at Takoradi Technical University.

Discussion

Essential qualifications

The study revealed that the ability to use both hard and soft skills to perform certain tasks, staff requires a certain level of education to be eligible to work and working with a specific field or related role or in a specific industry or employment sector during a time that accounts for essential qualifications staff are required to possess at Takoradi Technical University. The study findings are coherent with the findings of Wooden and Harding (1997) that attitudes, skills, experiences and appearance are significant determinate of staff selection and are regularly stressed on than academic accomplishments. The authors stressed that the part of credentials within the staffing and promotions methods used by managers focus on staff's eligibility such as educational experiences, abilities to perform a specific job whether learned through training or job as well as having talents that can be applied universally.

Additionally, the study findings further support Keating (2002, as cited in ANTA, 2005) and Ridoutt et al.'s (2002a) findings that qualifications are substantial results of educating people and human resource managers for institutions in a country. Thus, qualifications serve as the primary measure of schooling or educational or training outcomes. According to Varanasi (1999), essential qualifications conveyed against an unmistakable norms system permit common acknowledgment of knowledge and skills-set across wide geographic, jurisdictional, and global limits. From a certain perspective, this can work with work-versatility across institutions or organisations, industrial sectors and geographical limits, by presenting some proof of expertise that is generally acknowledged.

Emerging characteristics of staff qualifications

The study further showed that staff qualification characteristics after transition at Takoradi Technical University is important. The emerging staff characteristics include supporting lifelong learning, used for different purposes, including job entry, changing jobs, further learning, and career change, for all types of employees, horizontal and vertical career progression and mobility, involve different institutions and stakeholders, and partial recognition (unitisation) is a key principle, including to facilitate the validation of nonformal and informal learning. Thus, great significance or value is placed on the characteristics of staff employed and to be employed. This may be because of the change in status emanating from the Technical University Act 922, thus, to apply the requirements of the harmonised Statutes and Scheme of Service to persons deemed to have been employed by the Technical Universities and to provide for related matters.

The findings of the current study tally with the findings of Cedefop (2013) that qualification characteristics are important in modern societies as carriers of information and value (currencies), extensively influencing the way occupations and professions are defined and regulated. Cedefop (2013) stressed that by defining the minimum level of knowledge, skills and competence required by somebody holding a particular position, qualifications regulate access to, and conduct of, an occupation or profession to support lifelong learning, career progress whether horizontal or vertical and engaging all actors in staff issues.

The findings of the current study are consistent with the findings of Skillsbase (2010) that staff in modern societies have a sense of purpose and

personal gain for work such as improved competence and skills connecting with institution. They can also play a role in policy making, as a tool to influence education systems and labour market management. According to Zhao (2013), the iceberg theory considers five types of competence: knowledge (skills), social roles, self-image, personality, and motivation. Among the above, knowledge (skills), in the visible iceberg above the water, is the easiest to change; social roles, self-image, personality, and motivation, hidden below the surface, is more difficult to reach, change or develop are emerging characteristics of staff at TTU.

Categories of staff skills-set

The study revealed that three categories the skill-sets (communication, technical and conceptual) are essential for current and potential staff. The study showed that communication skills is a relevant category of employable skills set for recruiting staff at Takoradi Technical University. As such, Takoradi Technical University staff ought to demonstrate good listening skills for interpersonal communication, ability to understand and comprehend a message and drive out the relevant information from written, can express ideas clearly and confidently in speech and conveying of ideas and messages through written text. The study showed that staff should have the ability to perform certain tasks in a specific discipline or department, use academic knowledge obtained through formal education or apprenticeship to further delve into specific domain skills, the ability of inspecting, cleaning, transforming, and modeling data for the purpose of obtaining and assimilating useful information, suggesting conclusions, and supporting decision making and the competency to do a certain kind of work at a certain level that is

considered as talent. Additionally, conceptual skills are relevant category of staff skills-set for recruiting and maintaining staff at Takoradi Technical University. This suggests that Takoradi Technical University requires staff to have the ability to apply information and concepts to practice, ability to quickly get at the true cause of a certain situation through a maze of data, observation and facts within an institution and the mental ability to coordinate and integrate the entire interests and activities of the institution.

The findings of the current study are in line with the findings of NRC (2003) that thoughtfully constructed dialogue can help to identify required skill set or knowledge deficiencies and pinpoint the need for initial and refresher training for current staff and job candidates. Supervisors should always verify the written and stated qualifications of an individual employee with observation. This measure will help to ensure that the knowledge and skills that a person claims to have commensurate with the specific task requirements. However, regardless of the professional orientation, these skills give advantage to all the staff in the dealing with their individual current situations within their assigned task at workplace. Thus, it can be noted that good abilities in technical and non-technical skills such as communications skills, problem solving skills and decision-making skills will be used as a medium to enhance the ability for skilled workers in industry (Tokarčíková et al., 2020).

Similarly, the findings support the findings of Shrivastava and Prasad (2019) that effective skills-set (communication, conceptual and technical) must be effectively practiced at workplace for better work output and results. According to Shrivastava and Prasad, several studies identify that effective communication is imperative at the workplace for increasing employee

productivity and organisational performance as a result of staff possessing these skills-set. In line with the current findings, Terry (2004 as cited in Mukarromah et al., 2019) stated that skills-set are abilities in using a specific activity in the form of processes, procedures and techniques to allow the implementation of the mechanisms needed to carry out certain tasks. The factors highlighting benefits of skills-set within the workplace are improved productivity, increased employee morale, higher job satisfaction, reduced turnover rates, increased trust in management, stronger teamwork, augmentation of knowledge, reinforcement in employee participation, development of stronger organisational culture and formation of amiable working environment.

