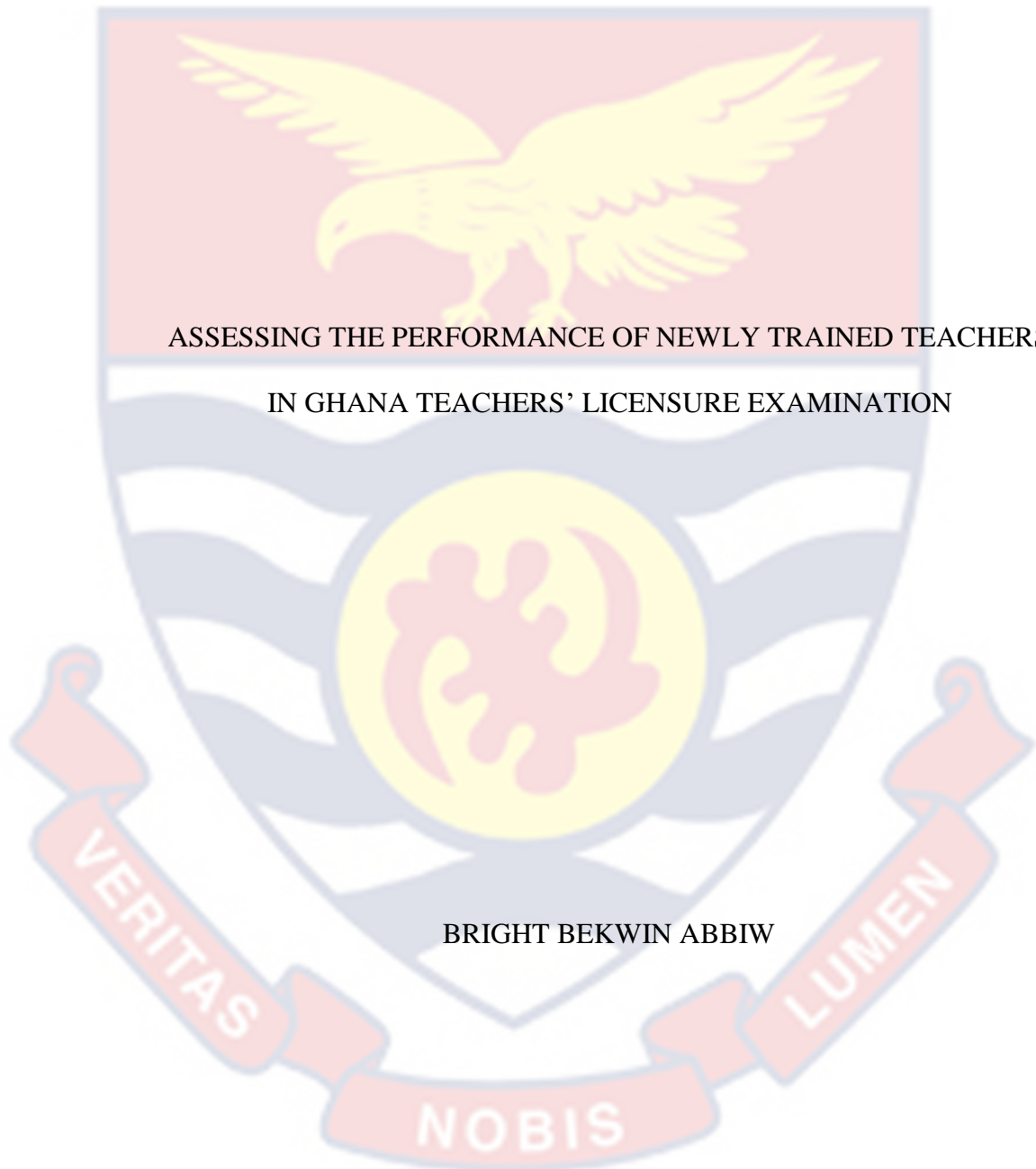UNIVERSITY OF CAPE COAST

ASSESSING THE PERFORMANCE OF NEWLY TRAINED TEACHERS

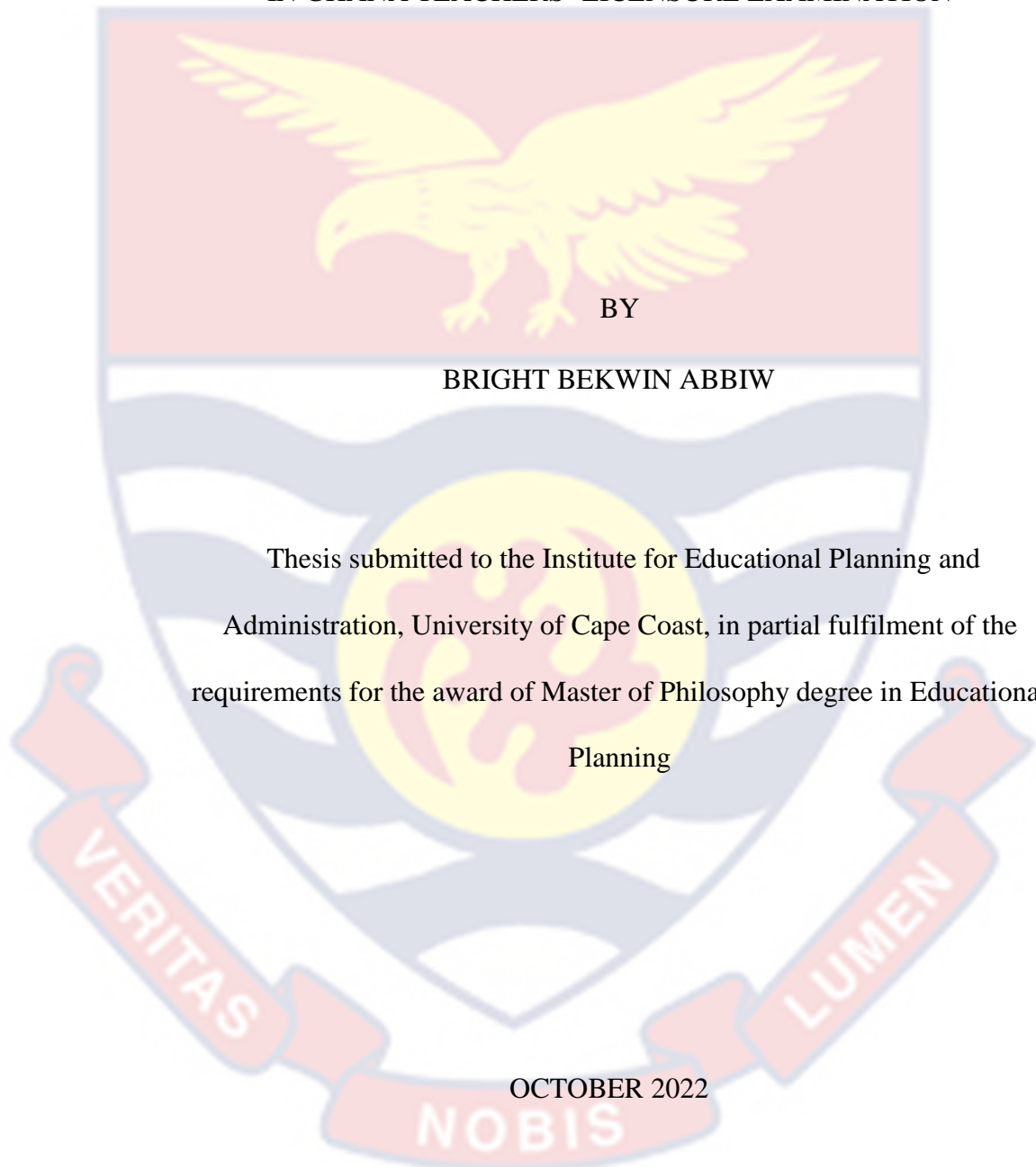IN GHANA TEACHERS' LICENSURE EXAMINATION

BRIGHT BEKWIN ABBIW

2022

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UNIVERSITY OF CAPE COAST

ASSESSING THE PERFORMANCE OF NEWLY TRAINED TEACHERS

IN GHANA TEACHERS' LICENSURE EXAMINATION

BY

BRIGHT BEKWIN ABBIW

Thesis submitted to the Institute for Educational Planning and

Administration, University of Cape Coast, in partial fulfilment of the

requirements for the award of Master of Philosophy degree in Educational

Planning

OCTOBER 2022

DECLARATION

Candidate's Declaration

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

Candidate's Signature: …………………………………..

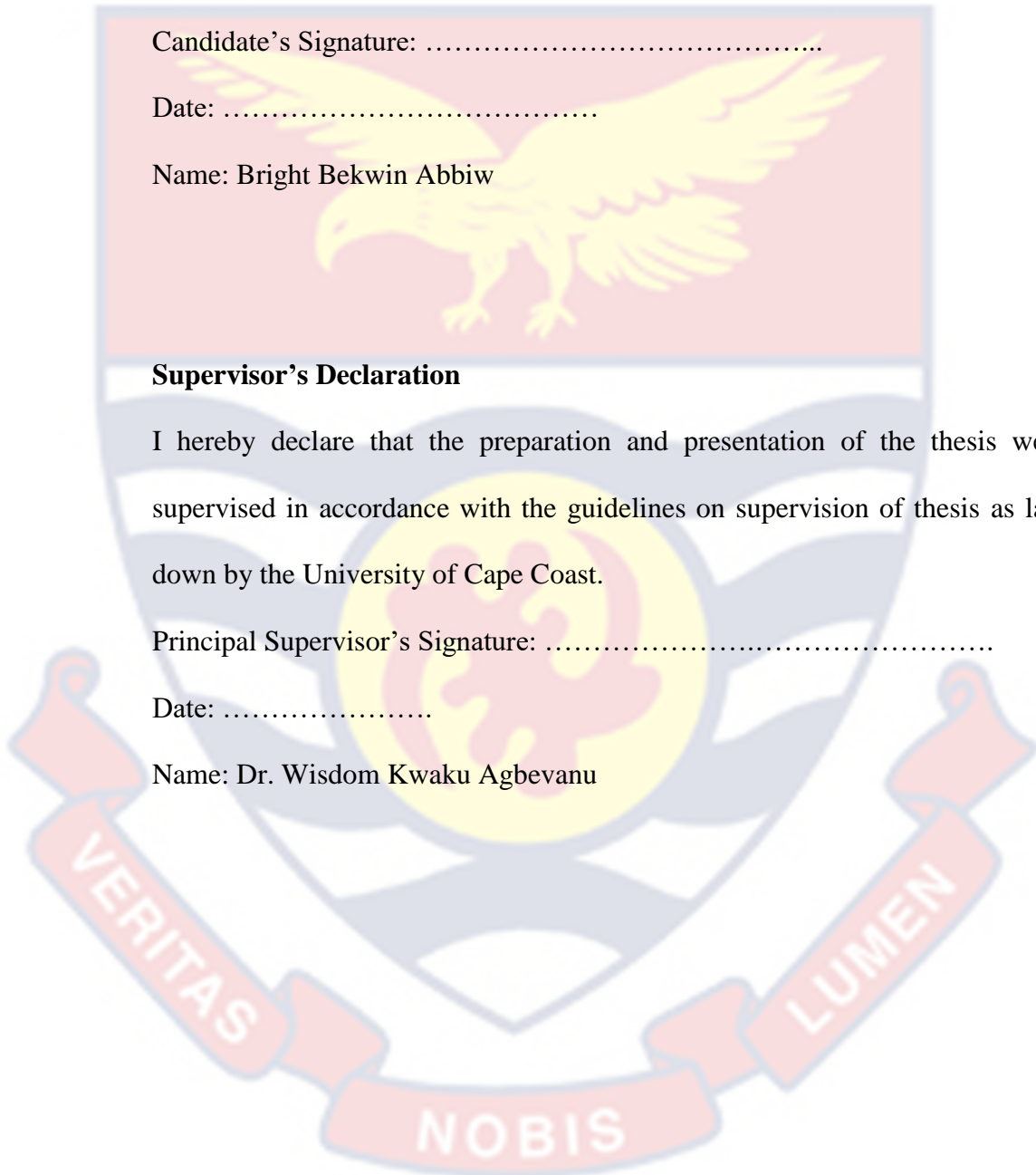Date: ……………………………….

Name: Bright Bekwin Abbiw

Supervisor's Declaration

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

Principal Supervisor's Signature: ……………….……………………….

Date: ………………….

Name: Dr. Wisdom Kwaku Agbevanu

ABSTRACT

The Education Regulatory Bodies Act 2020 (ACT 1023) mandates newly trained teachers to pass a standardized test to be licensed as professional teachers in Ghana. The policy on writing the Ghana Teachers' Licensure Examinations (GTLE) commenced in 2018. Within the first four years of (2018-2021), 15,979(23.15%) out of 69,034 newly trained teachers who wrote the GTLE in the Central Region failed on their first attempt. This necessitated the study to identify the factors affecting the performance of newly trained teachers in the GTLE. Convergent Parallel Mixed Method Design was used to collect data and determine the variables influencing newly trained teachers' performance. The research included one NTC official and 421 newly trained teachers. Four hundred and thirteen (413) of the newly trained teachers were drawn through simple random sampling to respond to questionnaires. 8 of the newly trained teachers who failed the GTLE and the NTC official were drawn through purposive sampling for interviewing. Descriptive statistics such as frequencies and percentages were used to analyze the quantitative data while the qualitative data was analyzed thematically. The study revealed that the NTC did not offer any official study guide. Examinees depended on unverified materials that did not follow the GTLE's format. Also, examinees were not tested on their subjects of specialization. Additionally, examinees wrote the examination long duration after their training. Some respondents also alleged that examination scripts were not rightly marked. The study recommended that the NTC should make available related sample licensure materials and past GTLE papers to examinees. Specific subject areas for subject teachers should be examined. The NTC should also employ script checking to ensure proper marking of scripts.

KEYWORDS

Performance

Teacher Licensure Examination

Newly trained teachers

Wastage

Sitting

Re-sit

ACKNOWLEDGEMENTS

DEDICATION

To my grandma, Mrs. Hannah Abbiw, mum, Sromani Apollonia, and Uncle

Michael Kwesi Abbiw.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE

INTRODUCTION

The chapter provides insight into the study. The outline of the chapter includes the background to the study, problem statement, purpose of the study, research questions, definition of terms, and organization of the study. The rest are significance to the study, delimitation of the study, and limitations of the study.

Background to the Study

The licensure examination stands as one of the final challenges that candidates must overcome in their journey toward professional licensure within a specific field of work (Norman & Roberta, 2000). The successful completion of the licensure examination serves as a fundamental benchmark for attaining recognition as a competent professional within a specific domain. Within the realm of education, the teacher licensure examination evaluates essential competencies encompassing pedagogical content knowledge, literacy, and numeracy skills that are indispensable for effective teaching. This process is essential in ensuring the selection of qualified individuals for teaching roles. Norman and Roberta (2000) emphasize the establishment of an overseeing board responsible for maintaining technical, professional, and legal standards in the licensure examination, while also safeguarding public welfare by assessing candidates' capabilities for competent practice. Upon achieving commendable results and passing the licensure examination, the licensing authority gains confidence in issuing the license, thereby assuring the public that the licensee possesses the minimum qualifications required for proficient practice upon initial licensure.

1

The disparities in academic performance among teacher trainees in colleges and universities of education have been a longstanding concern and a subject of significant research interest for higher education management, government authorities, parents, and other stakeholders. This is due to the crucial role of education in nation-building and development. Educational institutions are increasingly required to closely monitor the academic performance of trainee teachers during their academic tenure to ensure their suitability and preparedness for teaching roles in both public and private schools across Ghana. As part of this process, trainee teachers are expected to successfully complete the Ghana Teachers' Licensure Examination (GTLE). This study aimed at exploring the performance of recently trained teachers from the Central Region in the GTLE and delve into potential factors influencing their performance.

Performance denotes the extent to which a set goal is achieved. Within an academic context, performance in examinations significantly influences academic progress. Many jurisdictions employ performance criteria for promotions, licensure, and even employment decisions. Galiher (2006) and Darling (2005) employed GPA as a measure of student performance, focusing on performance within a specific semester. Other researchers have employed test scores or results from previous years when examining performance in a specific subject or grade level (Hijazi & Naqvi, 2006; Hake, 1998). For recently trained teachers, performance in the teacher licensure examination (whether pass or fail) stands as a pivotal criterion for obtaining teaching licenses. Numerous factors can either positively or negatively affect the performance of these newly trained teachers in the licensure examination. Some of these factors include the availability of learning resources, English proficiency, the difficulty

2

level of exam questions, allocated exam time, levels of anxiety or stress among the trainees, attitudes toward the exam, self-confidence, study preparation duration, adequate rest before the exam, and more.

In the US, the ''No Child Left Behind'' policy in 2001 introduced the highly qualified status for k-12 teachers, which mandated successful scores on a series of high-stakes tests; within this series was the Pre-Professional Skills Test (PPST) or PRAXIS I. The PPST measured basic k-12 skills for reading, writing, and mathematics (Wilkins, 2012). The mathematics sub-test is a national concern because some American high school students may graduate with basic math skills deficits that may prohibit their performance on the PPST. In the US, teacher licensure varies by state. Each state has its requirements and examinations for prospective teachers. Common exams include the Praxis series and state-specific assessments.