Quality assurance of staff qualifications

The study revealed that quality assurance criteria is an imperative component of ensuring quality staff qualification at Takoradi Technical University requires staff to possess. This implies that quality assurance arrangement criteria include standard benchmark (all standards behind staff qualifications relate to skills and competence requirements for a job description or a group of descriptions, involvement of labour market actors in defining the qualifications of staff and all standards set are outcome-based), certification benchmark (using certificate to allow for progression and for further education or training, certification should have a national value and awarded by a competent body [Ghana Tertiary Education Commission, MoE, institutions of higher education, etc., and fulfill regulatory requirement and increase employee quality) are the benchmark for controlling and ensuring quality, efficient and resourceful staff.

The study findings are in line with the findings of ETF (2016) that qualification specifications used are important and have worth in the work market; and how nations should rest assured that individuals getting certificates are meeting the states of these capabilities (as such, they have exhibited that they fulfil the guidelines). Assuring the quality of current or potential staff in an institution requires demands conversation among a scope of stakeholders, proportionate regulations or laws, and clearer institutional job description with detailed functions.

The findings of the current study support the findings of Manghani (2011) that quality control is an integral part of the daily activities occurring within relevant systems of departments established by the institution. Quality control is generally the responsibility of the departments as quality is infused into the services. According to ETF (2016), a concrete example could be that qualifications need regular review and updating of standards, job relevance and certification requirement of staff. Thus, commitment of all actors to this, as a natural part of a qualifications system, suggests a view of quality as more than just a control mechanism. Quality control is focused on fulfilling quality requirements, and as related services.it encompasses the operational techniques and activities undertaken within the quality assurance system to verify that the requirements for quality staff with regards activities that must fulfilled (ICH, 2001). Quality control is generally the responsibility of the departments as quality is infused into the services. Therefore, quality control is an integral part of the daily activities occurring within relevant systems of departments established by the institution (Manghani, 2011).

Staff recruitment challenges

The current finding suggests that Takoradi Technical University is confronted with recruitment challenges with regards to staff qualifications. These challenges include limited financial resources to expand services, inadequate staff development programmes, political influences (both internal and external), applicants who do not demonstrate adequate work ethic, and inadequate infrastructural facilities (both physical and technological). The findings of the current study support the findings of Nagarajan and Fathima (2014) that in an already saturated job market, where the practices like recruiting and maintaining staff are gaining momentum, human resource professionals are constantly facing new challenges in one of their most important functionrecruitment. They have to face and conquer various challenges to find the best candidates for their institutions. Similarly, the findings support the findings of MoE (2014), that other difficulties faced by the polytechnics in the early years included poor funding, inexperienced management staff and a sluggish administrative system. According to MoE, inadequate funding was a particularly serious problem for the polytechnics, which felt marginalised in the allocation of government resources vis-à-vis the universities. Throughout the 1990s, government expenditure per university student was twelve times the amount spent on a polytechnic student. The issue of funding and particularly the welfare of staff at various universities in Africa have been at the centre of a series of strikes since 1990s (Mushemeza, 2016).

Additionally, the findings of the current study are in line with findings of MoE (2014) that there are still a number of challenges that need to be addressed to enhance the quality and relevance of polytechnic education and

training in the country. According to MoE, by far the greatest challenge facing the polytechnics is their ability to recruit and retain qualified staff with relevant practical or professional experience. This is because the type of skilled professionals that the polytechnics require are also those highly sought after by industry. In this regard, therefore, the polytechnics are unable to compete for staff with industry which can offer better remuneration packages. Again, higher education institutions have clear governance bodies; the university council, boards of council, senior management (Mushemeza, 2016). Such governance organs are important for participation and democratic governance generally, however, both internal and external influences hamper their decision making in staffing. Feng (2007) revealed that the basic and unpreventable truth is that tertiary institutions should be overseen determinedly, judiciously and expertly in a decent context to save and give over guiding principle to new ages. The findings support the findings of Mushemeza (2016) that higher education institutions are faced with heavy infrastructural needs/demands (both physical and technological). The increase in number of students year after year requires more lecture rooms, ICT laboratories, expanded libraries, academic staff offices, and recreational facilities.

Differences in quality assurance criteria based on gender

Finally, the study revealed that the quality assurance has three components, namely certification, relevant of job and standard behind qualification criteria. About the standards and relevant systems, the present study showed a significance difference between male and females' views. However, in terms of certification as a quality assurance criterion, the views of each gender were not significant different from other. Hence, gender is not a

critical determinant of the use of certificate to employ staff at Takoradi Technical University. The results of this research are in line with the conclusions of ETF (2016) that qualification specifications used are important and have worth in the work market; and how nations should rest assured that individuals getting certificates are meeting the states of these capabilities (qualifications). Equally, staff must demonstrate that they meet the certificate requirement irrespective of their gender status. Similarly, the current findings support the findings of Cedefop (2015) that formal qualifications are achieved individually, and it is not dependent on gender. In state funded higher education, for what we ordinarily allude to as official qualifications tends to be done in either a concentrated or de-brought together way; with one body authenticating educational institutions authority to confer certificates to individuals.

Chapter Summary

This section provided the results and discussion of the current study. A sample of 231 staff were involved in the study. Emerging staff characteristics such as supporting lifelong learning, used for different purposes, including job entry, changing jobs, further learning, and career change, for all types of employees, horizontal and vertical career progression and mobility, involve different institutions and stakeholders, etc., were relevant and evident among staff of TTU. The study showed that three categories of skills-set (communication, technical and conceptual) are essential for current and potential staff. There was no significant difference in the opinions of male and female in terms of certification as a quality assurance criterion.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This section offers the summary of study purpose and current findings emanated from the study. The conclusions derived from the data (findings) analysis are described. Suggestions to improve the emerging staff qualification issues are also made.

Summary

The current study sought to delve into the emerging issues of staff qualification in Takoradi Technical University's transition from Polytechnic. Precisely, the study pursued to answer five research questions and one hypothesis. These include 'hat essential qualifications should staff of Takoradi Technical University possess?', 'What are the characteristics of the emerging staff qualifications issues at Takoradi Technical University?', 'What category of employable skills set are relevant to the qualifications of staff at Takoradi Technical University as a result of their transition from Polytechnic?', 'What quality assurance criteria are relevant to the current emerging staff qualifications issues at Takoradi Technical University?', What recruitment challenges are associated with staff qualifications of Takoradi Technical University's transition from Polytechnic?;' and H₀: the views of male and female staff are significantly not different regarding quality assurance criteria of staff qualifications at Takoradi Technical University.

Also, the study reviewed related literature that covered theoretical framework (iceberg theory of staff selection and competency), historical antecedent of Technical Universities in Ghana and Conceptual Review. A

descriptive survey design was chosen for the study. A sample of 231 were selected via a stratified and simple random sampling techniques for the study. Data were collected with questionnaires (Staff Qualification Questionnaire [SQQ]). The quantitative data were analysed using descriptive (frequencies, percentages, and means) and inferential statistics (independent samples t-test).

Key Findings

Concerning the essential qualifications, the study revealed that the ability to use both hard and soft skills to perform certain tasks, staff requires a certain level of education to be eligible to work and working with a specific field or related role or in a specific industry or employment sector with during a time accounts for essential qualifications staff are required to possess at Takoradi Technical University.

The study showed that staff qualification characteristics after transition at Takoradi Technical University is important. The emerging staff characteristics include supporting lifelong learning, used for different purposes, including job entry, changing jobs, further learning, and career change, for all types of employees, horizontal and vertical career progression and mobility, involve different institutions and stakeholders, and partial recognition (unitisation) is a key principle, including to facilitate the validation of nonformal and informal learning. Thus, great significance or value is placed on the characteristics of staff employed and to be employed.

The study revealed that three categories of skills-set (communication, technical and conceptual) are essential for current and potential staff. This suggests that Takoradi Technical University requires staff to be good listening ability is as a vital element for interpersonal communication, ability to

understand and comprehend a message and drive out the relevant information from written, can express ideas clearly and confidently in speech and conveying of ideas and messages through written text. The study showed that staff should have the ability to perform certain tasks in a specific discipline or department, use academic knowledge obtained through formal education or apprenticeship to further delve into specific domain skills, the ability of inspecting, cleaning, transforming, and modeling data for the purpose of obtaining and assimilating useful information, suggesting conclusions, and supporting decision making and the competency to do a certain kind of work at a certain level that is considered as talent. Additionally, the study showed that Takoradi Technical University requires staff to have the ability to apply information and concepts to practice, ability to quickly get at the true cause of a certain situation through a maze of data, observation and facts within an institution and the mental ability to coordinate and integrate the entire interests and activities of the institution.

The study revealed that quality assurance criteria is an imperative component of ensuring quality staff qualifications at Takoradi Technical University requires staff to possess. This implies that quality assurance arrangement criteria include standard benchmark (all standards behind staff qualifications relate to skills and competence requirements for a job description or a group of descriptions, involvement of labour market actors in defining the qualifications of staff and all standards set are outcome-based), certification benchmark (using certificate to allow for progression and for further education or training, certification should have a national value and awarded by a competent body [Ghana Tertiary Education Commission, MoE, institutions of higher education, etc., and fulfil a regulatory requirement and increase

employee quality) are the benchmark for controlling and ensuring quality, efficient and resourceful staff.

The study further revealed that Takoradi Technical University is confronted with recruitment challenges with regards to staff qualifications. These challenges include limited financial resources to expand services, inadequate staff development programmes, political influences (both internal and external), applicants who do not demonstrate adequate work ethic, and inadequate infrastructural facilities (both physical and technological).

Finally, the study revealed that quality assurance has three components, namely certification, relevant of job and standard behind qualification criteria. The study showed that there was a significant difference in the views of male and female staff regarding the standards and relevant of job. However, there was no significant difference in the opinions of male and female in terms of certification as a quality assurance criterion. It can be established that gender positionality is not an important element of the use of certificate to employ staff at Takoradi Technical University.

Conclusion

This study concludes that staff qualification issues are critical in Technical Universities and was effectively monitored in the study area. The essential qualifications giving attention cut across education and work experiences as well as both hard and soft skills. The ability of a skilled staff to apply the skills-set acquired to the real working environment was highly regarded. Both hard and soft skills are the important assets require by technical universities in the three categories of skills-set (technical, communication and conceptual). These skills-set are important to the success of technical

universities. Thus, a lack of any of the skills-set lead to a loss of hours of working time and it generates additional costs. Identifying competent and apt staff is one of the most challenging responsibilities for all institutions. The emerging staff characteristics including supporting lifelong learning, used for different purposes, including job entry, changing jobs, further learning, and career change, for all types of employees happened as a result of transitioning to technical university.

Recommendations

Recommendations made were based on the findings.