In South Africa, teacher licensure falls under the responsibility of the South African Council for Educators (SACE) which is a professional council responsible for the regulation and professional development of educators in the country. Teachers must register with SACE and meet certain criteria, including qualification assessment and professional development. The process of teacher licensing involves completion of a recognized qualification in teaching, typically a Bachelor of Education (B.Ed.) degree or a Postgraduate Certificate in Education (PGCE) from an accredited institution. Upon completing their qualifications, teachers must register with SACE. Registration requires the submission of relevant documentation, including proof of qualifications, identity documents, and a registration fee. Newly qualified teachers undergo a professional induction process, which may include mentorship or induction programs facilitated by schools or education authorities. Teachers develop a

3

professional portfolio documenting their teaching experiences, professional development activities, and evidence of their effectiveness as educators. This portfolio serves as a reflective tool and can be submitted as part of the licensing process. Licensed teachers are required to engage in ongoing professional development activities to maintain their licensure. SACE provides guidelines and opportunities for professional development, including workshops, courses, and conferences. Teachers must renew their registration with SACE annually by paying an annual registration fee and meeting the continuing professional development requirements set by the council (SACE, 2024).

In Nigeria, teacher licensure is regulated by the Teachers Registration Council of Nigeria (TRCN). Prospective teachers must undergo teacher training programs and pass the Professional Qualifying Examination (PQE) conducted by TRCN. In Nigeria, the process of teacher licensure involves several steps. Prospective teachers must first complete a recognized teacher training program at an accredited institution. This typically involves obtaining a degree in education or completing a postgraduate diploma in education (PGDE). Upon completing their teacher training program, individuals must register with the Teachers Registration Council of Nigeria (TRCN). Registration involves submitting relevant documents, including educational certificates, identification documents, and registration fees. Registered teachers are required to pass the Professional Qualifying Examination (PQE) conducted by TRCN. The PQE assesses candidates' knowledge and competencies in teaching pedagogy, subject knowledge, educational psychology, and other relevant areas. Before taking the PQE, candidates are encouraged to prepare thoroughly by studying relevant materials and resources. This may include textbooks, past examination questions, study guides, and other educational materials. The PQE

4

is typically conducted periodically by TRCN at designated examination centers across the country. The examination format may include multiple-choice questions, essay questions, and practical assessments, depending on the subject area. After the examination, TRCN scores the answer sheets and releases the results to candidates. Those who pass the PQE are eligible to proceed to the next stage of the licensure process. Candidates are then issued a teaching license by TRCN. This license certifies that the individual has met the necessary qualifications and standards to practice as a licensed teacher in Nigeria. Licensed teachers are required to engage in continued professional development activities to maintain their teaching license. TRCN provides opportunities for CPD through workshops, seminars, conferences, and other professional development programs (TRCN,2008).

In recent times, the Ghanaian government has undertaken a series of educational reforms to elevate the educational standards and enhance the quality of learning within the country. A pivotal reform introduced is the implementation of the Ghana Teachers Licensure Examinations. A significant change, initiated in 2018, mandates both graduates from Colleges of Education and Universities of Education must successfully complete the Ghana Teachers' Licensure Examinations (GTLE) before being eligible to seek employment within the Ghana Education Service (GES). Once deemed qualified, these applicants are then employed by the GES and assigned to schools according to the demand for their services. The primary objective of the Licensing Examination is to grant qualified teachers a professional license. This initiative is rooted in the Education Act 2008 (Act 778), Section 9, which empowers the National Teaching Council (NTC) to enhance the professional status of teachers in Ghana, facilitating their licensure and registration. The Licensing

Examination endeavors to equip aspiring teachers (recent graduates) with a professional license and simultaneously prepare them to meet the National Teachers' Standards. These standards mandate teachers to possess the essential knowledge, skills, values, attitudes, competencies, and experience necessary for effective classroom instruction. The policy on teacher licensing and the subsequent teacher licensure examination draws its foundation from the Education Regulatory Bodies Act 2020 (ACT 1023), established to fortify the regulation and oversight of teaching practices in Ghana, including the imposition of a Licensure Examination for Teachers, among other objectives. Acquiring the professional license stands as a pinnacle achievement, signifying the teacher's membership in a larger network of accomplished educators who play a significant role in shaping the teaching profession and the lives of individuals. Additionally, passing the GTLE confers a competitive advantage over non-professionals. The GTLE serves as the determinant of a teacher's competence and readiness for job performance. Successful completion of the GTLE signifies that teachers are equipped and prepared for their roles.

At present, the GTLE consists of three distinct papers: Essential Professional Skills, Literacy, and Numeracy. The Essential Professional Skills section comprises 60 multiple-choice questions, while Literacy involves 30 multiple-choice questions, a comprehension segment, and an essay. The Numeracy section includes 30 multiple-choice questions and two written subjective questions. Each paper is scored out of 100%. Attaining a score of 50% or higher is considered a passing grade, while a score below 50% denotes failure (NTC, 2021). The performance of a recently trained teacher is pivotal in determining whether they will be certified and licensed or not.

6

Since the implementation of the teacher licensure policy in 2018, the National Teaching Council (NTC) has conducted seven successive examinations with the eighth examination to be conducted in May, 2021, a few months ahead of the commencement of this study. From the year 2018, two successive examinations were written each year. One in March, conducted solely for the graduates from the Colleges of Education, and the other in September for the graduates from the universities of education and for those re-sitting the examination (NTC, 2021).

According to data obtained from NTC (2021), over the first four years of implementing the policy, 128,494 newly trained teachers have sat for the examinations, and out of these, 88,062 newly trained teachers constituting 69% have passed while 40,432 newly trained teachers, representing 31% have failed. Table 1 shows the statistics on the rate of performance among newly trained teachers who sat for the GTLE over the first four years.

Table 1: Performance of Newly Trained Teachers in Central Region over the First Four Years

Year	Number registered	Number passed	Percentage passed	Number failed	Percentage failed
2018	9,361	6,906	73.7%	2,455	26.3%
2019	26,757	22,040	82.3%	4,717	17.7%
2020	19,080	14,852	77.8%	4,228	22.2%
2021	13,836	9,257	66.9%	4,579	33.1%

Source: NTC (2021)

According to the data obtained from the NTC (2021), 84 candidates have written the GTLE 5 times, and 372 candidates have written it 4 times as of 2021 nationwide but are yet to pass. Out of the 128,494 newly trained teachers

7

nationwide who sat for the GTLE over the first four years, 69,034 representing 53.8% wrote it from the Central Region. The failure of newly trained teachers in the GTLE called for a study into the causes of the failure, more especially when these newly trained teachers have successfully passed their training examinations in the colleges and universities.

Passing the licensure examination for teachers is one of the prerequisites for becoming a professional teacher in Ghana. This is a mandatory standardized test according to the Education Regulatory Bodies Act 2020 (ACT 1023) to strengthen supervision and regulation in the teaching profession. If one failed, he/she equally failed the chance of being licensed to teach as a professional teacher in Ghana.

So far, regarding licensure examinations in Ghana, it appears much attention has been given to the perceptions and preparedness of teachers for the GTLE. Amoah (2020) considered the perceptions and preparedness of senior high school teachers in the Ashanti Region towards the introduction of a professional teacher licensing policy in Ghana and concluded that teachers mainly perceived that teacher licensing was about granting teachers legal permission to practice their profession as it is done elsewhere but think the introduction of teacher licensing could have negative effects (such as a low supply of teachers to schools and colleges and reduced number of people attracted to the teaching profession). He also identified some positive effects (such as teacher job satisfaction, motivation to teach, and improved communication among the teaching fraternity) on teachers and their practices. The respondents also indicated their unpreparedness for the implementation of the teacher licensing policy in Ghana.

8

After four years of successively conducting the GTLE, there is a need to evaluate the factors that affect the performance of newly trained teachers in the GTLE over the period. The purpose of this study was to develop an in-depth description and analysis of some newly trained teachers who sat the GTLE especially, those who failed the examination in any session over the first four years. The researcher explored the nature of the GTLE, determined the trend of performance in the Central Region over the first four years, and also identified the factors that affected the performance of newly trained teachers in the GTLE and the measures that can be put in place to improve the rate of performance.

Statement of the Problem

Four years after the implementation of the policy on the writing of licensure examinations and the licensing of teachers, it is observed that many newly trained teachers are failing each year. Among the issues on teacher licensure examinations that are currently being debated, literature has covered improving the quality of basic education in Ghana: teacher licensure and matters arising, the perception and preparedness of newly trained teachers towards professional teacher licensing policy in Ghana. Data from NTC revealed that the Central Region kept recording a higher number of failures over the period (Table 1). The inability of newly trained teachers to pass the GTLE is a subject of concern. More especially, the fact that mass failure was recorded in 2021 even after the pass mark had been reduced according to the Minister for Education, Dr. Yaw Osei Adutwum (MyJoyOnline). However, the performance of the newly trained teachers in the Central Region has not been extensively assessed to determine the factors affecting performance in the GTLE. This study emerged as a result of this background to find out the factors that affect performance among newly trained teachers in the GTLE. A study

9

into the causes of the failure is important as failure in the GTLE leads to wastage, a situation where a newly trained teacher cannot be licensed and employed by the GES due to his/her inability to pass the GTLE upon the years spent in college and the resources of the state invested in the person.

Given the importance of teachers and more especially the expenditure of the government on these trainee teachers throughout their training, failure in the GTLE amounts to a waste on the part of the government. More so, when these newly trained teachers must join another session to rewrite the examination. Wastage can also be counted on the side of the newly trained teachers who failed themselves as they must stay at home without being employed until they pass the examination. This is a matter of concern for educational planning. The findings from the study could help plan and prepare newly trained teachers effectively to avoid failure in the GTLE.

Purpose of the Study

The purpose of this study was to assess the performance of newly trained teachers in the GTLE in the Central Region. The study aimed to explore the nature of the GTLE, determine the trend in the performance of the GTLE, investigate potential factors that contributed to the performance outcomes, and consider measures to improve the performance.

Research Questions

The following research questions guided the conduct of the study:

1. What is the nature of the Ghana Teachers Licensure Examination?

2. How has the trend in performance in the Ghana Teachers Licensure Examination been over the first four years in the Central Region?

3. What factors affect the performance of newly trained teachers in the Ghana Teachers Licensure Examination?

10

4. How can newly trained teachers' performance in the Ghana Teachers

Licensure Examination be improved?

Significance of the Study

This study promised to uncover the myriad challenges encountered by newly trained teachers when undertaking the Ghana Teachers' Licensure Examination (GTLE), offering valuable recommendations to inform the framework of teacher licensing assessments in Ghana. The significance of the study lies in its exploration of the factors influencing performance in the Ghana Teachers' Licensure Examination (GTLE). Understanding these factors is crucial for several reasons. Firstly, it can provide valuable insights into the effectiveness of the current educational system and curriculum in preparing teachers for licensure. By identifying areas where candidates struggle, educational institutions and policymakers can implement targeted interventions to improve teacher training programs and enhance overall preparation for the examination.

Furthermore, the findings of this study would serve as an empirical resource for a wide array of stakeholders, including teacher trainees, graduates, educational institutions, and policymakers. Specifically, this research will offer insights beneficial to college policymakers, the National Teaching Council, college tutors, and aspiring teachers, aiding them in understanding and addressing the complexities surrounding teacher licensure examinations.

By delving into these challenges and proposing actionable suggestions, this research would not only contribute to the theoretical literature in the field but also serve as a practical guide for future investigations in similar domains as well as providing practical guidance and empirical evidence to inform policy and practice in teacher education and licensure in Ghana.

Delimitation

This study is focused on performance in the Licensure Examination for Teachers in Ghana. Specifically, the study focuses a spotlight on the newly trained teachers who sat for the GTLE within the first four years. Several teacher professional-related issues could affect education in general and students' performance. The study, therefore, will be delimited to the factors that affect performance in the GTLE and not to any other area like teachers' continuous development, conditions of service, scheme of service, or code of ethics. This is because teacher licensing is the current policy in Ghana's education sector with little empirical basis for evaluation. The study is delimited to newly trained teachers who sat for the GTLE within the first four years of the successful conduct of the examination in the Central Region, and the NTC as the licensing body.

Limitations

This study was focused on factors that affected performance in the Licensure Examination for newly trained teachers. Currently, Ghana has 16 regions with all the 128,493 newly trained teachers who sat for the examination GTLE spread out in them. The researcher cannot reach out to all these newly trained teachers due to the distance of travel. Further, the researcher had a limited period to conduct the research and so was not in the position to cover all the regions. The researcher also had challenges at the data collection stage as some victims were unwilling to respond to the questionnaires and any attempt to get them interviewed. This delayed the data collection process and made the sample size small (413 respondents for the questionnaire and 8 respondents for the interview). However, measures were put in place to minimize the impact of these challenges on the findings of the study. Respondents to the questionnaire

12

were guided to respond adequately as the case was. Items were made compulsory on the Google Forms to avoid respondents from skipping them. Where respondents' responses were not applicable, the forms were sent back to them and guidance was given them to help them respond adequately. Interviews were also conducted in a professional manner for the right responses.

Definition of Terms

Performance, as used in this research, refers to the measurement of newly trained teachers' achievement in the GTLE. In simple terms, it refers to the rate at which newly trained teachers pass or fail the GTLE.

Teacher Licensure examinations is an examination written by newly trained teachers which forms part of the legal procedure of permitting them to teach in the classroom as professionals.

Newly trained teachers as used in this study refer to teachers who have completed their teacher education program and are about to write the GTLE.

Wastage refers to the inability of a trained teacher to be licensed and employed by the GES due to his/her inability to pass the GTLE upon the resources of the state invested in the person.

Sitting refers to the act of taking the GTLE during a designated testing session.

Re-sit refers to the opportunity for candidates to retake the GTLE if they do not achieve a passing score on their initial attempt.

13

Organization of the Study

       This research has been organized into five chapters. For the remaining four, Chapter Two deals with the review of relevant literature on the topic under study. Chapter Three describes the methods that were used to collect the needed data for the study. Specifically, research design, population, sample and sampling procedure, instrument, and data collection and analysis procedures were covered. Chapter Four looks at the results of the study and discusses the findings. Chapter Five, provides a summary of the study, and a summary of the findings, draws conclusions, and offers recommendations. Suggestions for further research are also included.
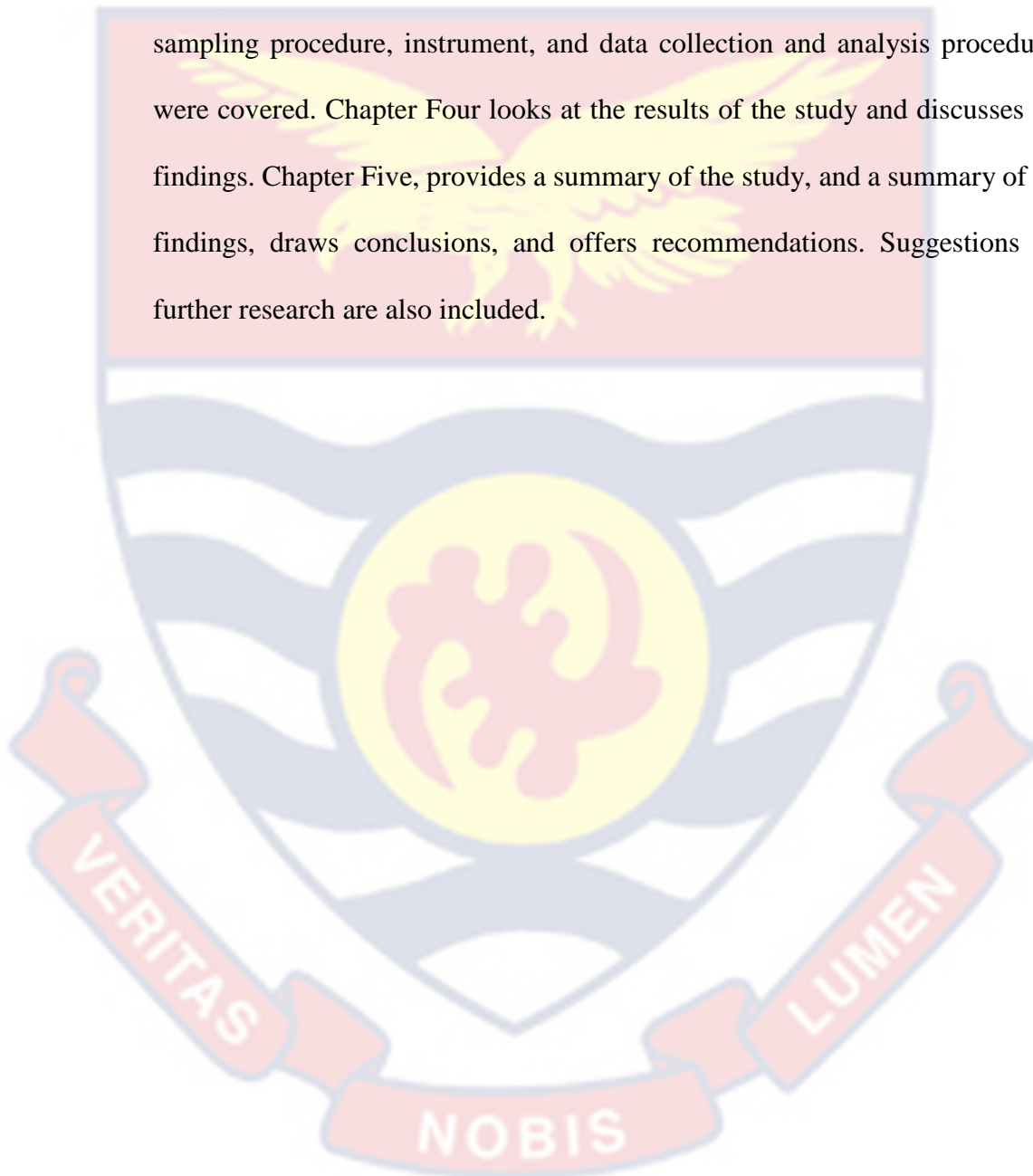
CHAPTER TWO

LITERATURE REVIEW

Introduction

Presented in this chapter is a synthesis of research that supports the study of licensing for the teaching profession. The chapter reviews the conceptual framework and theoretical perspectives on the subject. The review is presented in the following sub-themes: key concepts, theories and studies, key debates and controversies, gaps in existing knowledge, and theoretical framework.