- 1. Human resource managements should review staff qualification requirements periodically to meet current economic demands.
- 2. Management and human resources of technical universities should educate staff about 21st century qualifications characteristics that may directly affect work output.
- 3. Human resource management of technical universities should design effective, efficient and transparent skills-set toolkit and development programmes to facilitate staff's competency.
- 4. HRMs should utilise several tactics and strategies to poach, train and retain staff.
- 5. Management should redesign and review quality assurance benchmarks such as standards and relevant systems to monitor staff qualification since gender is not a determinant of certification.

Suggestions for Future Research

There is a need to have future research in a similar area that focuses on the skills-set gaps of non- staff so that one can have a bigger picture about the qualification gaps within technical universities in Ghana. Furthermore, further research should add an interview guide as part of the data collection instrument and procedures. This would help provide adequate information concerning the state of qualification issues at technical universities in Ghana.



REFERENCES

- Adjibolosoo, S. B. S. K. (1995). *The human factor in developing Africa*.

 Greenwood Publishing Group.
- Afeti, G. A. (2005). Strategic institutional development in the South: A case study of Ho Polytechnic education, Ghana. Ho Polytechnic.
- Akoo, D. A. (2017). Analysis of employee selection methods on performance of the County Government of Kisumu. MBA Research Project, Maseno University, Kenya.
- Albayyari, J., & Lahidji, B. (2002). Assessing the competencies in the manufacturing engineering technology programs. Paper presented at 2002 June Annual Conference, Montreal, Canada. 10.18260/1-2—11188.
- Alemu, K. B. (2010). Shaping research universities in the Nile Basin Countries.

 Fountain Publishers.
- Amegashie-Viglo, S. (2014). Organisational Change Management of the Transition of Polytechnics in Ghana to Universities of Technology: A Theoretical Framework for Managing Transitional Challenges. *Journal of Education and Practice*, 5(25), 93–99.
- Australian National Training Authority. (2005). What value do employers give to qualifications? Adelaide, Australia: NCVER.
- Atakora, A., & Yeboah, A. (2012). Achieving quality assurance of Polytechnic Education in Ghana: The role of stakeholders. *International Journal of Innovative Research and Development*, 1(8), 428–447.
- Atakpa, S. K. (2006). *Managing human resource in Ghanaian Polytechnics*. Kick Off Conference of NPT/UCC Project June 2006 at Elmina/UCC.

- Armstrong, M., & Armstrong, T. S. (2014). *Handbook of human resource*management practice (13th ed.). Kogan Page.
- Arubayi, D. O. (2009). Lecturer quality and gender in Colleges of Education in Nigeria. *College Students Journal*, *43*(2), 669-675.
- Aryeetey, E. (2000). A7T Socio-economic development: Economic reforms in Ghana. *The Miracle and the Mirage*, 284.
- Baiden, F. A. (1996). Technical and vocational education in Ghana. The development of technical and vocational education in Africa: Case studies from selected countries. UNESCO
- Bakah, M. A. B. (2010). Teacher professional development through collaborative curriculum design in Ghana's polytechnics. Published doctorate thesis. University of Twente, Enschede.
- Bartone, P. T. (2010). Enhancing human performance in security operations:

 International and law enforcement perspectives. Springfield: Charles C

 Thomas Publisher.
- Bayissa, W., & Zewdie, S. (2010). Academic staff reward system: A case of Jimma University. *Ethiopian Journal of Education and Sciences*, 6(1), 13-27.
- Benson, G. S., Finegold, D., & Mohrman, S. A. (2004). You paid for the skills, now keep them: Tuition reimbursement and voluntary turnover.

 Academy of Management Journal, 47(3), 315–331.

 https://doi.org/10.2307/20159584.
- Boone, L. E., & Kurtz, D. L. (2002). Contemporary marketing. Dryden Press.
- Benešová, A., & Tupa, J. (2017). Requirements for Education and Qualification of People in Industry. *Procedia Manufacturing*, 11, 2195-2202,

- Bryman, A., & Bell, E. (2011). *Business research methods*. Oxford University Press.
- Buhasio, S. A. (2012). Challenges facing employee recruitment and selection among Non-Governmental Organizations in Kakamega Central District, Kenya. University of Nairobi.
- Candy, P. C. (1991). Self-direction for lifelong learning: A comprehensive guide to theory and practice. Jossey-Bass.
- Carrell, M. R., Elbert, N. F., & Hatfield, R. D. (2000). *Human resource management. Strategies for managing a diverse and global workforce* (6thed). The Dryden Press-Harcourt College Publishers.
- Casio, W. F. (1991). Managing human resources: Productivity, quality of work life profits. McGraw Hill Inc.
- Cedefop. (2009) *The relationship between quality assurance and VET*certification in EU Member States. Cedefop, Publications Office of the European Union, Belgium.
- Cedefop. (2010). Changing qualifications: a review of qualification policies and practices. Luxembourg. Cedefop, Publications Office of the European Union. Retrieved from http://www.cedefop.europa.eu/EN/Files/ 3059_en.pdf.
- Cedefop. (2013). The role of qualifications in governing occupations and professions. Publications Office of the European Union.
- Cedefop. (2015). *Ensuring the quality of certification in vocational education* and training. Publications Office of the European Union.
- Chen, P. S. (2010). The effects of financial license on job performance. *Journal* of Global Business Management, 6(2), 1-5.

- Clutterbuck, D., & Lazidou, D. (2001). Communication competence and business success: A comparative review of communication programs.