Teacher Licensing in Education

Teacher licensure serves as an additional requirement that regulates the professionalism of the teaching profession. It is typically conducted alongside one's educational credentials and is overseen by a distinct authority responsible for upholding professional standards. In various countries, either independent agencies or individual states govern the teaching field through teacher certification programs, which act as entry points into the profession, much like the system in the United States of America (USA). Every country or state has its protocols for certifying teachers, and public schools are mandated to hire educators who have completed the state's certification process. Certification usually involves examinations covering general knowledge and teaching skills, as well as coursework and teaching practice (Boyd, Goldhaber, Lankford, & Wyckoff, 2007). As Sass (2015) points out, aspiring teachers often pursue a state-required teaching license in addition to their educational degree. This licensing guarantees the ability to teach within the licensed state and offers flexibility in terms of subject and location of instruction within the state. The benefits of this approach become evident after graduation, as it signifies a higher level of expertise and specialization in the field. This, in turn, makes

15

them more appealing candidates to potential employers (Chen, 2015; Marx et al., 2004).

It is evident that obtaining an educational certificate alone is insufficient and cannot ensure professionalism in the teaching sector (Tanang & Abu, 2014). Instead, a robust and mandated framework is essential to ensure that educators adhere to the skill standards established through licensing after their academic training (Gordon, Kane, & Staiger, 2006). A teaching license is a formal certification that grants individuals the legal authorization to work as teachers in a specific state (Gordon et al., 2006). The prerequisites for acquiring a teaching license vary by country, but in nearly all cases, a Bachelor's degree is a minimum requirement to be eligible for such a license. In some instances, passing an examination or completing a specific course may also be mandatory (Inoue, 2015). In Ghana, for instance, the National Teaching Council (NTC) is the authoritative body responsible for implementing the professional teacher license policy. To sit for the license examination, candidates must have completed their final college examination and obtained a diploma or Bachelor's degree (NTC, 2018).

According to Sallis (2014), the education sector has progressively recognized teacher quality through licensure as a crucial factor in enhancing student outcomes. This shift entails moving away from viewing teachers as uniform resources (offering equal compensation to all teachers and emphasizing adequate teacher numbers at a reasonable cost) to recognizing teacher quality as a pivotal element of educational policy. While this shift acknowledges the importance of licensing in elevating teacher quality, there remains a lack of consensus on the most effective means to attain licensing objectives (National Research Council, 2001). Consequently, it has been suggested that teacher

16

licensing programs serve as a mechanism to enhance quality by encouraging educators to continuously enhance their professional learning and expertise over time.

Perceived Effects of Teachers' Licensing

According to Hendrickson (2010), teacher licensure can yield both positive and negative consequences, depending on how it is approached. Therefore, a well-considered collaborative effort is crucial to establish an inclusive and widely accepted teacher licensing system. Boyd et al. (2007) proposed in a policy brief that teacher training and licensure can potentially enhance teaching and student outcomes in multiple ways. This enhancement might directly result from improved teaching practices or indirectly through the dissemination of achievement-related information to educators.

It is believed that licensed teachers tend to exhibit higher job enthusiasm and self-efficacy. As indicated by Hoy (cited in Harris & Muijs, 2004), teacher efficacy refers to a teacher's belief that, when licensed, they can significantly impact a student's learning, behavior, and achievements irrespective of external factors. Bandura's perspective, as cited by Harris and Muijs (2004), suggested that an individual's assessment of their capabilities to complete future tasks directly influences the likelihood of task completion. Moreover, higher self-efficacy levels correlate with setting and achieving more ambitious goals. Teachers who possess high teacher efficacy due to completing rigorous licensing programs often set higher expectations for themselves and their students, ultimately influencing the teaching and learning process. These educators believe in their ability to reach their objectives, leading them to exert greater effort and resilience in attaining and sustaining their goals, even in the

17

face of external challenges or setbacks (Norman, Neville, Blake, & Mueller, 2010).

Labone (as cited in Harris & Muijs, 2004) suggests that licensed teachers reporting a stronger sense of efficacy are more likely to remain in the profession, experience higher job satisfaction, exhibit greater effort and motivation, take on additional roles within their schools, and display enhanced resilience throughout their careers. These findings underscore the positive impacts of teacher licensing on educators, who feel adequately prepared for their roles after completing comprehensive preparatory programs and standardized or mandated licensing assessments.

Several studies indicate a connection between teacher licensing examinations and student achievement. Nettle, Scatton, Steinberg & Tyler (2011) found a correlation between teachers' performance on licensing exams like Praxis and student performance in reading and math tests. Certification exam results were found to be more closely linked to student success than degrees or other indicators. These findings support the use of certification scores by states to regulate entry into the teaching profession and ensure a minimum level of quality. Additionally, they highlighted that the type of certification held by teachers significantly influences student outcomes. For instance, students of teachers lacking certification in their subject performed less well in mathematics compared to students with teachers possessing standard, probationary, or emergency math certification. Teacher licensing processes often include standardized tests like Praxis I and II, assessing general academic skills, subject area knowledge, and teaching techniques. These exams aim to determine if potential educators possess the foundational abilities essential for the profession (Hightower et al., 2011). Clotfelter, Ladd, and

18

Vigdor (2006) discovered that teachers with strong performance in licensure exams achieved better overall outcomes.

Nevertheless, teacher licensing can act as a deterrent for prospective educators, making the path to becoming a teacher more complex and costlier. Lengthy processes could lead individuals considering a teaching career to question their commitment to the field. Licensing might discourage talented potential educators who have uncertainty about their vocational choice. Furthermore, it might deter educationally qualified minorities, who have various appealing career options and may struggle to afford the costs associated with teacher training, including licensing programs. Teacher licensing confers a position of authority on educators in sensitive social and moral matters, giving colleges of education control over entry into the profession. Licensing that relies on factors beyond demonstrable skills or knowledge implies that gatekeepers' normative and ethical inclinations hold quasi-official authority (Hess, 2002).

In criticizing teacher licensing, Kleiner (2000) argued that the prevailing economic perspective on professional licensing is that it restricts the supply of teachers, generating heightened demand for educators and their services. This approach assumes that teacher licensing can address shortages by filtering out those unable to meet the requirements, creating a void in the profession. Once a profession is regulated, practitioners in a particular area can implement more stringent standards or examination pass rates, gaining a competitive edge over regions with less rigorous criteria by limiting the expert supply (Kleiner, 2000). Another consequence of licensure is individuals are excluded from practicing a profession entirely due to regulations, potentially leading them to enter non-licensed fields and altering the supply curve, thereby lowering earnings in unregulated occupations (Kleiner, 2000). With the foregoing discussion, the

19

stage of writing and passing the licensure examination before being licensed has been ignored. This study will focus on the examination stage considering the factors that influence it.

Current Trend in Teacher Licensing

Enhancing student learning and school performance is contingent upon the implementation of diverse high-quality teacher programs and policies that encompass aspects like recruitment, training, certification, employment, and retention of proficient educators within public school classrooms (Tatto, Savage, Liao, Marshall, Goldblatt, & Contreras, 2016). The ongoing practice of assessing teachers throughout their training and professional journeys has transformed the landscape of teaching, largely driven by the imperative for public accountability (Stubbs, 2008).

The influence of managerialism and market-driven global factors has reverberated throughout education systems worldwide, reshaping them into competitive entities guided by market principles and strategies (Stubbs, 2008). Within this framework, management takes center stage, prioritizing organizational efficiency. Such trends have profoundly impacted reforms aimed at bolstering the teaching profession, entailing management techniques and attitudes. Neoliberal terminology and practices such as accountability, quality control, standards, and performance have permeated restructuring efforts that seek to modernize and professionalize educators (Narayan & Stittle, 2018). The proliferation of teacher evaluation programs over the past two decades aligns with the surge of economic globalization processes, with the public and policymakers keenly focusing on the accountability aspect of teacher assessment.

Larsen (2013) asserts that teacher licensing systems are designed to furnish stakeholders with insights into how educators can effectively fulfill their roles. These teacher assessment mechanisms are viewed as quality control measures, addressing concerns about the retention of underperforming teachers and aiming to enhance classroom performance for better student outcomes. Across the political spectrum, governments have embraced accountability-driven teacher licensing regulations, suggesting a growing acceptance of managerialism as essential for effective public service delivery. Consequently, governments, whether at the national or subnational level, have played pivotal roles in formulating, implementing, and monitoring teacher licensing regulations (Larsen, 2013).

Teacher licensing programs differ in terms of their objectives (selection criteria, public accountability, and professional development), the aspects they measure (basic skills, general knowledge, subject matter expertise, and pedagogical knowledge), their format (ranging from multiple-choice tests to holistic performance-based assessments), and the referencing mode employed (norm, criterion, standards, or growth-based), as outlined by Knowles (1985). In some countries, the path to becoming a teacher commences with a licensing examination. This examination assesses candidates' foundational skills, subject knowledge, pedagogical understanding, educational law, school management, practical teaching experience, or a combination thereof (Huckle as cited in Amoah, 2020). Often, certification exams are written, short-answer tests conducted using pen and paper, designed for straightforward administration and grading.

Comparatively, the United States has a history of competence testing for teacher licensing, presenting notable differences in teacher evaluation practices

21

between and within various contexts. In the US, teacher testing has undergone a rapid transformation. In 1983, only 5% of educational institutions required a teacher licensing exit exam, a figure that has surged to over 90% in just two decades, with more than 40 states implementing some form of standardized examination (Mitchell, Robinson, Plake, & Knowles, 2001). Basic skills examinations were prevalent in the late 1990s, followed by assessments of pedagogical knowledge, general knowledge, and subject-specific expertise, as revealed by a survey commissioned by the National Research Council (Mitchell et al., 2001).

While standardized and standard-based certification exams are prevalent in England and most US states, other jurisdictions have explored and experimented with performance-based teacher assessments for both novice and experienced educators (Willms, 2000). Performance-based evaluations, often more palatable to the teaching profession than standardized exams, have been adopted in a few US states, Canadian provinces, England, and some Australian states for assessing both novice and experienced teachers' work (Larsen, Lock, & Lee, 2005). The USA pioneered performance-based evaluation models in the 1980s, with Georgia introducing a state-wide approach to evaluating new teacher performance, a trend that other states have followed. These programs, initially for certifying new teachers, have evolved into broader initiatives including career ladders, merit pay, and professional renewable certification in different states (Ellett & Teddlie, 2003). However, political pressures and budgetary constraints have led to modifications or discontinuations of some of these programs (Gordon, Kane, & Staiger, 2006), with many states favouring cognitive performance metrics in teacher licensure systems. The literature outlined the current trends in the licensing of newly trained teachers but did not

22

address the nature of the licensure examination. This study threw light on the nature of the licensure examination in Ghana.

Legal Basis of the Ghana Teachers Licensure Examination (GTLE)

The establishment of the self-regulatory body for the teaching profession was formalized through Act 778 of Parliament in 2008. This legislative action assigned the responsibility to the National Teaching Council (NTC), empowered by Act 778, to devise standards, facilitate teacher registration, and implement a licensure framework aimed at upholding the professionalism of educators. The core objective of the NTC was to foster excellence and professionalism among teachers and school administrators. This was to be achieved by ensuring educational standards through efficient regulation, effective execution, and vigilant oversight of teacher education programs. Additionally, the NTC was entrusted with the roles of maintaining disciplinary measures, offering avenues for professional growth, and spearheading comprehensive reforms in education delivery.

Notably, while the NTC purportedly establishes specific benchmarks for the conduct of the teaching profession, there is a lack of clarification regarding the methodology employed to determine these prescribed criteria. Concurrently, as per the same legal statute, the NTC is mandated to enhance the professional status of teachers in Ghana through the processes of licensing and registration.

Factors that affect the performance of Newly trained Teachers in

Licensure Examinations

Sadiq and Saeed (2017) conducted a study that delved into the challenges confronted by teachers during licensure examinations in Pakistan. The focus of their investigation was on the difficulties encountered by teachers participating in these exams, specifically about the physical environment,

23

examination management and conduct, and technical glitches originating from the examination board. Employing a descriptive research design with a qualitative approach to data collection, the researchers selected ten teachers through a convenient sampling technique. To gather information, they employed an interview protocol as their research instrument and opted for a survey-based method.

The study brought to light several challenges within the physical environment category, which encompassed issues like electricity interruptions, inadequate furniture, and overcrowded examination rooms. Likewise, challenges related to the management and conduct of examinations were identified, including problems such as issues with invigilation, disruptions during the exams, uncooperative behavior of examination board officials, delayed delivery of question papers, improper seating arrangements, and leakage of exam questions. The researchers also revealed challenges stemming from technical errors, which encompassed matters like roll number slip issuance, glitches in online registration processes, and printing errors.

In response to these challenges, teachers offered insightful suggestions to address the issues they encountered during licensure examinations (Mensah, Acquah, Frimpong & Babah, 2020). These suggestions emphasized the need to create a conducive examination environment for teachers, encouraging examination board personnel to adopt a considerate demeanor towards teachers during licensure exams, and promoting cooperation within the examination board. Additionally, the study proposed that examination boards should recognize the importance of addressing these issues to boost students' morale and enhance the quality of education. Ensuring students' comfort and seamless access to up-to-date examination systems is crucial. The study stressed that

24

resolving students' examination-related challenges not only contributes to better educational quality but also positively influences student performance. The study also recommended that invigilation staff receive thorough training to minimize disruptions during exams. Proper briefings about guidelines and instructions for students should be given to invigilators. To mitigate technical errors, the study suggested hiring more IT-skilled staff to ensure the smooth functioning of examination processes.

In another study by SañosaAljo and Tancinco (2016), the focus was on ''faculty performance and students' academic achievement in the licensure examination for teachers at Naval State University.'' The primary goal was to examine the correlation between faculty members' performance and students' academic success in the Licensure Examination for Teachers (LET) at Naval State University. Among their specific objectives, the researchers aimed to identify the challenges faced by both faculty members and students in their preparation for the LET. The researchers employed a descriptive survey methodology, with a sample population consisting of 62 College of Education (COED) faculty members and 1,072 LET-taking students. Findings from the study pointed to a range of challenges faced by faculty members during LET preparation. These included issues like inadequate review materials, students' comprehension difficulties, financial constraints, absence of organized review classes, lack of student focus during lectures, insufficient curriculum organization in the library, limited updates on examination developments, absence of comprehensive professional preparation for reviewers, parental support deficiencies, inadequate guides for major courses, and overwhelming faculty workloads. Among these, insufficient or inadequate review materials

emerged as the most common challenge observed by faculty members during their LET preparation.

On the student front, the study identified several challenges faced during LET preparation, including a lack of sufficient review materials, time constraints for focused review, financial limitations, difficulty in grasping the content, unavailability of review class enrollment, emotional and psychological unpreparedness, irrelevant review materials, attitude-related issues, inconsistencies in review materials' answers, varied graduation years, curriculum changes, health concerns, and overconfidence. The study did not indicate how these challenges affect the students' performance or outcomes in the LET (Licensure Examination for Teachers). This information would provide a more comprehensive understanding of the significance of these challenges. In the case of this study, how these challenges affect the students' performance or outcomes in the GTLE would be considered.

Empirical Review

The Ghana Teacher Licensure Examination (GTLE) serves as a critical assessment tool for evaluating the competencies and readiness of prospective teachers in Ghana. Understanding the factors that influence performance in this examination is essential for enhancing teacher quality and ensuring effective educational outcomes. In this empirical review, the researcher explored existing research and literature on the determinants of performance in licensure examinations, with a focus on the GTLE context.

Demographic Factors

Examinees' demographic characteristics, such as age, gender, and academic background, may also influence their performance in the GTLE (Duckworth & Seligman, 2005). Performance in an examination greatly

26

depends on one's biographic and demographic characteristics. Biographic factors such as age, gender, and physical and mental disabilities contribute to one's chances of performing well in an examination. Aging and maturity go with responsibilities. For newly trained teachers normally between the ages of 20-40, some of whom would have been married and even with kids to take care of, the challenge of managing the two at the same time cannot be over-emphasized. Others may have diverse issues they face which can affect their preparedness and therefore their performance. The study considered if and how these biological conditions affected the performance of newly trained in the GTLE.