 International Association Business Communicators-Chicago.
- Damooei, J., Maxey, C., & Watkins, W. (2008). A survey of skill gaps and related workforce issues in selected manufacturing sectors: Report and recommendations. Workforce Investment Board of Ventura County, USA.
- Danim, S. (2010). Kinerja Staff dan Organisasi. Pustaka Setia.
- Effah, P. (2006). A decade of polytechnic education in Ghana: An assessment of achievements and failures. Lecture Series delivered at Sunyani polytechnic, April 2006, Sunyani, Ghana.
- Elliott, A. (2006). Early childhood education: Pathways to quality and equity for all children. Australian Council for Educational Research. *Australian Education Review*, 50.
- European Commission. (2013). *Statistics: professionals moving abroad*.

 Retrieved from http://ec.europa.eu/internal_market/qualifications/regprof/index.cfm?fuseaction=stats.ranking.
- European Training Foundation. (2015). Lifelong learning qualifications: How should professional qualifications, including those acquired through non-formal and informal learning, and regulated professions be considered in Ukraine? Should they be a part of the NQF? European Training Foundation.

- European Training Foundation. (2016). *Qualification systems: Getting organised*. European Training Foundation. Retrieved from https://www.etf.europa.eu/sites/default/files/m/89E0B0EEF0F8C468C 12580580029F2CD_Qualification systems_toolkit.pdf.
- Feng, L. (2007). Hire today Gone tomorrow: The Determinants of Attrition among public school teachers. Department of Economics; Florida State University, Florida, USA.
- Fielden, J. (1998). *Collaboration in administrative computing: The issues*.

 Association of Commonwealth Universities.
- Fives, H. (2003). What is teacher efficacy and how does it relate to teachers' knowledge: A theoretical review. Paper presented at the American Educational Research Association Annual Conference, April 15, 2003, Chicago.
- Fraenkel, J. R., & Wallen, N. E. (2000). *How to design and evaluate research in education* (4th ed.). McGraw-Hill Company Inc.
- Garwe, E. C. (2015). The status quo of doctoral student enrolment in universities in Zimbabwe. *Journal of studies in Education*, *5*(3), 1-16. http://dx.doi.org/10.5296/jse.v5i3.7645
- Gay, R. L. (1992). Educational research: Competencies for analysis and application (4th ed.). Macmillan Publishing Company.
- Gehrke, L., Kühn, A. T., Rule, D., Moore, P., Bellmann, C., & Siemes, S. (2015). A discussion of qualifications and skills in the factory of the future: A German and American perspective. Düsseldorf: VDI-Haus.
- Goad, T. W. (2002). *Information literacy and workplace performance*. Quorum Books.

- Godwyll, F. E. (2008). Education at the crossroads: The Ghanaian dilemma and puzzle. In Wan, G. (Ed), the education of diverse student populations. explorations of educational purpose (111-138). Dordrecht: Springer. https://doi.org/10.1007/978-1-4020-8204-7_7.
- Green, A., & Sakamoto-Vandenberg, A. (2000). The place of skills in national competition strategies in Germany, Japan, Singapore and the UK. UNESCO.
- Guo, L. C., & Sanchez, Y. (2005). Workplace communication. *Organizational Behaviour in Health Care*, 77-110.
- Hazelkorn, E. (2004). Growing research: Challenges for late developers and newcomers. *Higher Education Management and Policy*, *16*(1), 119–142.
- He, L. J. (2015). Auditor industry specialization, audit experience and accounting restatement. *International Business Management*, 9, 1686-1697.
- Hernes, T., & Bakken, T. (2003). Implications of self-reference: Niklas Luhmann's autopoiesis and organization theory. *Organization Studies*, 24(9), 1511-1535.
- Hill, Y., Lomas, L., & MacGregor, J. (2003). Students' perceptions of quality in higher education. *Quality Assurance in Education*, 11(1), 15-20.
 Retrieved from http://dx.doi.org/10.1108/09684880310462047.
- Holm, J. D. (2012). *The chronicle of higher education: The brain drain within Africa*. Retrieved from http://chronicle.com/blogs/worldwise/the-brain-drain-within-africa/30554.

- Indeed Editorial Team. (2021). *Conceptual Skills: Definition, Overview and Examples*. Retrieved from https://www.indeed.com/career-advice/career-development/conceptual-skills.
- International Conference on Harmonisation. (2001). Guideline for Good Clinical Practice. *Journal of Postgraduate Medicine*, 47(1), 45-50.
- International Labour Organisation. (2000). World labour report 2000: Income security and social protection in a changing world. International Labour Organisation.
- Ishola, A. A., Adeleye, S. T., & Tanimola, F. A. (2018). Impact of educational, professional qualification and years of experience on accountants' job performance. *Journal of Accounting and Financial Management*, 4(1), 32-44.
- ISO, N. C. (2008). Sistemas de gestión de la calidad. Requisitos. AENOR.
- Jacob, W. J., Xiong, W., & Ye, H. (2015). *Professional development programmes at world-class universities*. Palgrave Communications, 1, 15002. Retrieved from http://dx.doi.org/10.1057/palcomms.2015.2.
- Katz, L. G. (1995). Talks with teachers of young children: A collection. Ablex.
- Kogan, I., & Unt, M. (2008). The role of vocational specificity of educational credentials for labour market entry in Estonia and Slovenia. *International sociology*, 23(3), 389-416.
- Kombo, D. K., & Tromp, L. A. (2006). *Proposal and thesis writing: An introduction*. Paulines Publications.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 232-256.

- Kwapong, L. S. A., Opoku, E., & Donyina, F. (2015). The effect of motivation on the performance of teaching staff in Ghanaian polytechnics: The moderating role of education and Research experience. *Global Journal of Human Resource Management*, *3*(6), 30-43.
- Larbi, A. R. (2008). A human resource and staff development practices of the Ghana Education Service in the Suhum Kraboa Coalter District of the Eastern Region of Ghana. Unpublished M. ED Dissertation. University of Cape Coast, Cape Coast.
- Leedy, P. D., & Ormrod, J. E. (2005). *Practical research: Planning and design* (8th ed.). Pearson College Division.
- Litjens, I., & Taguma, M. (2010). Literature overview for the 7th meeting of the OECD Network on Early Childhood Education and Care. OECD.
- Manghani, K. (2011). Quality assurance: Importance of systems and standard operating procedures. *Perspectives in clinical research*, 2(1), 34–37. https://doi.org/10.4103/2229-3485.76288.
- Manuh, T., Gariba, S., & Budu, J. (2007). Change & transformation in Ghana's publicly funded universities: A study of experiences, lessons & opportunities. Woeli Publishing Services.
- Mayrhofer, W. (2004). Social systems theory as theoretical framework for human resource management: Benediction or curse? *Management Revue*, 15(2), 178-191.
- McClelland, D. C. (1973). Testing for competence rather than for intelligence.

 *American Psychologist, 28, 12-21.

- Medina, R. (2010). Upgrading yourself—technical and nontechnical competencies. *IEEE Potentials*, 29, 10.
- Mensah, E. K. (2019). Assessing multicultural competence of counsellors in public universities in Ghana. *Journal of Education and E-Learning Research*, 6(3), 142-148. https://doi.org/10.20448/journal.509.2019.
- Ministry of Education, Ghana. (2014). Report of the technical committee on conversion of the Polytechnics in Ghana to Technical Universities.

 Ministry of Education.
- Mohd Fauzi, A. R. (2000). Perception of industry towards competencies of German-Malaysian Institute graduate in relation to their qualification for highly skilled technician. Master thesis, Universiti Teknologi Malaysia, Skudai.
- Mukarromah, I., Mudjito, M., & Purbaningrum, E. (2019). The effect of managerial skills (conceptual, human, and technical) of headmasters to the effectiveness of Islamic Senior High Schools in Jombang District.

 International Journal for Educational and Vocational Studies, 1(6), 539-544.
- Munton, T., Mooney, A., Moss, P., Petrie, P., Clark, A., & Woolner, J. (2002).

 Review of international research on the relationship between ratios,

 staff qualifications and training, group size and the quality of provision

 in early years and childcare settings. Australia: Queen's Printer.
- Mushemeza, E. D. (2016). Opportunities and challenges of academic staff in higher education in Africa. *International Journal of Higher Education*, 5(3), 236-246.

- Nagarajan, G., & Fathima, K. N. (2014). Challenges in recruitment and selection of employees. *Elixir Human Resource Management*, 67, 21535-21540.
- Nasir, A. N. M., Ali, D. F., Noordin, M. K. B., & Nordin, M. S. B. (2011, January). *Technical skills and non-technical skills: predefinition concept*. In Proceedings of the IETEC'11 Conference, Kuala Lumpur, Malaysia (pp. 01-p17).
- National Research Council. (2003). *Personnel qualifications, training, and continuing education*. National Academies Press. Retrieved from https://www.ncbi.nlm.nih.gov/books/NBK43445/.
- Nsiah-Gyabaah, K. (2005). *Polytechnic education in Ghana: The past, present*and the future. A Paper presented at the Kick-off Conference: NPT/UCC

 Project on Building Management and Leadership Capacity in

 Polytechnics at the University of Cape Coast. 20th 22nd May 2005.
- Nyarko, D. A. (2011). *Polytechnic education in Ghana: The challenges and prospects*. Addressed on the occasion of the NAPTEX/POLYTECHNIC meeting Accra, 23 March, 2011, 1-7.
- Olaniyan, D. A., & Ojo, L. B. (2008). Staff training and development: a vital tool for organizational effectiveness. *European journal of scientific research*, 24(3), 326-331. Retrieved from http://www.eurojournals.com/ejsr-24-3-01.pdf.
- Omebe, S. E., & Omebe, C. A. (2014). Impediments towards enlarging access to qualitative tertiary education in Nigeria. *Journal of Emerging Trends in Educational Research and Policy Studies*, 5(3), 306-310.

- Owolabi, S. A., & Okwu, A. T. (2010). A qualitative analysis of the role of human resource development in economic growth in Nigeria. *European journal of economics, finance and administrative sciences*, 27, 7-17.
- Oyebade, S. A., Oladipo, S. A., & Adetoro, J. A. (2012). Determinants and strategies for quality assurance in Nigerian University Education.

 Retrieved from http://herp-net.org.
- Peček, P. (2000). Z razvojem zaposlenih do boljše kakovosti. In V A. Trnavčevič (Ed), *Raznolikost kakovosti (pp. 83–98)*. National School of Leadership in Education.
- Pfeffer, J. (1992). Managing with power politics and influence in organizations. Harvard Business Review Press.
- Pityn, K., & Helmuth, J. (2007). *Human resource management for MFIs Toolkit*. Retrieved from http://www.lamicrofinance.org/files/22947_file_Toolkit.pdf.
- Power, I., Millington, K. A., & Bengtsson, S. (2015). *Building capacity in higher education topic guide*. Retrieved from https://www.heart-resources.org/wp-content/uploads/2015/09/Capacity-Building-in-Higher-Education-Topic-Guide.pdf.
- Rasheed, M. I., Aslam, H. D., & Sarwar, S. (2010). Motivational issues for teachers in higher education: A critical case of IUB. *Journal of Management Research*, 2(2), 1-23.
- Rebore, R. W. (2007). *Human resource administration in Education: A management Approach.* (8th ed.). Pearson Education Inc.