Personal Factors

Achebe (2001) states that feeling a sense of fear before or during an exam is a common occurrence, and within certain limits, it can contribute to enhancing a student's performance. Without any encouragement or fear of not performing well, a student might lack the motivation to adequately prepare for the test, potentially leading to subpar performance. Disregarding the importance of the test might cause a student to adopt an avoidance approach, possibly leading to skipping the test, inadequate preparation, or missing preparation sessions. Additionally, if a student's fear levels are too high before or during the test, it might hinder them from showcasing their true abilities, disrupting their preparation and causing anxiety that impairs their performance. This fear triggers the amygdala, a brain region, to activate the body's alertness mode, which could inhibit advanced thinking, long-term memory, and task execution. Consequently, students might find themselves knowing the answers after the test but not during it. Duley, Conroy, Morris, Wiley, & Janelle (2005) report that the fear of failure serves as a motive to avoid showing inadequacy and

27

drives achievement behavior. However, avoiding learning situations can intensify fear and negative emotions.

For newly trained teachers, particularly those taking the Teacher Licensure exam for the first time or retaking it, the initial decision on how to prepare can be challenging. This decision significantly impacts their preparation strategies and, consequently, their performance on the exam. There are several options at this stage: following personal National Teaching Council guidelines, relying on individual learning habits, heeding advice from fellow teachers, or instructions from university tutors. Personal learning habits play a crucial role in exam preparation decisions. Each person typically has unique learning strategies to approach tasks or tests, which is also common among students. Guiot and Franqui-Rivera's (2018) study on medical students' performance in the United States Medical Licensing Examination (USMLE) found that personal learning habits were the primary factor influencing students' preparation decisions. Other factors included advice from peers, financial considerations, the exam's reputation, curriculum gaps, and the need for structured scheduling. Personal learning habits encompass aspects such as fear of failure, self-confidence, and family background.

Petchauer (2012) further suggests that some newly educated teachers might choose to take the licensure exam unprepared with the intention of gaining firsthand experience. However, this approach risks subjecting them to initial failure, potentially eroding their self-efficacy, reinforcing a negative test-taker identity, and shaping subsequent negative interactions with the licensure exam.

28

Examination Factor

The alignment between teacher education curricula and the content assessed in the GTLE is critical for ensuring that examinees are adequately prepared for the examination (Brewer & McCulloch, 2004). The knowledge that newly trained educators acquire during their college education is meant to equip them for better performance in their future coursework, especially in closely related subjects such as the licensure examination. Nevertheless, students typically retain only a fraction of the information they learn. The extent of this retention varies according to different estimates. Deslauriers and Wieman (2011) argue that a substantial portion of the learned material fades away within the initial year if there's no continued relearning or reviewing, with the majority of forgetting happening within the first three months.

For recently graduated teachers, the time gap between college and taking the licensure examinations holds significant importance. The duration of this gap can impact their performance in the exam, with a longer gap potentially leading to poorer results. Aquino and Balilla (2015) emphasize a critical period between graduation and the licensure examination. The activities that these new teachers engage in during this period might influence their readiness to succeed in the licensure examination. The authors also suggest that the pursuit of employment following graduation might divert their focus away from adequately preparing for the teacher licensure exam. Many respondents in their study expressed a desire to take the exam shortly after graduation, possibly due to the belief that the subject matter and knowledge assessed are still fresh in their minds, potentially leading to enhanced performance.

However, an opposing viewpoint suggests that the time between graduation and licensure exams is brief, possibly leading to insufficient

29

preparation among newly trained teachers. This perspective holds that if these teachers are not provided ample time to get ready for the licensure exam, their performance might suffer due to inadequate preparation. Conversely, Corpuz, Faltado, and Mayordomo (2014) argue that the timing of the Teacher Licensure examination, whether it occurs shortly after graduation or at a later date, does not significantly impact the success or failure rates of the examinees. This argument implies that newly trained teachers should be capable of meeting the assessment's demands whenever they are required to do so.

In every examination, the examination body plays a pivotal role in ensuring the smooth and effective administration of the test. The primary objective of the Examination Body is to develop examination and assessment methodologies, encompassing aspects like the administration of exams, the security of test papers, the responsibilities of invigilators and markers, grade moderation procedures, and protocols for handling student appeals. The GTLE (Ghana Teacher Licensure Examination) follows this pattern, with the National Teaching Council (NTC) overseeing the arrangement, execution, and evaluation of the examination. Inadequate execution of the exam can inevitably have adverse consequences on the candidates' performance.

Similarly, the evaluation of examination papers is significantly importance for candidates' performance. The process of grading answer scripts should involve competent examiners working with a meticulously prepared marking scheme. Rushing through the grading process can have detrimental effects on the candidates' performance. Additionally, a thorough review of the marked scripts should be conducted to ensure accuracy. This post-grading review is essential to maintaining the integrity of the examination results and ensuring fairness in the evaluation process.

Learning Materials Factor

The availability and quality of review materials play a crucial role in shaping examinees' preparedness for licensure examinations (Sattar, Smith, & Johnson, 2020). Access to comprehensive study resources, aligned with the GTLE content and format, can enhance examinees' content knowledge and examination readiness. Conversely, a lack of sufficient review materials or inadequacies in their relevance may impede effective preparation efforts.

Within any learning process, the learning materials employed hold paramount importance. They act as a guiding framework for learning, offering a means to self-assess one's grasp of the content and understanding. The influence of learning materials on candidates' performance in teacher licensure exams is profound, encompassing content coverage, practice avenues, and effective study resources (Tyler, 2011). The availability of these materials plays a pivotal role in determining success in the GTLE. It is equally vital to underscore the origin of the materials and their alignment with the examination's content. The use of irrelevant materials for examination preparation can lead to deviations and subpar performance.

The emergence of technology and online platforms has substantially broadened access to an array of customized learning materials. However, the internet constitutes an extensive and heterogeneous information network, where the quality and credibility of content vary widely based on the sources and the nature of the information. As noted by Flanagin and Metzger (2008), the internet offers a wealth of accurate and valuable information, but it is also rife with misinformation, fake news, and untrustworthy content. This is because online information often lacks thorough quality and reliability assessments. Sahin, Belta, and Ercan (2010) assert that unlike information published in

31

reputable scientific and professional journals by established institutions, the information disseminated on the web lacks the same level of oversight. Relying on materials from unreliable online sources can result in unfavorable outcomes, including failure in the GTLE.

Contextual Factor

The format and structure of the GTLE, including the types of questions, time constraints, and scoring rubrics, can significantly impact examinees' performance outcomes. The accessibility of the GTLE for examinees with diverse needs and backgrounds, including those with disabilities or linguistic differences, is critical for ensuring equitable assessment practices. The standardization and reliability of the GTLE administration procedures are fundamental for ensuring the validity and fairness of the examination results.

Self-efficacy and Motivation

Self-efficacy, as defined by Bandura (1977), refers to an individual's belief in their ability to execute tasks and achieve desired outcomes. In the context of teacher licensure exams, individuals with high self-efficacy are more likely to approach exam preparation with confidence, persistence, and effective study strategies. Numerous studies have demonstrated a positive correlation between self-efficacy and academic performance across various domains (Zimmerman, 2000). Also, studies have highlighted the significant impact of test anxiety and psychological factors on examination performance (Putwain et al., 2019). High levels of anxiety can impair cognitive functioning and hinder effective test-taking strategies, thereby lowering performance outcomes. Research indicates a strong interplay between self-efficacy, motivation, and academic performance. Individuals with high self-efficacy are more likely to set challenging goals, exert effort, and persist in the face of obstacles (Schunk

32

& Pajares, 2002). Moreover, self-efficacy beliefs influence individuals' choice of activities and level of commitment to exam preparation (Bandura, 1997). When combined with intrinsic motivation, individuals with high self-efficacy are more likely to adopt effective learning strategies, seek out resources, and engage in deliberate practice, ultimately leading to better performance in teacher licensure exams (Pajares & Valiante, 2001). In the context of the GTLE, research examining the prevalence of test anxiety among examinees and its correlation with performance outcomes would provide valuable insights into this area.

Improving Performance of Examinees in Licensing Examination

The Licensure Examination serves as a critical assessment tool for evaluating the competency and readiness of educators. As the educational landscape evolves, there is a growing emphasis on identifying effective strategies to enhance performance in Licensure Examination. This literature review aimed to explore various means of improving performance in Licensure Examination, drawing insights from recent research and best practices.

One prominent approach to improving performance in Licensure Examination is through the provision of comprehensive review materials. Studies by Smith et al. (2019) and Patel and Jones (2020) emphasize the importance of access to high-quality study guides, practice tests, and review sessions. These resources not only help candidates familiarize themselves with the exam format but also reinforce key concepts and competencies essential for success.

Effective preparation strategies tailored to the specific content domains of the Licensure Examination can significantly impact performance outcomes. Research by Lee and Kim (2018) highlights the effectiveness of targeted study

plans focusing on identified areas of weakness. By prioritizing topics with higher weight in the exam and allocating study time accordingly, candidates can optimize their preparation efforts and improve their chances of success.

Engagement in collaborative learning communities, such as study groups and online forums, can foster knowledge sharing, peer support, and motivation among examinees. Studies by Garcia and Nguyen (2019) and Wang et al. (2021) demonstrate the positive influence of collaborative learning environments on exam preparation and performance. Through active participation in group discussions, peer teaching, and shared resources, candidates can gain valuable insights and enhance their understanding of key concepts.

Integration of formative assessment practices throughout the preparation process can facilitate continuous learning and skill development. Research by Brown and Clark (2020) suggests that regular self-assessment quizzes, mock exams, and feedback sessions enable candidates to identify areas needing improvement and adjust their study strategies accordingly. Timely feedback from instructors or mentors also provides valuable guidance for refining knowledge and addressing misconceptions.

Equipping candidates with effective test-taking strategies and time management skills is essential for optimizing performance. Studies by Chen et al. (2019) and Jackson and Taylor (2021) underscore the significance of techniques such as strategic guessing, question prioritization, and efficient allocation of time across exam sections. Training in test anxiety reduction techniques can also help candidates remain calm and focused during the exam.

Improving performance requires a multifaceted approach that encompasses comprehensive review materials, targeted preparation strategies,

collaborative learning communities, formative assessment practices, and effective test-taking skills. By integrating these means into their preparation regimen, candidates can enhance their readiness and confidence, ultimately achieving success in the examination. Further research is warranted to explore the long-term impact of these interventions and identify additional avenues for optimizing performance in Licensure Examination.

Theoretical Framework

The primary objective of the study is to discern the factors influencing the performance of newly trained teachers in the Ghana Teachers' Licensure examination. In achieving this goal, the study adopted Elger's (2007) 'The Performance Model' as its theoretical framework. The Performance Model puts forth a six-factor framework to outline how this can be achieved and suggests potential areas for relevant research focus. These are Identity, Knowledge, Learning Skills, Context, Personal Factors, and Fixed Factors.

Elger's Theory of Performance offers a comprehensive framework to analyze performance, establish performance criteria, and formulate meaningful performance measures. Within this model, the interaction of the six components forms a holistic basis for determining the level of performance. Starting with 'Identity', Elger asserts that individuals, as they mature within a discipline, embrace the shared identity of the professional community while nurturing their distinctiveness. This phase involves the development of a personal mission, professional identity, and uniqueness. For newly trained teachers, cultivating self-efficacy and a belief in their capabilities is crucial, as is taking ownership and responsibility for their learning journey.

The dimension of 'Skills' delves into the specific actions undertaken by individuals, groups, or organizations in various types of performances. In the

35

context of newly trained teachers preparing for licensure examinations, this dimension encapsulates their examination readiness strategies. The enhancement of critical thinking skills to process information, construct meaning, and apply knowledge becomes vital for successful performance. Additionally, building social skills for effective collaborative learning fostering emotional maturity to tackle challenges, and perseverance toward success are key attributes.

The 'Knowledge' dimension encompasses facts, information, concepts, theories, or principles acquired through education or experience. Newly trained teachers must elevate their learning levels by being cognizant of their learning processes and aligning with effective learning practices to excel in the examination. The curriculum-based skills and knowledge attained during college play a pivotal role in performing well in the Ghana Teachers' Licensure Examination (GTLE).

Contextual variables associated with the educational system and the situation within which individuals or organizations perform are scrutinized in the 'Context' dimension. Adapting optimal learning practices from peers and publicly engaging in the learning process contribute significantly to performance. Contextual awareness is instrumental in achieving success, as discussed by Quarless (2007).

The 'Personal Factors' dimension considers individual-specific variables impacting performance. This involves transforming past setbacks and failures into opportunities for growth, ultimately contributing to a more successful future. Horton (2015) highlights personal factors that influence the performance of college students, emphasizing their potential to hinder successful outcomes.

36

Lastly, 'Fixed Factors' refer to variables unique to an individual that cannot be altered, such as mental or physical disabilities. While unchangeable, these factors can be acknowledged and adapted to, enabling individuals to perform to the best of their abilities despite such challenges.

In summation, Elger's Theory of Performance offers a comprehensive framework to comprehend the intricate interplay of identity, learning skills, knowledge, context, personal factors, and fixed factors in shaping the performance of newly trained teachers. This model provides a valuable lens through which to analyze, evaluate, and enhance the performance of teachers in the Ghana Teachers' Licensure Examination.

Figure 1 below represents the Performance Model by Elger (2007). The figure outlines the factors that influence performance.
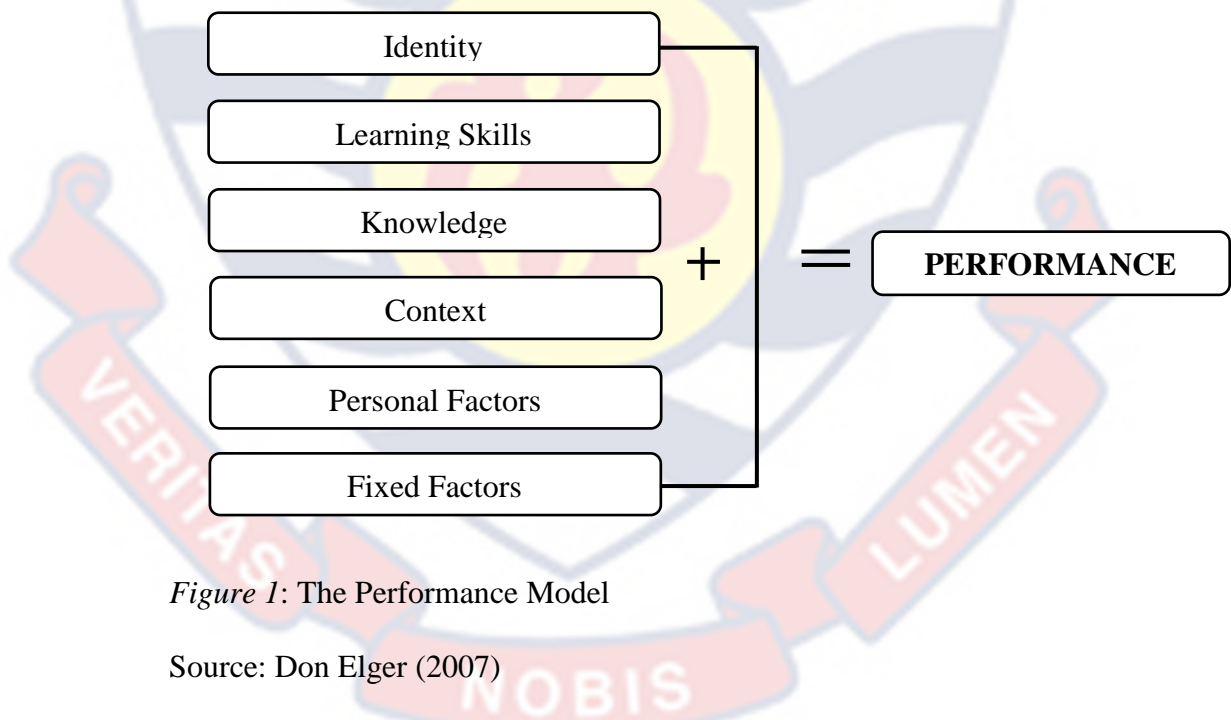
Figure 1: The Performance Model

Source: Don Elger (2007)

The study emphasized the paradigm of Process Education, which entails shifting the ownership of learning to the learner. Within this framework, students are encouraged to take the initiative in determining their learning needs, setting goals, identifying resources, implementing learning strategies,

and assessing outcomes. This approach empowers students to take responsibility and control over their learning process. The key components of Process Education, such as context, personal factors, and fixed factors, provide a holistic understanding of student performance and encourage them to measure their performances.

Incorporating Durkheim's Structural-Functional Theory, the study acknowledges education's role in molding individuals for societal responsibilities. Education promotes unity, stability, and socialization by teaching individuals how to interact with others and prepare for future roles in society. Colleges and universities in Ghana play a crucial role in shaping and training teacher education graduates to excel in teacher licensure examinations and become effective members of society.

The study also draws from Self-directed Learning Theory, as articulated by Knowles (1975), which centers on individuals taking initiative in their learning process. This theory is especially relevant for the arduous task of taking licensure examinations, where individuals must take control of their learning and readiness for the test.

Self-efficacy theory by Bandura (1994) is also integrated, focusing on individuals' belief in their capabilities to perform tasks. Positive self-efficacy impacts attitude and performance. English language proficiency, time spent on learning, and attitude toward learning play vital roles in influencing performance.

Additionally, the study incorporates the concept of social support as outlined by Gottlieb (2007), highlighting the significance of emotional, esteem, informational, and instrumental support. The support provided by family,

38

school administration, and other stakeholders can significantly influence examinees' performance.

To guide the study, a research conceptual framework was constructed, incorporating independent variables such as demographic attributes, personal factors, learning materials, proficiency skills, examination context, and time factors. This framework aids in understanding how these variables affect the performance of newly trained teachers in the Ghana Teachers' Licensure Examination.

The study underscores the complex interplay of various theories and concepts, offering a comprehensive perspective on factors influencing the performance of teacher licensure examination takers. By considering demographic attributes, personal factors, learning materials, proficiency skills, examination context, and time factors, the study aims to provide insights that contribute to the enhancement of performance in the examination.

Demographically, the study sought to find how the gender, age, program of study, mode of enrolment, certificate type attained in tertiary, and the period one takes to sit for the examination. The demographic characteristics of a person are essential to educational planning. This is so because all quantitative analysis of educational planning depends on the data and information of people in terms of gender and program of study. The sex and age structure will practically assist the planner in easily sorting the age and sex factors in the planning of education. The educational planner requires demographic data and information to determine the behavior and dynamics of the population as this helps the planner to understand the population figures expected to work with at the present time as well as in the future date. In this case, the demographic data gives information to plan for education, especially in the areas of projection and forecasting of

39

future education needs of the trainee teachers and the resource requirements of the educational system itself.

The personal attributes of the trainee teacher cannot be overlooked. Identifying one's personal condition can better place a person to perform well in the GTLE. While the time spent in learning and attitude towards learning will help the examinee to perform well, these are anchored on the emotional and psychological readiness of the examinee. This largely can also be determined by the state of the examinee. An examiner going through a difficult time due to some family stress or other human problems during the period of the examination will greatly be affected in terms of performing in the GTLE. An examinee sitting for the examination after completing college or university over a longer period might likely perform compared to an examinee who completes school and sits for the GTLE within a short time. This is because the longer it takes, the more likely one is to forget what was learned in school. More so, an examinee who prepares by taking some private class before the examination is more likely to perform better than someone who does not attend.

Learning materials and resources play a key role in performance in any examination. The availability of these materials will guide the examinee on what to expect in the GTLE as well as ensure confidence. Confidence before the examination will prevent anxiety and fright among examinees. The NTC has provided a lot of such materials on its website which examinees can download and practice. Where sample questions are unclear, examinees can go online and/or use other materials to get an adequate understanding. Trying one's hands on sample questions and past papers is an important part of revision; this is because it helps examinees to use the style of assessment and how to manage their time. In Ghana, the official language used for educational instruction is the

40

English Language. Examination questions are set in the English language and the examinee is expected to answer questions in the English language. Not being adequately proficient in the English language can affect one's performance. The hypothesis that English language proficiency is associated with academic success appears to be substantially correct (Stephen, Welman & Jordaan, 2004).

For any examination, the examination body plays a key role. It is a body responsible for the setting and conducting of the examination. Examinations can have more than one function, even though we typically think of them as a tool to assess students' knowledge of the topic. Examination experiences for both students and instructors may be improved by being conscious of why we are assessing students and what precisely we want to test. The question put out for applicants to answer during the test is one factor in determining performance. This needs to be based mostly on the curricula used. The entire test should reflect the learning objectives for the subject matter being examined. All students have an equal chance to completely exhibit their learning in a fair test. In addition, there should be consistency, questions that are appropriate for the typical student's level of competence, and questions that directly address the objectives of the evaluation (Hayward & Blackmer, 2010).

Success in tests and even other areas of life later depends on pre-service teachers' capacity to apply their knowledge independent of the situation. Therefore, it is vital to teach teacher candidates how to use their knowledge in context. The examination should, to the greatest extent practicable, be given in a setting that is familiar to the examinees. Some test takers may feel and think they are being questioned about the material they have not been taught when they first read questions in examinations with new context. The licensure

41

examination must consider both the professional context of teaching as well as the day-to-day teaching practices that candidates will encounter in the classroom to evaluate and license instructors. More specifically, answering test questions correctly is a crucial ability that must be deliberately honed. But because abilities take time to hone, they must be cultivated earlier than only during the examination-revision phase.

In terms of college and university students, self-efficacy refers to how individuals feel about and value themselves, especially in terms of their social and academic functioning. One learns and comprehends the significance of strong self-efficacy in college via the numerous challenges and overwhelming duties of being a student. High self-efficacy provides several advantages and benefits, particularly for college students. Students who are confident in themselves resist peer pressure to conform less readily, persevere through challenging activities, are happier and more gregarious, and most importantly for this study, they typically outperform their classmates academically. Self-efficacy is thought to be related to effort, perseverance, and success in the context of education. In their research on solving mathematical problems, Chemers, Hu, and Garcia (2001) found that students with higher self-efficacy persevered for longer periods and employed more efficient problem-solving techniques.

Conceptual Framework
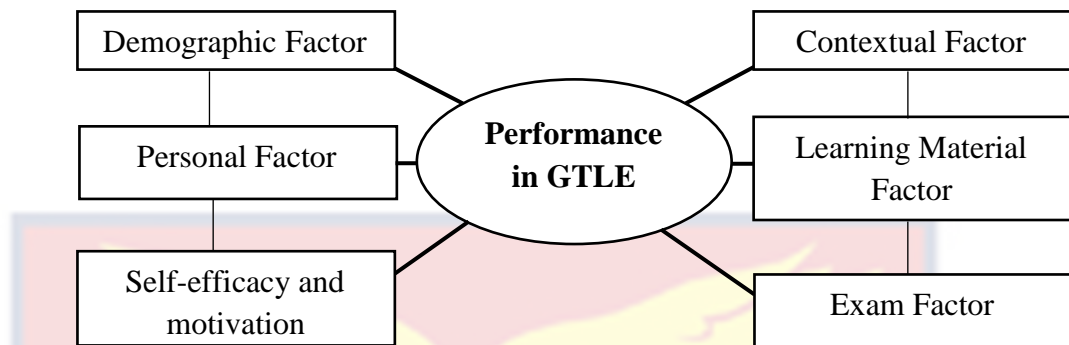
Figure 2: Conceptual paradigm

Source: Abbiw (2022)

This study considered Demographic Factor, Personal Factor, Self-efficacy and Motivation Factor, Contextual Factor, Learning Material Factor, and Examination Factor as the factors that affected the performance of newly trained teachers in the GTLE.

1. Demographic Factor: This includes aspects such as age, gender, or socioeconomic status of the newly trained teacher.

2. Personal Factor: This refers to personal traits or characteristics, like resilience, creativity, or dedication.

3. Self-efficacy and Motivation Factor: This refers to a person's belief in their ability to succeed in a situation or accomplish a task. This is about the individual's belief in their ability to succeed and their level of motivation to do so. The degree to which a person is driven to achieve a particular goal or outcome.

4. Contextual Factor: This includes the learning environment, teaching environment, resources available, or support from peers and educators.

43

5. Learning Material Factor: This refers to the quality, accessibility, and relevance of the learning materials provided to the teachers. This might assess the quality, relevance, and accessibility of the learning materials provided.

6. Examination Factor: This involves the format of the examination, the difficulty of the questions, or the time allowed for completion. This could examine the effectiveness of the assessment methods used to measure the teachers' performance.

These factors are all being considered as potentially influential in the performance of newly trained teachers in the GTLE. Each of these factors can influence the success of newly trained teachers in their professional development.

Chapter Summary

This chapter reviewed the literature on performance and the factors that affect performance. The Performance Model by Don Elger was reviewed as the theoretical basis for the study. The Theory of Performance (ToP) develops and relates six foundational concepts to form a framework that can be used to explain performance as well as performance improvements. According to Elger (2007), the current level of performance of any individual depends holistically on these six components: context, level of knowledge, levels of skills, level of identity, personal factors, and fixed factors

Every state or country has its procedures for certifying teachers, and every public school is required to hire teachers who have completed the state's certification process. Certification always entails examinations, which are frequently in both general knowledge and teaching skills, as well as coursework and teaching practice (Boyd et al, 2007). Improving student learning and school performance is seen as reliant on the adoption of a variety of quality teacher

44

programs and policies linked to the recruitment, training, certification, employment, and retention of competent teachers in public school classrooms (Tatto, Savage, Liao, Marshall, Goldblatt, & Contreras, 2016).

Kelly (2007) identified five significant implications of good teacher licensure and training. Licensing: aids in the prevention of failure, aids in the prevention of teacher burnout, offers a grasp of the accomplishment benchmarks, offers supported practice in a controlled environment, and aids in the prevention of costly student experiments. Finally, for this study, the factors that affect the performance of newly trained teachers in the GTLE considered include: personal factors, examination of body factors, the duration between completion of college and writing of examination factor, and learning materials factor.

45
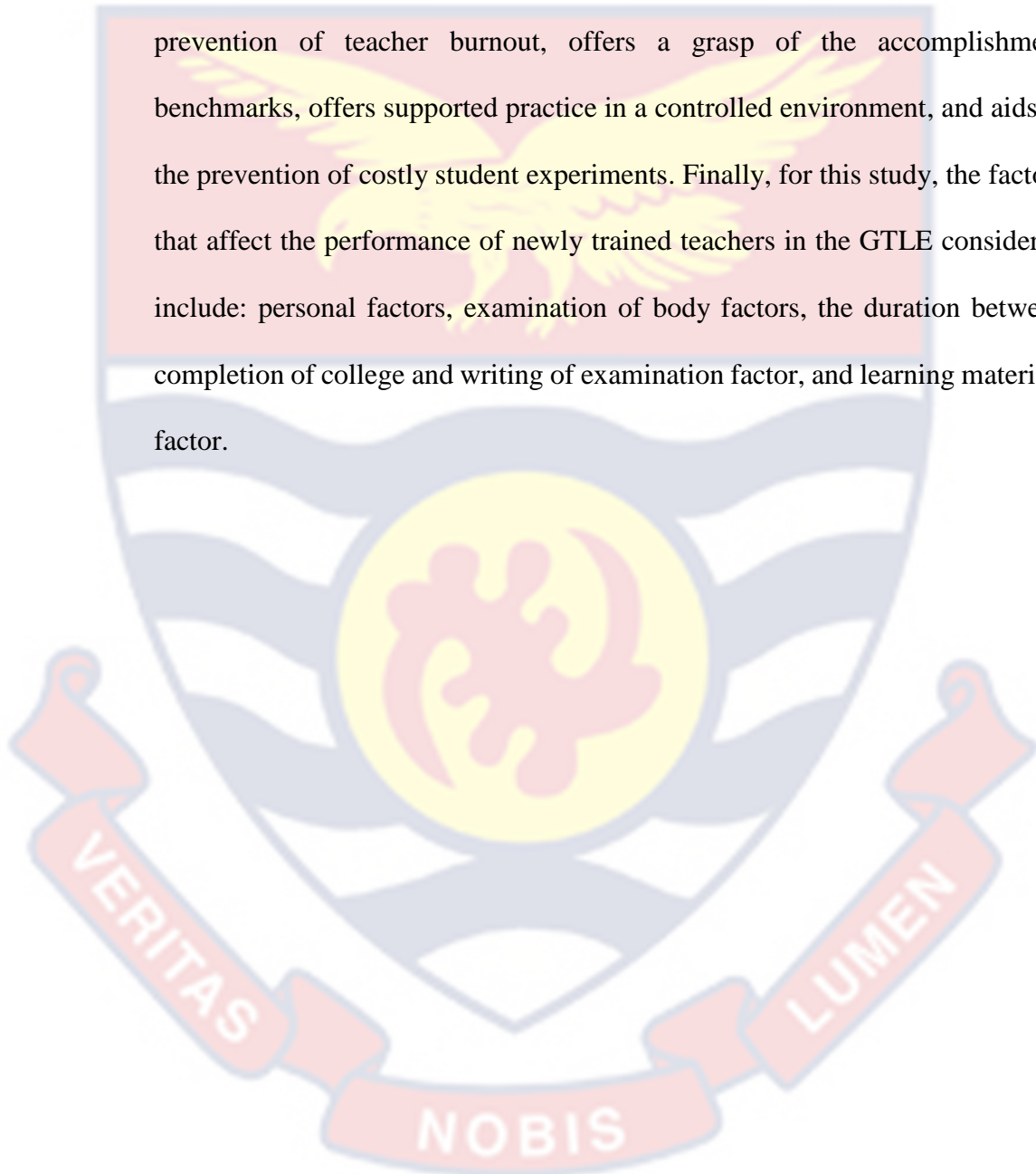
CHAPTER THREE

RESEARCH METHODOLOGY

The approach used to conduct the study is discussed in this chapter. This chapter is divided into ten sections that describe various methodologies and approaches in the conduct of this research. These include Research Paradigm, Research Design, Study Area, Population, Sample and Sampling Procedure, Research Instruments, Validity, Pilot-testing Procedure, Instrument Reliability, Data Collection Procedure, and Data Analyses.

Research Paradigm

The philosophical foundation underlying this study is the pragmatist worldview or assumption. Pragmatism as a research paradigm rejects the rigid dichotomy between positivism and interpretivism because it acknowledges reality as both singular and manifold (Tashakkori & Creswell, 2007). Pragmatism represents a philosophical approach that aims to reconcile the systematic scientific approach and structuralist orientation of earlier methodologies with the more naturalistic techniques and flexible orientation of contemporary approaches (Creswell, 2013; Creswell & Plano Clark, 2011). It is characterized as ''pluralistic'' and centers on ''what actually works'' (Creswell & Plano Clark, 2011, p. 41). In essence, pragmatism employs a diverse array of methods to tackle research challenges.

The selection of pragmatism as the research paradigm for this study is rooted in its association with abductive reasoning, which interweaves deduction and induction. As a consequence, the researcher actively engages in generating facts and theories (Goldkuhl, 2012; Morgan, 2007). The researcher aimed to prioritize both objective and subjective knowledge to achieve the research objectives. According to Creswell (2007), researchers adopting a pragmatic

46

approach have the freedom to employ various research methods or strategies to address their research inquiries. Pragmatism transcends the quantitative/qualitative divide, resolving the paradigmatic conflict by emphasizing whether the research has assisted the researcher in uncovering the information they seek (Feilzer, 2010). The primary rationale for adopting a pragmatic standpoint in this study is to enable the researcher to employ a versatile approach to data collection to address the research questions most effectively. The pragmatic research paradigm serves as the foundational framework for this study, which aims to assess the performance of newly trained teachers in the Ghana Teacher's Licensure Examination (GTLE). Pragmatism, as a philosophical stance, emphasizes the practical consequences and real-world applications of research findings, making it particularly suitable for investigating issues in education and professional development. From an ontological standpoint, the pragmatic approach acknowledges the existence of multiple realities and perspectives. It recognizes that the understanding of teacher performance and the factors that affect performance in the GTLE is multifaceted and dynamic, influenced by various contextual factors such as educational policies, teaching methodologies, and societal expectations. This paradigm embraces the idea that knowledge is constructed through practical experiences and interactions, rather than being fixed or absolute.

Epistemologically, the pragmatic approach adopts a transactional view of knowledge, emphasizing the interconnectedness between theory and practice. It recognizes the importance of both quantitative and qualitative methods in generating insights into teacher performance in the GTLE. The pragmatic research paradigm guides the selection of research methods and data collection techniques. Employing a mixed-methods approach allows for a

47

comprehensive exploration of teacher performance in the GTLE. Quantitative analysis enables the examination of performance trends and statistical relationships, while qualitative methods such as interviews and focus groups facilitate the exploration of individual experiences, perceptions, and contextual factors influencing performance.

At its core, the pragmatic approach is problem-solving-oriented, focusing on addressing practical issues and informing actionable solutions. In the context of this study, the pragmatic paradigm directs attention towards identifying factors that affect the performance of newly trained teachers in the GTLE, proposing recommendations for enhancing the assessment process, and ultimately improving the quality of teacher education and professional development in Ghana.

Ethical considerations are paramount in pragmatic research, particularly concerning the treatment of research participants and the responsible use of data. Respect for participant autonomy, confidentiality, and informed consent are foundational principles that guide the ethical conduct of this study. Additionally, efforts are made to minimize potential biases in data collection and analysis, ensuring the integrity and validity of the research findings.

In summary, the pragmatic research paradigm provides a comprehensive and contextually relevant framework for investigating the performance of newly trained teachers in the GTLE. By embracing practicality, methodological diversity, and ethical integrity, this approach enables researchers to generate insights that contribute to the improvement of teacher assessment practices and the enhancement of educational quality in Ghana.