- Ridoutt, L., Dutneall, R., Hummel, K., & Selby-Smith, C. (2002a). Factors influencing the implementation of training and learning in the workplace. Adelaide, Australia: NCVER.
- Ridoutt, L., Dutneall, R., Hummel, K., & Selby- Smith, C. (2002b). *The place of recognised qualifications in the outcomes of training*. NCVER.
- Robinson, P. (1997). *The myth of parity of esteem: Earnings and qualifications*.

 Centre for Economic Performance, London School of Economics and Political Science.
- Robson, C. (2002). Real world research (2nd ed.). Blackwell.
- Sargent, M. (1998). *Problems of mutual internalised examinations and recognition of licence qualifications*. Proceedings of Second Australia—Taiwan Conference on Vocational Education and Training, 2–3 March.
- Saunders, M., Lewis, P., & Thornhill, A. (2007). Research methods for business students (4th ed.). Pearson Education Limited.
- Shakir, R. (2009). Soft skills at the Malaysian institutes of higher learning. Asia Pacific Education Review, 10(3),309-315.
- Sheridan, S. M. (2009). Discerning pedagogical quality in preschool.

 Scandinavian Journal of Educational Research, 53(3), 245-261.
- Sheridan, S. M., Edwards, C. P., Marvin, C. A., & Knoche, L. L. (2009).

 Professional development in early childhood programs: Process issues and research needs. *Early Education and Development*, 20(3), 377-401.

 DOI:10.1080/10409280802582795.
- Sheridan, S., M., Samuelsson, I. P., & Johansson, E. (2009). *Children's early learning: A crosssectional study of preschool as an environment for children's learning*. Acta Universitatis Gothoburgensis.

- Skillsbase (2010). Skillsbase: *Labour market information*. Retrieved from http://www.skillsbase.co.uk/.
- Shonkoff, J. P., & Phillips, D. A. (2000). From neurons to neighborhoods: The science of early childhood development. National Academy Press.
- Shrivastava, S., & Prasad, V. (2019). Importance of effective communication strategies to improve workplace communication. *International Journal of Recent Technology and Engineering*, 8 (3), 161-168.
- Takoradi Technical University Division of Human Resources. (2021).

 Composition of senior and junior staff for 2020-2021 academic year.

 Takoradi Technical University.
- Teferra, D., & Albach, G. (2004). African Higher Education: Challenges for the 21st Century. *Higher Education*, 47(1), 21 50.
- Tella, Y., & Daniel, S. (2013). Mathematical model for Nigerian University academic staff mix by rank. *International Journal of Educational Planning & Administration*, 3(2), 145-150. Retrieved from http://www.ripublication.com/ijepa.htm.
- Tetteh, G. (2008). An assessment of leadership behaviour of administration of health training institutions in the greater Accra region. Unpublished master's thesis. University of Cape coast, Cape Coast.
- Tettey, J. W. (2006). Staff retention in Africa Universities: Elements of sustainable strategy. World Bank. Retrieved from http://siteresources.worldBank.org.12/10/2011.
- The Quality Assurance Agency for Higher Education. (2007). *The standard for initial teacher education*. The Quality Assurance Agency for Higher Education.

- The Republic of Ghana. (2016). *Technical Universities ACT 2016 (ACT 922)*.

 Republic of Ghana.
- The Republic of Ghana. (2017). *Technical Universities Amendment Bill*.

 Republic of Ghana.
- Thompson, S. (2019). *The iceberg theory of staff selection*. Retrieved from https://yourbusiness.azcentral.com/iceberg-theory-staff-selection-9414.html.
- Tokarčíková, E., Malichová, E., Kucharčíková, A., & Durišová, M. (2020).

 Importance of Technical and Business Skills for Future IT Professionals.

 Amfiteatru Economic, 22(54), 567-578. doi: 10.24818/EA/2020/54/567.
- Trochim, W. M. K. (2006). *Research methods knowledge base*. Retrieved from http://www.socialressearchmethods.net/kb/sampling.php/.
- Varanasi, R. (1999). Two-way street: Trans-Tasman recognition of qualifications. TAFE.
- UNESCO. (1994). Higher education staff development: directions for the 21st century. UNESCO.
- Wooden, M., & Harding, D. (1997). *Trends in staff selection and recruitment*.

 Department of Employment, Training and Youth Affairs.
- Zhao, L. (2013). The Research on the performance evaluation of civil servant based on competency model. International Conference on Artificial Intelligence and Software Engineering (ICAISE 2013). Atlantis Press, (190-193).

APPENDICES

APPENDIX A

STAFF QUALIFICATION QUESTIONNAIRE

The following questions are part of an educational study being conducted by the researcher of University of Cape Coast. It is aimed at investigating the emerging issues of staff qualification in Takoradi Technical University's transition from Polytechnic. This research is purposely for academic work and so your honest and sincere response would contribute a lot to the study. There are no 'right' or 'wrong' answers. Your identity would be held in confidence with regards to the information given. Be sure to give a response for all statements. If you change your mind about any response, just cross it out and circle another. Some statements in this questionnaire are fairly similar to other statements.

Please give your opinion about all statements by ticking $[\sqrt{\ }]$ in the box against your response.