Research Design

Researchers employ a systematic array of methodologies to assemble, assess, and present their findings within a study (Plano Clark & Creswell, 2015). This structured set of methodologies, known as research design, encompasses a researcher's comprehensive strategy for obtaining responses to study inquiries or examining hypotheses (Asamoah-Gyimah, 2012).

To concurrently or sequentially amass both qualitative and quantitative data, analyze these two sets of data separately, juxtapose the outcomes, and ascertain if they corroborate or counteract each other, the researcher opted for the convergent parallel mixed-methods design, also termed triangulation mixed-method. The choice of this mixed method design stems from its inherent philosophical assumptions and investigative techniques (Creswell & Plano Clark, 2011). It adopts these philosophical assumptions as a research approach, offering guidance on collecting and interpreting data from various sources within a single study. The underlying philosophical assumption supporting the triangulation mixed-method research design utilized in this study is the pragmatist perspective. Essentially, a pragmatist employs a mixed-methods approach by embracing one or more research designs.

In a mixed-methods research design, qualitative research approaches aid in comprehending the issue through indicative findings achieved via means such as participant observation and interviews. Concurrently, quantitative research techniques facilitate the extraction of objective findings through tools like surveys (Braun, Clarke, Boulton, Davey, & McEvoy, 2021). Turner, Cardinal, and Burton, (2017) assert that mixed-methods design is better suited for unraveling intricate educational matters. Its capability to elucidate and rationalize quantitative findings, depict both processes and outcomes, scrutinize

49

reasons for unexpected effects, establish the foundation for instruments, demonstrate the extent of generality, validate and triangulate other data, and fulfill social or political objectives prompted the researcher's adoption of mixed-method research for this study (Krathwohl, 2009).

A mixed-methods approach effectively addresses intricate research challenges by amalgamating post-positivism and interpretivism philosophical frameworks. It seamlessly interlaces qualitative and quantitative data, ensuring that research matters are effectively communicated (Fetters, 2016). In investigating the factors influencing the performance of recently trained teachers in the GTLE examination, mixed-method research supplies a coherent framework, methodological adaptability, and a comprehensive grasp of minor factors (Maxwell, 2016). In essence, mixed-methods research empowers researchers to delve deeply and broadly into study inquiries (Enosh, Tzafrir, & Stolovy, 2014), as well as to generalize the findings and implications regarding the factors impacting the performance of recently trained teachers in the GTLE over the initial four years of Ghana's teacher licensing policy implementation.

The quantitative approach enables the researcher to gather data from numerous participants, enhancing the potential for generalizing findings to a broader population. Conversely, the qualitative approach provides a more profound comprehension of the factors influencing GTLE performance, valuing the insights of the newly trained teachers involved in the study. In essence, quantitative data contributes breadth to the investigation, while qualitative data contributes depth. Moreover, it's possible to combine quantitative and qualitative data regarding the factors affecting newly trained teachers' performance in the GTLE. By amalgamating the strengths of both approaches and compensating for their respective limitations, a mixed-methods approach

50

enhances the likelihood of addressing research inquiries (Johnson & Onwuegbuzie, 2004).

The researcher effectively employed the convergent parallel design to intricately integrate qualitative and quantitative data types, yielding more comprehensive and reliable outcomes and conclusions on the subject. This method facilitated the identification of disparities in results when qualitative and quantitative data did not align. This discrepancy, as outlined by Clark, and Creswell (2015), provides an excellent opportunity for scholars to deepen their understanding of the phenomenon by analyzing the reasons behind the inconsistencies. Figure 3 illustrates the utilization of the convergent parallel architecture.
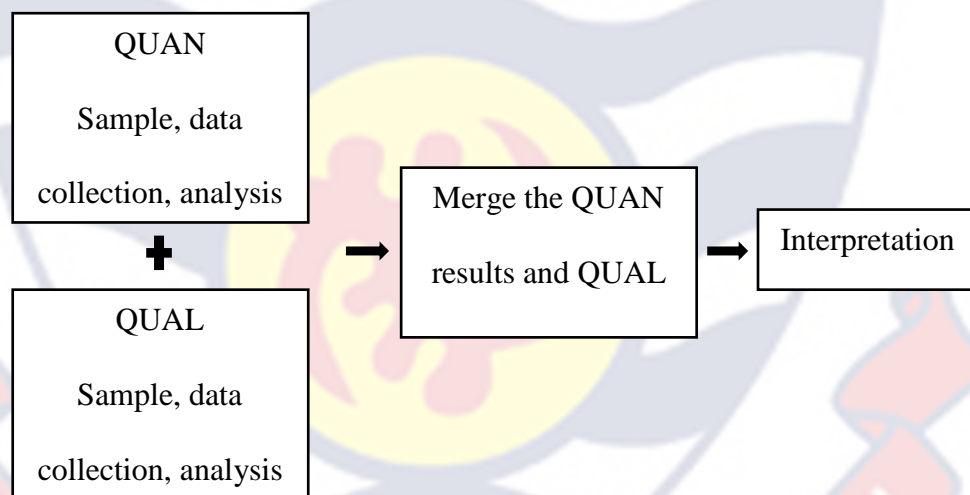
Figure 3: The Convergent parallel (QUAL and QUAN) mixed-method design

Source: Clark, and Creswell (2015)

Figure 3 depicts the data collection and analysis procedural framework. The quantitative and qualitative datasets, as well as the similarities and differences in respondents' opinions, are collected simultaneously to aid in the interpretation or evaluation of the findings. In the convergent parallel mixed method design, both datasets are given equal weight or priority.

51

Study Area

This study is centered around investigating the factors influencing the performance of newly trained teachers who take the Ghana Teacher Licensure Examination (GTLE) within the Central Region. The Central Region is renowned for its prominent institutions of higher education and a thriving economy fueled by abundant industrial minerals and tourism. Beyond its significant tourist attractions, the region has attracted migration from diverse ethnic groups, regions, and even other countries due to its educational prominence, boasting some of the nation's top schools.

Within the Central Region, two major universities of education, namely the University of Cape Coast and the University of Education, Winneba, hold prominence. Additionally, three significant teacher training colleges, including the Ola Training College, Fosu College of Education, and Komenda College of Education, contribute to the educational landscape.

Table 2 below indicates the Colleges and Universities of Education in the Central Region and the percentages of newly trained teachers who passed and failed within 2018-2021.

Table 2: Rates of Failure Among Colleges and Universities of Education in the Central within 2018-2021

School	Total No.	Total Pass	%age Pass	Total Fail	%age Fail
CE01	1,189	961	80.8%	228	19.2%
CE02	1,314	1,179	89.7%	135	11.3%
CE03	1,149	1,028	89.4%	121	11.6%
UCC	34,030	25,689	75.4%	8,341	24.6%
UEW	31,352	24,198	77.1%	7,154	22.9%

Source: NTC (2021)

Key:

CE01 – OLA College of Education, Cape Coast

CE02 – Komenda College of Education, Komenda

CE03 – Fosu College of Education, Fosu

UCC – University of Cape Coast, Cape Coast

UEW – University of Education, Winneba

The selection of the Central Region as the study locale is underpinned by several factors. First, the prevalence of failure among newly trained teachers in the GTLE in the Central Region. 15,979 newly trained teachers in the Central Region representing 23.15% out of the total of 69,034 newly trained teachers over the period in the Central Region failed. Second, the data also revealed that newly trained teachers from the two major Universities of Education (University of Cape Coast and University of Winneba) constituted 96.6% of the 16,039 newly trained teachers who failed in the Central Region within the 2018-2021 period (Table 2). Lastly, the population of newly trained teachers (69,034) represents 53.8% of the total national figure which makes it a good representation for generalization. The significance of the chosen topic is rooted in the gravity and recurrent nature of the issue across Ghana after the implementation of the policy on licensing of Ghanaian teachers through the GTLE. The researcher aimed to gauge the severity of this situation within the Central Region, as no prior studies have delved into this particular subject within the chosen context.

Population

The population of a research study refers to the entire group of individuals or items that the researcher is interested in studying. It is the total set of elements that share at least one common characteristic. In essence, a

53

population is a compilation of individuals, entities, or objects from which sample measurements are drawn to facilitate investigation (Mugo & Bottaro, 2008). It encapsulates individuals who share particular attributes of interest to the researcher. In this study, the target population encompasses newly trained teachers who participated in the Ghana Teacher Licensure Examination (GTLE) within the initial four-year period of its implementation. This group encompasses recently trained educators hailing from various colleges and educational institutions in Ghana who undertook the GTLE spanning from 2018 to 2021.

The comprehensive population under scrutiny comprises the entire count of recently trained teachers who took part in the GTLE during the initial four years of the teacher licensure examination's enactment in Ghana. Based on data sourced from the National Teaching Council (NTC), this population is comprised of 128,494 individuals. The target population encompasses all recently trained teachers who participated in the teacher licensure examination within the geographical confines of the Central Region. The data show that over the specified period, a total of 69,034 recently trained teachers within the region wrote the GTLE. This number corresponded to 53.8% of the comprehensive cohort of 128,494 newly trained teachers who participated in the examination across the entire nation within the period under study (2018-2021). The decision to focus exclusively on the subset of recently trained teachers who engaged in the GTLE within the inaugural four years emanates from the fact that data on these specific cohorts is readily obtainable. Furthermore, these cohorts are integral to the foundational fabric of GTLE administration within the country. Understanding their situation in the GTLE can help further improve the policy and the GTLE in itself.

54

Sampling Procedure

As articulated by Asamoah-Gyimah (2012), a sample denotes a thoughtfully chosen subset of the components constituting the overall population. The size of a study's sample is contingent upon factors such as the population's attributes, the nature of the data to be amassed, the intended analysis, and the financial resources allocated to the study.

Sampling, by Asamoah-Gyimah (2012), is the act of culling a subset from the population to serve as a representative representation. The researcher pursued a method aimed at substantiating the sample's representativeness. The technique of simple random sampling was harnessed to extract a cohort of 421 recently trained teachers who sat for the GTLE within the initial four years (50 each from the three colleges of education, 135 from UEW, and 136 from UCC), based on the sampling size table formulated by Krejcie and Morgan (1970). The adoption of this sampling strategy stems from the fact that all participants partook in the GTLE across any of the sessions within the inaugural four years of implementation. Out of the larger contingent of 69,034 individuals from the Central Region, the study's sample was selected through simple random sampling. Table 3 gives the breakdown of the respondents and their categories and college or university.

Table 3: Categories of Respondents

Category of Respondent	No. Responded to Questionnaire	No. Responded to Interview	Total
OLA College	50	0	50
Komenda College	50	0	50
Fosu College	50	0	50
UEW	132	4	136
UCC	131	4	135
NTC Official	0	1	1

Source: Field Survey (2022)

The researcher's inquiry was deeply invested in deciphering the factors influencing the suboptimal performance of recently trained teachers who did not succeed in the GTLE during any of the sessions within the initial four years of the policy's introduction in Ghana. To glean insights into the nature of the GTLE and the perspective of newly trained teachers concerning their underachievement, 1 NTC official was drawn through purposive sampling and interviewed. Also, a subset of 8 newly trained teachers who failed aspects of the GTLE were sampled out of the 421 through purposive sampling and interviewed (4 from UCC and 4 from UEW respectively) since the failure was prevalent in these institutions because of their numbers. Given the elusive and intricate nature of this sample population, the snowballing methodology was harnessed. This was because the respondents were already out of the university and registered individually. The colleges and universities of education do not have any record of those who registered, wrote the examination, failed, or passed the GTLE. The NTC conducts the GTLE on a private basis. A trainee who completes can register and write the GTLE at the time he/she so wills at

56

the time of this study.   This approach, recognized as exponential non-discriminative snowballing sampling, was employed due to its aptitude for enlisting obscured populations and procuring primary data in a resource-efficient manner. The rationale behind this choice rests upon the study's sensitive nature and the characteristics of the respondents. The snowballing sampling strategy is characterized by the initial subject's referrals subsequently suggesting additional potential subjects for inclusion, forming a cascading chain of sampling (Latha & Jeyabharathi, 2012). In essence, the snowballing approach relies on referrals from initial subjects to identify subsequent subjects.

Furthermore, beyond its relevance in sensitive studies, the snowball sampling approach was embraced for its minimal requisite pre-planning, enabling an expeditious commencement of primary data collection, ultimately culminating in a swift data accumulation process. Snowball sampling, or chain-referral sampling, represents a non-probability (non-random) sampling method particularly applicable when the traits to be identified within samples are infrequent and elusive (Rostamzadeh et al., 2023). Additionally, the Director overseeing Examinations at the National Teaching Council (NTC) was purposefully selected as a participant to address certain research inquiries through interview sessions. Table 4 below presents the categories of interview respondents.

Table 4: Categories of Interview Respondents

Respondent	Institution
1	UCC
2	UEW
3	UEW
4	UEW
5	UCC
6	UCC
7	UCC
8	UEW
Deputy Director (in charge of Examination)	NTC Official

Source: Field Survey (2022)

Data Collection Instruments

The data for this study were collected through a semi-structured questionnaire and interviews. The questionnaire encompassed two sections comprising a total of 48 items. The 48 items were divided into two parts; Part A- Demographic Information, and Part B- Likert Scale form. Part two was further divided into six on the factors that affected the performance of newly trained teachers. They included: Personal Factors, Learning Material Factors, Examination Factors, Contextual Factors, Self-efficacy and Motivation, and suggestions to help improve the performance of newly trained teachers in the GTLE. Kumar (2011) enumerates several advantages of employing questionnaires as data collection instruments. One prominent advantage highlighted by Kumar is the enhanced anonymity provided by questionnaires due to the absence of face-to-face interaction between respondents and

58

researchers. Nonetheless, it is important to acknowledge that using questionnaires carries inherent disadvantages that pose challenges to the instrument's effectiveness and validity. Firstly, the process of designing and developing a questionnaire demands considerable time and effort (Kumar, 2011). Moreover, the nature of questionnaires necessitates brevity and simplicity, making it difficult to accommodate complex question structures.

Addressing the challenges inherent in the chosen instruments, meticulous measures were taken to safeguard the internal validity of this study. Firstly, to ensure content validity, the questionnaire items were meticulously crafted to align with the research objectives. Additionally, scrutiny and refinement of certain questionnaire items were undertaken by both my supervisor and other faculty members of the Institute of Educational Planning and Administration, ensuring comprehensive coverage of all facets of the factors influencing the performance of newly trained teachers in the GTLE.

The research instruments underwent a pre-testing phase after the vetting process. Pre-testing a research instrument entails a meticulous evaluation of each question and its interpretation by respondents (Kumar, 2011). Kumar further emphasizes that conducting a pre-test should mirror real-world conditions and involve a sample that is representative of the final research study's population. Pre-testing serves to identify potential defects in measurement instruments and to verify if concepts have been operationalized effectively (Adosi, 2018, referencing Cohen, Teijlingen & Hundley, and Watson, Atkinson, & Rose). The research instrument utilized in this study underwent pilot testing to ensure its robustness, reliability, and validity.

Initially, the questionnaire underwent review by the principal supervisor of the study, leading to necessary modifications in items, instructions, consent

forms, grammar, and overall layout. It was further scrutinized by the Institutional Review Board of the University of Cape Coast (IRB-UCC). The questionnaire was then adapted into a Google document format and administered to a pre-test sample of 43 newly trained teachers who wrote the GTLE from UCC using simple random sampling. This cohort was only used for the pilot test and not added to the main study. Descriptive analysis of the pilot testing data was conducted using the Statistical Package for the Social Sciences (SPSS) to determine the internal consistency reliability. This revealed a Cronbach alpha of 0.829 for the Likert scale making the instrument acceptable for the study.

Validity, as defined by Mugenda & Mugenda (2003), refers to the extent to which a test measures its intended construct. This study scrutinized the ability of the test instruments to effectively measure the targeted constructs. The responses of participants during the pre-test corresponded with the research questions and objectives, thereby confirming validity. The concept of validity essentially involves demonstrating that an instrument accurately measures its intended content (Winter, 2000; Cohen, Manion, & Morrison, 2007).

The choice of interviews as a data-gathering technique stems from its versatility, allowing the incorporation of various sensory channels: verbal, non-verbal, spoken, and auditory. Interviews provide a degree of conversational control to the interviewer while still permitting spontaneity. This approach facilitates comprehensive responses to intricate and profound issues. Interviews often delve into emotionally charged topics, requiring interviewers with adeptness in handling such situations to enable participants to candidly and emotionally express themselves, thereby ensuring authenticity, depth, and honesty in their narratives. The chosen interview type for this study was a

standard open-ended interview. The formulation and sequence of questions were prearranged, with identical fundamental questions posed in the same order to all participants (examinees with repeated failures). Similarly, a semi-structured questionnaire was employed, presenting respondents (failed examinees in general) with open-ended queries to respond to.

Reliability, on the other hand, pertains to the consistency and stability of data produced by a research instrument across repeated trials (Mugenda & Mugenda, 2003). In the context of this study, the reliability of interviews is derived from their common use as a method of gathering qualitative data. Interviews are extensively employed in the social sciences to elicit perspectives and attitudes from interviewees on various subjects. The degree of formality in interviews spans from informal ''chats'' like ''Vox-pops'' to structured and recorded interviews.

Regarding interviews, content validity was established by subjecting interview questions to review and critique by the researchers' supervisor and the IRB-UCC. The feedback received addressed identified weaknesses, thereby enhancing the interview's content validity. Additionally, ethical clearance was secured from the ethical clearance team of the University of Cape Coast.

Data Collection Procedures

In any research study, the primary aim of collecting data is to acquire information that pertains to the research inquiries. These data collection procedures encompass a series of interconnected steps, including sampling, securing permissions, recruiting participants and respondents, identifying data sources, recording data, and executing the data collection procedures.

In this study, data was collected from a total of 422 respondents. 413 newly trained teachers were sampled through simple random sampling from the

61

colleges and universities of education in the Central Region to respond to a semi-structured questionnaire through Google Forms. This was to ensure that every individual in the population had an equal chance of being selected. This reduced the risk of bias in the sample. 8 of the newly trained teachers who have failed the GTLE were also sampled through purposive sampling for interviewing to gain an in-depth understanding of the factors that affected the performance of newly trained teachers in the GTLE, 4 from UEW and 4 from UCC. The choice of these two universities was based on the fact that newly trained teachers who failed the GTLE in the Central Region were predominantly from these institutions. 1 NTC official (The Deputy Director -in charge of Examinations) was also sampled purposively for interviewing to understand the nature of the GTLE because he possesses the needed information on the nature of the GTLE.

Ensuring participants' availability before interviews is a critical step (Kusi, 2012). Consequently, the researcher sought respondents' consent and availability before conducting the interviews. Individual interviews were conducted with each respondent, spanning over two months. Each interview lasted a time frame of 20-to-30 minutes. The initiation of the data collection process was scheduled following the advice of the supervisor and after obtaining ethical clearance from the Institutional Review Board of the University of Cape Coast, ensuring accurate and effective data collection.

Data Processing and Analysis

The present research employed a mixed-methods approach. The quantitative data was first analyzed and supported with the qualitative data. Quantitative data derived from newly trained teachers underwent initial editing to ensure data integrity by rectifying inconsistencies, omissions, and errors.

Rigorous analysis was performed on completed questionnaires to rectify any inaccuracies, incomplete entries, misclassifications, or data gaps. This entailed reviewing responses for each questionnaire item individually and scrutinizing each respondent's answers to all questions systematically. In cases of errors or incomplete responses, the questionnaire was electronically returned to the respondent for clarification and completion. Following the editing process, data coding commenced, transforming information from the research instrument into numerical values for entry into the statistical software, IBM Statistical Package for the Social Sciences (SPSS) version 25.0, to facilitate analysis. Descriptive outcomes were generated utilizing frequency tables to summarize and ascertain response trends.

Given that the variables under examination were structured on ordinal and nominal scales, the analysis employed descriptive statistical tools such frequency distributions and percentage descriptive statistics to synthesize and interpret response patterns. Also, percentage tables, pie charts, and bar charts were used to help pictorially understand the results. These techniques were chosen to effectively interpret and communicate response characteristics and trends.

To facilitate straightforward identification, the interview data were assigned sequential numbers. The collected information underwent a refinement process to ensure accuracy and correct responses. This editing procedure was also instrumental in excluding incorrect interview responses. The interview recordings were transcribed by the researcher, a process referred to as transcribing according to Creswell (2013). This entails converting audio recordings of field notes into textual data. The transcribed responses were subsequently categorized into themes aligned with the research topics.

63

The quantitative and qualitative findings were then integrated, facilitating the identification of connections and discrepancies in the responses. Research questions 2, 3, and 4 were analyzed using frequency distributions and percentages while research question 1 detailed the nature of the GTLE. Frequencies and percentages were employed in this study because they are fundamental in descriptive analysis. They helped describe the basic features of the data in the study. They also provided simple summaries with the sample and the measures. More so, frequencies and percentages ensured transparency in the data presentation which would allow readers to understand the distribution and relative proportions of the different categories within the sample. This study aimed at generalizing the result about the population of newly trained teachers within 2018-2021 hence the use of frequency and percentage since they form the basis for inferential statistics.

Ethical Considerations

Throughout the study, various ethical considerations were considered. Ethical clearance was secured from the Institutional Review Board of the University of Cape Coast after fulfilling the required board criteria. To facilitate efficient data collection, an official introductory letter was procured from the Institute for Educational Planning and Administration. This letter dispelled any apprehensions among respondents, fostered responsiveness, and eliminated misunderstandings. The National Teaching Council (NTC) was also provided with this introductory letter to obtain their consent for the study's implementation within their domain. NTC's approval, granted after a month, facilitated the release of preliminary information, including GTLE data, essential for conducting the study.

To uphold ethical research conduct, the anonymity and confidentiality of information provided by respondents were assured. Participant involvement in the research was entirely voluntary, without any coercion. Consent forms were administered to all participants contributing to both qualitative and quantitative data, and comprehensively outlining ethical considerations. Furthermore, to minimize plagiarism risks, proper attribution was provided to the works of others when relying on external sources. To establish a mechanism for reporting any ethical breaches in the data collection process, a Google Form was created, linked to a University of Cape Coast student email.

In summary, this study meticulously adhered to ethical research practices to ensure the integrity and validity of the research process.

Chapter Summary

The research design that was used for this study was the convergent parallel mixed-method research design which made use of both qualitative and quantitative data. This design was considered for this study because it focuses on collecting, analyzing, and mixing both qualitative and quantitative data to provide a better understanding of research problems than either approach alone. One data resource may not be enough, a second method is needed to enhance a primary method, and initial results on the subject matter (factors that affect the performance of newly trained teachers in the GTLE) need to be further explained. Data was gathered after obtaining ethical clearance from the University of Cape Coast Institutional Review Board. The choice of the Central Region was because of the concentration of teacher training colleges and the presence of the two major universities of education in the Central Region. The study made use of 413 respondents from the Central Region of Ghana using simple random sampling to sample general respondents and purposive sampling

65

to sample 8 participants for interviewing through snowballing and 1 NTC official. The research instruments that were used were semi-structured questionnaires and interviews. Quantitative data obtained from newly trained teachers were analyzed using descriptive statistics with the help of SPSS software. Descriptive statistics in the form of frequency and percentages were used to analyze the data. The qualitative data was also analyzed thematically. After this was done, both quantitative and qualitative data were integrated to determine the findings.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

This study aimed to explore the factors that affect the performance of newly trained teachers in the GTLE in the Central Region of Ghana. The study sought to determine the trend in the performance of newly trained teachers in the GTLE and determine measures to help improve the rate of passing the examinations in the next four years. The researcher employed the mixed methods approach with a particular focus on the convergent parallel mixed methods design.

In all, a total of 421 newly trained teachers, who sat for the GTLE over the period participated and one NTC official. Out of the 421 participants, 8 of them who failed in some aspects of the examination were purposively selected and interviewed after they voluntarily accepted to be interviewed. Questionnaires and interview guides were used to gather data from participants. The data from the questionnaire were analyzed with version 25 of SPSS and the data from the interviews were transcribed and analyzed thematically.

This chapter presented an analysis and discussion of the results from the quantitative and qualitative sets. The first part of the chapter considered the background information of respondents from the questionnaire. This was followed by the main results from the questionnaire, after which the transcribed data from the interviews was also presented. The fourth part of the chapter merged the results and discussed according to the research questions while the key findings were presented in the fifth aspect.

Demographic Information

Several demographic factors have been identified as potential predictors of performance in teacher licensure examinations. These include age, gender, ethnicity, and socioeconomic status (Jiang, 2014). Other demographic factors such as race, ethnicity, and socioeconomic status have also been found to impact performance on teacher licensure examinations.

In this study, part one of the questionnaire as well as the interview guide for newly trained teachers who failed the GTLE sought to obtain information on their demographic characteristics. This piece of information was relevant in identifying the categories of respondents who participated in the research.

The gender of respondents is presented in Table 5 below.

Table 5: Gender of Respondents to Questionnaire

Gender	Frequency	Percentage
Male	204	49.4%
Female	209	50.6%

Source: Field Survey (2022)

Results from Table 5, 204(49.4%) of respondents are male while 209(50.6%) are female. This indicates that on the whole the respondents were proportionally represented in terms of gender.

Table 6 below presents the age range of respondents.

Table 6: Age Range of Respondents

Age range	Frequency	Percentage
20-25	165	40.0%
26-30	210	50.8%
31-35	26	6.3%
36-40	12	2.9%

68

Source: Field Data, Abbiw (2022)

From the field data, 165(40.0%) respondents were between the ages of 20-25, 210(50.8%) were between 26-30, 26(6.3%) 31-35, and 12(2.9%) were between age 36-40. Also, most of the respondents 403(97.6%) were regular students while the minority 10(2.4%) were distance students.

Table 7 presents the results on the years of graduation of respondents, their frequency, and the corresponding percentages.

Table 7: Year of Graduation from College or University

Year	Frequency	Percentage
2015	1	0.2%
2017	6	1.5%
2018	96	23.2%
2019	126	30.5%
2021	20	4.8%

Source: Field Survey (2022)

The majority of respondents 126 (30.5%) graduated from the University or College in 2019. This was followed by 96(23.2%) in 2018.

Regarding educational attainment, 229(55.4%) of the respondents attained a degree while 184(44.6%) of the respondents attained a diploma. This is presented in Figure 4
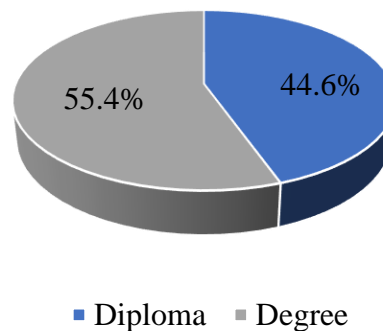
Figure 4: Certificate attained by respondents

Source: Field Survey (2022)

The number of times respondents wrote the GTLE is presented in Table 8 below.

Table 8: Number of Times Examinees Wrote the Licensure Exam

Number of times	Frequency	Percentage
1 time	321	77.7%
2 times	74	17.9%
3 times	9	2.2%
4 times	9	2.2%

Source: Field Data, Abbiw (2022)

From the field data, 321(77.7%) of respondents wrote the GTLE 1time, 74(17.9%) 2 times, 9(2.2%) 3 times and 9(2.2%) wrote the examination 4 times. A total of 92(22.3%) of respondents failed in one or two of the papers of the GTLE and had to re-write them in subsequent sittings.

Figure 5 presents the paper(s) failed by respondents.
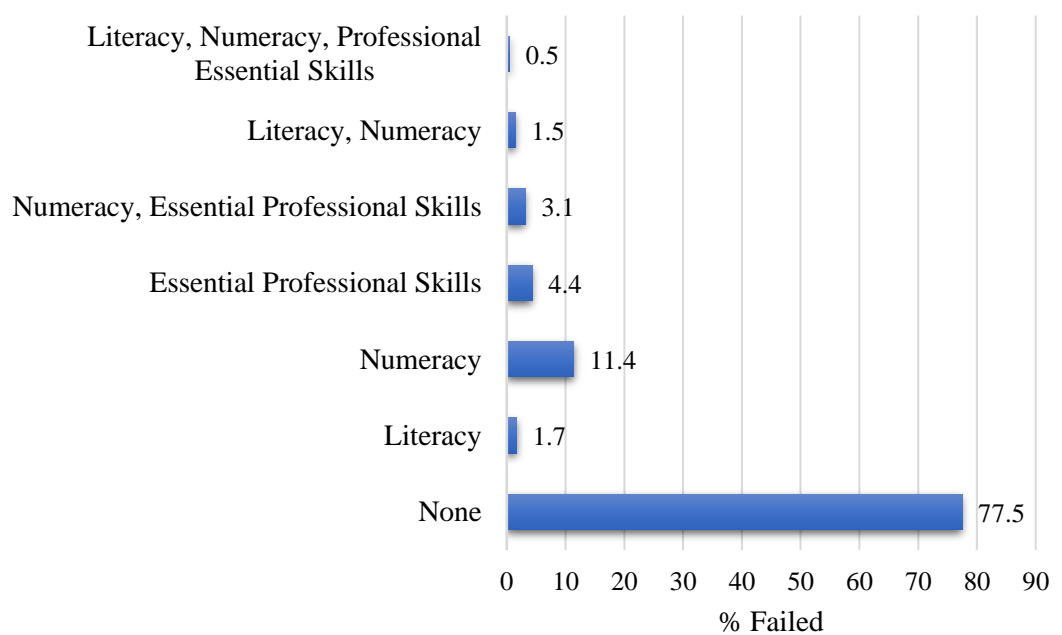
Figure 5. The proportion of paper(s) failed by respondents

Source: Field Survey (2022)

In all, 320(77.5%) of respondents did not fail any of the papers, 7(1.7%) failed the Literacy paper, 47(11.4%) failed the Numeracy paper, and 18(4.4%) failed the Essential Professional Skills paper. Also, 13(3.1%) of respondents failed the Numeracy and Essential Professional Skills papers while 6(1.5%) failed the Literacy and Numeracy papers, and 2(0.5%) of respondents failed all three papers thus Literacy, Numeracy, and Professional Essential Skills. The results indicate that newly trained teachers who sat for the GTLE failed the Numeracy paper more than the Essential Skills paper and the Literacy paper.

Profile of Interviewees

The profile of the participants who were interviewed is presented in Table 9. The table presents the biographic description of eight participants in order as the interview was carried out.
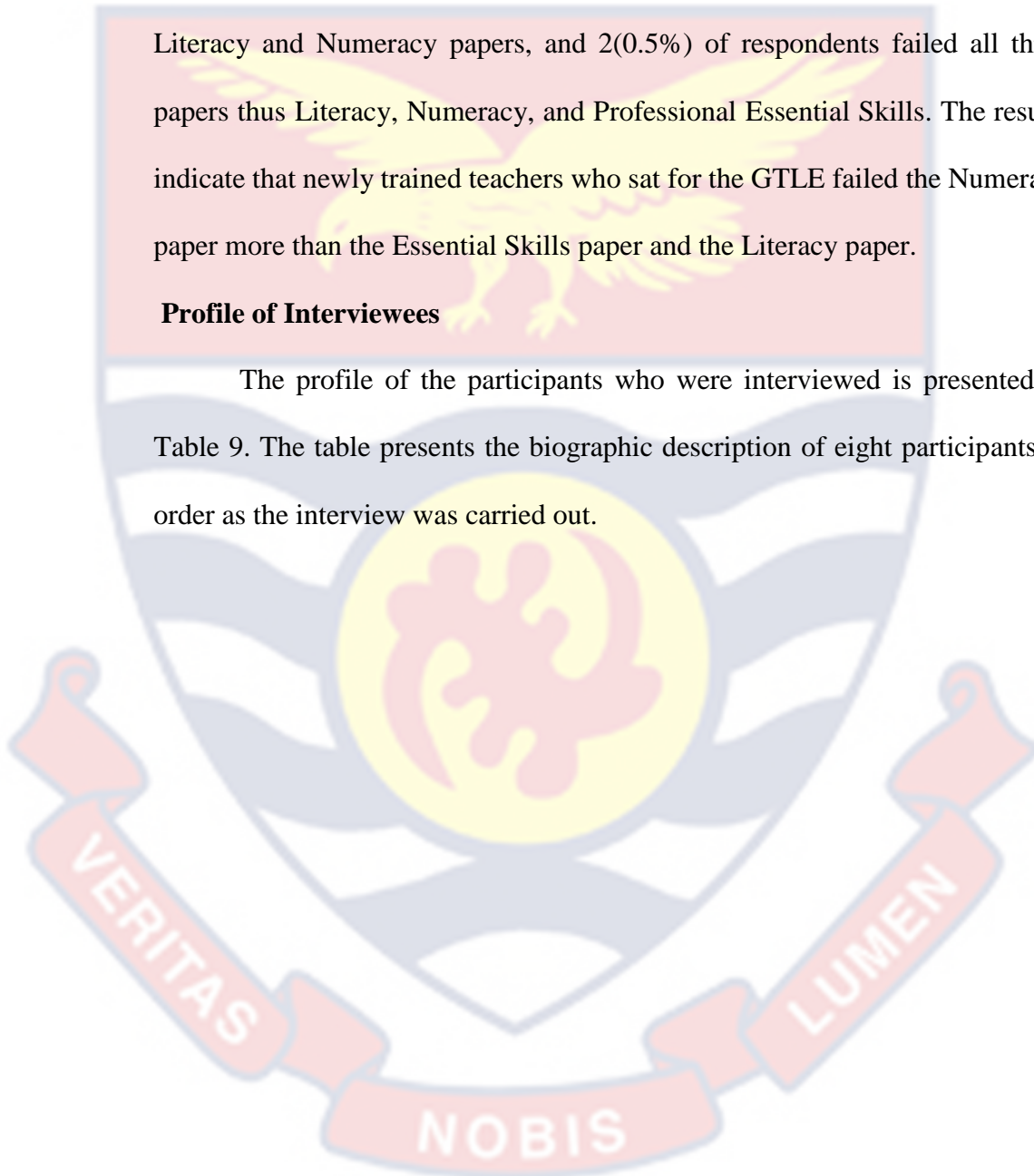
Table 9: Profile of Interviewees

	Gender	Program of study	Year of completion	1st siting	Paper failed	Sitting
1	Female	B.Ed. Social Studies Education	2020	2021	Numeracy	2 times
2	Female	B.Sc. Biology Education	2020	2021	Essential Professional Skills	2 times
3	Male	BA Art Education	2019	2020	Numeracy	2 times
4	Male	BA Art Education	2018	2019	Numeracy	2 times
5	Female	B.Ed. English Language	2019	2020	Numeracy	3 times
6	Male	B.Ed. English Language	2020	2021	Numeracy	2 times
7	Female	B.Ed. Social Studies	2020	2021	Numeracy	2 times
8	Male	BSc. ICT Education	2020	2021	Essential Professional Skills	2 times

Source: Field Survey (2022)

Research Question 1

The first research question explored the nature of the GTLE. To get an understanding of the nature of the GTLE, the Director in Charge of Examinations was asked what constituted the GTLE. His response is presented below.