PART ONE

Demographic Data

1.	Sex: Male [] Female []
2.	Period of appointment: Before transition [] After transition []
3.	Nature of appointment: Full time [] Part time []
4.	Level of Education: PhD [] Masters [] Bachelor []
	HND [] Diploma [] Certificate []
5.	Age Range: <30 Years [] 31-40 years [] 41-50 years []
	51 year and above []

PART TWO

SECTION A: ESSENTIAL QUALIFICATIONS

Please tick $[\sqrt{\ }]$ the option that best reflects your response to the statement in relation to the above situation in your institution.

Key: SD= Strongly Disagree (1), D=Disagree (2), A=Agree (3), SA=Strongly Agree (4).

S/N	Statement	SD	D	A	SA
1	Staff require a certain level of education to be				
	eligible to work				
2	Working with a specific field or related role or in a		٦		
	specific industry or employment sector with during		ı		
	a time				
3	Ability to use both hard and soft skills to perform				
	certain tasks	7			

NOBIS

SECTION B: STAFF QUALIFICATION CHARACTERISTICS

Please tick $[\sqrt{\ }]$ the option that best reflects your response to the statement in relation to the above situation in your university.

Key: NI=Not Important (1), SI=Somewhat Important (2), I=Important (3), VI=Very Important (4).

S/N	Statement	NI	S	I	VI
Befo	re transition staff qualification characteristics				
4	Focused on initial training				
5	Used for first job entry				
6	Focused on young learners				
7	Mainly vertical progression				
8	Overseen by a single authority, often led by	7			
	education ministries	J			
9	Only full qualifications recognized				
Curi	rent emergi <mark>ng staff qualifications characte</mark> ristics		Σ		
10	Supporting lifelong learning	(
11	Used for different purposes, including job entry,				
	changing jobs, further learning, and career change	N.			
12	For all types of staff				
13	Horizontal and vertical progression and mobility				
14	Involve different institutions and stakeholders				
15	Partial recognition (unitisation) is a key principle,				
	including to facilitate the validation of non-formal				
	and informal learning				
	ı				

SECTION C: REQUIRED STAFF QUALIFICATION SKILLS

Please tick $[\sqrt{\ }]$ the option that best reflects your response to the statement in relation to the above situation in your institution.

Key: SD= Strongly Disagree (1), D=Disagree (2), A=Agree (3), SA=Strongly Agree (4).

Communication Skills 16 Conveying of the ideas and the message through written text 17 The ability to express ideas clearly and confidently in speech		Į		
written text 17 The ability to express ideas clearly and confidently in speech		Į		
confidently in speech				
18 Good listening ability is as a vital element for				
interpersonal communication				
19 Ability to understand and comprehend a message	1			
and drive out the relevant information from		3		
written text				
Technical/ Professional Skills)
The ability of inspecting, cleaning, transforming,			/	
and modeling data for the purpose of obtaining	1			
and assimilating useful information, suggesting				
conclusions, and supporting decision making				
21 The ability to perform certain tasks in a specific				
discipline or department				

22	Using academic knowledge obtained through
	formal education or apprenticeship to further delve
	into specific domain skills
23	The competency to do a certain kind of work at a
14	certain level that is considered as talent
Conc	reptual skills
24	The mental ability to coordinate and integrate the
	entire interests and activities of the institution
25	The ability to apply information and concepts to
	practice
26	The ability to quickly get at the true cause of a
	certain situation through a maze of data,
	observation and facts within an institution

NOBIS

SECTION D: QUALITY ASSURANCE ARRANGEMENT CRITERIA

Please tick $[\sqrt{\ }]$ the option that best reflects your response to the statement in relation to the above situation in your university.

Key: SD= Strongly Disagree (1), D=Disagree (2), A=Agree (3), SA=Strongly Agree (4).

CAL						
S/N	Statement	SD	D	A	SA	
Stand	lards behind a qualification					
Sterre	natural ventra a quartication					
27	All standards are (learning) outcome-based					
20	A11					
28	All standards behind a staff qualification should					
	relate to skills and competence requirements for		-			
	an a job description or a group of descriptions					
29	Involvement of labour market actors in defining		7			
	g		,			
	the standards of a qualification		-			
Corti	fication	-				
Ceri	neunon					
30	A numerical level is allocated to the qualification	/				
_ \	in andonts commons the level with related		/			
	in order to compare the level with related	(
	qualifications from other countries		>			
31	The certification has national value and is		6			
	awarded by a competent body (Ghana Tertiary		/			
(5)	awarasa sy a competent soay (Shaha Tertary	•				
	Education Commission, MOE, institutions of					
	higher education, etc.)					
	inglici cadcation, etc.)					
32	The qualification allows for progression to further					
	advantion on tuning					
	education or training					

Relevant 33	Involvement of labour market actors in defining
	needs for a qualification
34	Justification that the sector and the occupation
	have a relevance for a specific department or unit

SECTION E: CHALLENGES ASSOCIATED WITH STAFF QUALIFICATION

Please tick $[\sqrt{\ }]$ the option that best reflects your response to the statement in relation to the above situation in your university.

Key: SD= Yes (1), No (0)

S/N	Statement	Yes	No
35	Limited financial resources to expand services and		
	provision of staff development programmes.		
36	Lack of qualified applicants		
37	Applicants who do not demonstrate adequate work ethic		
38	Political influences (both internal and external).		
39	Inadequate infrastructural facilities (both physical and		
	technological).		
40	Inadequate staff development programmes.		

NOBIS