> ''*Currently, the GTLE is made up of three (3) papers: Essential Professional Skills, Literacy, and Numeracy. The Essential Professional Skills comprises 60 multiple choice questions while Literacy comprises 30 multiple choice questions, comprehension, and essay. Numeracy, on the other hand, comprises 30 multiple-choice questions and two written subjective questions. Each paper is marked out of 100%. A score of 50% and above is a pass while a score below 50% is considered a failure*''. (NTC Official)

Probe: what goes into the setting of the GTLE questions and what does the examination seek to get from newly trained teachers?

According to the NTC official, there are domains or content areas that newly trained teachers are expected to study for the examination. The official then outlined them below.

> "*The Literacy Skills paper examines: conditional sentences, subject-verb agreement, prepositions, relative pronouns, question tags, arrangement of modifiers, adjective order, passive and active voices, reported speech, idiomatic expressions, synonyms, and antonyms, identifying errors in a passage (punctuations and dangling modifiers), the figure of speech expressions*". (NTC Official)

73

Probe: what about Numeracy?

"*The Numeracy Skills paper examines numbers (place of a value, set of numbers, factors, multiples, prime numbers), algebra, measurement, and geometry (measurement of time, measurement of money, capacity, and mass), statistics (working with data to find average)*". (NTC Official)

Probe: what about Essential Professional Skills?

"*For the Essential Skills, attention is focused on: general knowledge in education, practical scenario-based questions in teaching, codes, and ethics of the teaching profession*". (NTC Official)

The Director further iterated that the GTLE questions are practical applications and not direct questions as seen in the normal class assessments or examinations. He also indicated that Numeracy is not pure mathematics. It is rather an application of basic mathematics principles in real-life situations.

When asked about the quality assurance ensured in the setting of the examination, he explained that this examination is a professional examination and therefore a high level of quality assurance is ensured. According to the Director, the questions pass through four stages before they finally are ready to be administered. They include:

1. *The first stage is where the questions are set. We call that group the Test Item Writers. They set the questions based on our criteria.*

2. *The questions are then reviewed to meet the standard and difficulty level of trained teachers.*

74

3. *The examination question set is then composed, thus grouping the questions under the various domains according to low-level learning (example: recall and remembering), moderate-level learning, and high-level learning (example: application questions) by percentages. Usually, 50% of the questions fall under the low learning level.*

4. *Proofreading to check the grammar and spelling.*

Additionally, when asked about the time assigned for teachers to write the GTLE, the Director explained that:

"*The examination is backed by law. That is the Education Regulatory Bodies Act 1023; section 60B says that the council should conduct examinations for those who have successfully completed the teacher education program. Examinees are therefore expected to have completed training and have no referrals before they can register for the examination*''

Probe: there is the public notion that the GTLE was a means to reduce the employment intake of the government. What do you make of this accession?

''*NTC is not the employer of teachers but rather a regulator of teachers. The mandate of employing teachers is solely the responsibility of the Ghana Education Service. The mandate of NTC is to produce qualified teachers to teach in both public and private schools*".

The Ghana Teachers' Licensure Examination (GTLE) comprising Essential Professional Skills, Literacy, and Numeracy papers was confirmed by all respondents in this study. These three areas are

75

essential components in evaluating prospective educators' proficiency. This multi-faceted assessment ensures that teachers possess the foundational skills necessary to excel in the classroom. Research suggests that a comprehensive examination structure like the GTLE is crucial for maintaining high standards in teacher education programs. Furthermore, studies emphasize the importance of incorporating both theoretical knowledge and practical application in teacher assessments to effectively gauge their preparedness for the diverse demands of teaching (Grossman, 2010). Therefore, the inclusion of Essential Professional Skills, Literacy, and Numeracy papers in the GTLE aligns with scholarly recommendations for fostering competent, and capable educators.

Research Question 2

Research question 2 sought to determine the trend in performance in the GTLE nationally over the first four years. To understand the trend in the performance of newly trained teachers in the GTLE, data was collected from the NTC and analyzed. Thus, this section presents results on the trend in the performance of newly trained teachers in the GTLE at the national level.

According to the data obtained from the NTC, over the first four years of the GTLE in the Central Region, the passing rate of newly trained teachers is presented in Table 10 below.

Table 10: Performance of Newly Trained Teachers in The Central Region Within 2018-2021

Year	Total	No. Passed	%ge Pass	No. Fail	%ge Fail
2018	9,361	6,906	73.7%	2,455	26.3%
2019	26,757	22,040	82.3%	4,717	17.7%
2020	19,080	14,852	77.8%	4,228	22.2%
2021	13,836	9,257	66.9%	4,579	33.1%

Source: Field Survey (2022)

The figure below shows the trend in the performance of newly trained teachers in the GTLE over the first four years of the policy implementation in the Central Region.
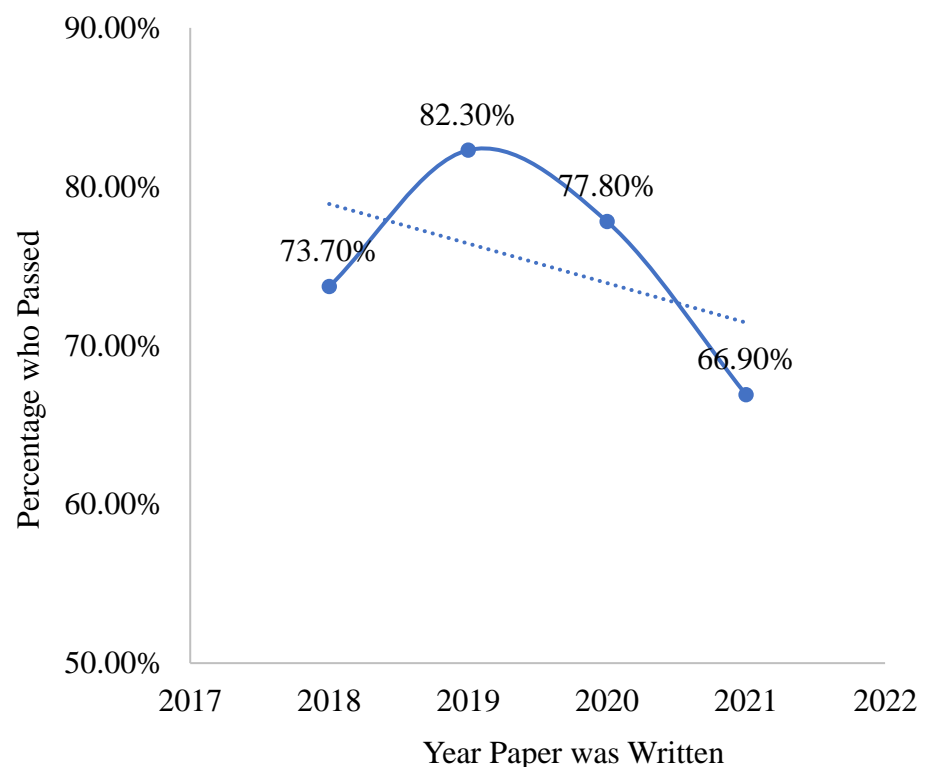
Figure 6: Trend in the Performance of Newly Trained Teachers in the Central Region

From the figure, the trend in passing has been declining since 2019 after it had seen some rise from the previous year (2018). This rise can be attributed to the increment in the number of newly trained teachers who registered for the GTLE in 2019. In 2018, there were 9,361 candidates with a pass rate of 73.7%. this saw a rise to 82.3% in 2019. However, the rate started declining after 2019. Between 2019 to 2020, there was a drop of 4.5% in the pass rate, and between 2020 to 2021, a drop of 10.9%. This indicates a worsening trend in performance over the years, accompanied by an increase in the rate of failure.

Such a decline is alarming as it suggests systemic issues within the examination system or potentially in the preparation and training of teachers. If the trend continues, it could lead to increased rates of wastage, which is not conducive to the improvement of the education system. Addressing the factors contributing to this decline is crucial to ensure the effectiveness and integrity of the examination system and ultimately, the quality of education provided. The consequences of a declining pass rate and increasing failure rate in the GTLE can be far-reaching and have significant implications for various stakeholders in the education system. First is the impact on Teachers. Teachers who fail to pass the licensure examination may face challenges in securing employment or advancing in their careers. This can lead to frustration, demotivation, and a loss of confidence among educators. Secondly, a decrease in the number of qualified teachers entering the workforce can affect the quality of education provided to students. Lower standards for teacher licensure may result in inadequately trained educators who may struggle to effectively teach students, leading to a decline in academic performance. More so, a decline in pass rates can erode public trust in the education system's ability to produce competent and qualified teachers. This can lead to skepticism among parents, students, and the broader

community regarding the effectiveness and credibility of teacher training programs and licensure examinations. Also, Educational institutions and policymakers may need to allocate additional resources to support struggling teachers or improve teacher training programs to address the decline in pass rates. This could strain already limited resources and divert attention from other important initiatives aimed at improving education quality. In the long-term, a sustained decline in pass rates and an increase in the rate of failure can lead to potential shortage of qualified teachers, reduced student performance, and ultimately, hindered socioeconomic development.

Addressing the root causes of the declining pass rates in the GTLE is essential to mitigate these consequences and ensure the continued effectiveness and quality of teacher education and licensure processes. This may involve comprehensive reforms in teacher training programs, curriculum development, examination standards, and support mechanisms for educators.

Research Question 3

Research question 3 sought to explore factors that affect the performance of newly trained teachers in the GTLE. From the study, the following factors were identified to have affected the performance of newly trained teachers in the GTLE.

Personal Factors

On the preparation of newly trained teachers towards GTLE, 121(29.2%) respondents from the quantitative data did not study well enough and were not well prepared academically for the GTLE at the time they wrote it. This evidence was supported by the qualitative data. For example, the following quote from Respondent 2 explicitly captures the insufficient preparation of the newly trained teachers:

79

> *"I blame myself because I did not put much effort into the essential skills. You know, I read Biology and have not done anything in Mathematics for a long time so I devoted much of my time to learning numeracy and literacy. I felt the essential skills paper was just going to be a normal application paper so I did not spend time learning it".*

On the same issue of inadequate preparation of newly trained teachers towards GTLE, another respondent said:

> *"On my side, I think it was just a lack of preparation for the examination. I did not plan to write it in the first place. I just tried to see if I could pass. It was when I failed the numeracy that I realized I had to sit up"*. (Respondent 3)

The above responses confirm Petchauer (2012) belief that some freshly educated teachers prefer to write the license examination unprepared under the premise of ''simply to experience what it is like''. The GTLE is a means to the teaching profession and should not be taken for granted.

Learning Material Factors

The study respondents revealed that there were no official learning guides from NTC. This is indicated in the result presented in Figure 7 below.
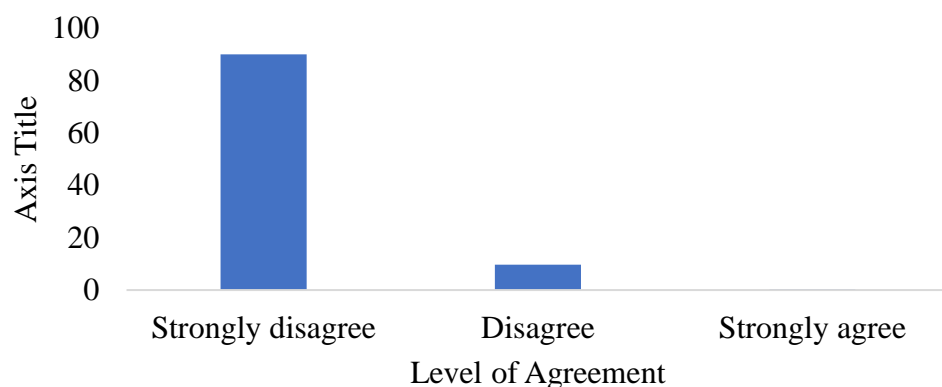
Figure 7: Response on whether the NTC provided learning materials

Source: Field Data, Abbiw (2022)

From Figure 7, 372(90.1%) of respondents Strongly disagree, 40(9.7%) Disagree, whiles 1(0.2%) Strongly agree. The results indicate (M=1.11) and (SD=0.353) showing that the majority of respondents disagree that the NTC provided sample and past questions to guide the examinees in their preparation. All 8 respondents interviewed confirmed that no official sample questions or past questions from the NTC were available to guide them in preparing for GTLE. This confirms the study by SañosaAljo, and Tancinco (2016) that insufficient review materials and books affect newly trained teachers who wrote Licensure Examination for Teachers. The benefits of the study materials range from the further elaboration of the content area to illuminating examinees to proven testing strategies for answering some specific tasks on the examination (Petchauer, 2012). In that spirit, pre-service teachers were initially asked if they had any study materials to aid them in their preparation for the Teacher Licensure examination. To some extent, study materials may even relieve examinees of unnecessary pressure as posited by Petchauer et al. (2015).

According to Tyler (2011), Learning materials significantly influence candidates' performance in teacher licensure examinations as they provide content coverage, practice opportunities, and effective study resources. The absence of study material might affect some pre-service teachers' preparation thereby their performance. This makes the absence of sample questions and previous exams to guide in the preparation for the GTLE a major factor in the failure of examinees.

81

On the contrary, the NTC official after admitting that the NTC has not yet conducted any empirical study to ascertain the factors causing the failure said:

"*I think the materials administered to the student at their various school to help them in their education programs are not good enough*''.

Contextual Factors

In addition to the unavailability of learning guides from NTC, 375(90.6%) of the study respondents obtained sample test materials from friends, some online outlets, and social media groups like WhatsApp and Telegram and relied on them as their main material for preparing for the examination. This statement was confirmed by all the 8 respondents of the qualitative data. The study also identified that the line and format of questioning in the materials obtained from the online outlets and social media groups were not in the context of the GTLE. The result is presented in Figure 8 below.
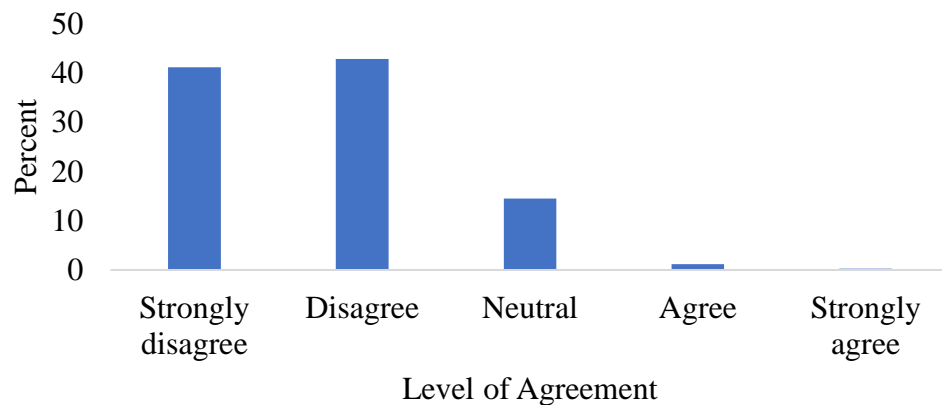

Figure 8: Response on whether the sample questions from the online outlets and social media align in the context of the GTLE

Source: Field Data, Abbiw (2022)

From Figure 8, 170(41.2%) of respondents Strongly disagree, 177(42.9%) Disagree, 60(14.5%) were Neutral, whiles 5(1.2%) Agree, and 1(0.2%) Strongly agree. This result shows that the majority of respondents disagreed that the line and format of questioning in the GTLE were the same as the sample questions from the online outlets and social media groups. This is important as examinees will not perform well in what they have not prepared for.

The following statement was made by respondents when they were asked if the materials they obtained from friends, some online outlets, and social media groups like WhatsApp and Telegram tested their knowledge in the context of the GTLE:

''*No, the materials we obtained from friends, some online outlets, and social media groups like WhatsApp and Telegram did not fall in the same context of the GTLE*''

Probe: So how relevant were the sample materials you got from the online outlets and social media groups like WhatsApp and Telegram to the GTLE?

''*The line and format of questioning in the GTLE were different from the sample questions from the online outlets and social media groups*''.

Interestingly, all 7 other interviewees gave similar responses. One of the other 7 respondents said the following regarding sample questions:

''*For sample question, there was a lot in the system. These were circulated on social media platforms all over but we did not get any official one from the NTC*''. (Respondent 1)

On whether the respondent relied on or used sample questions from the social media outlets, Respondent 1, further stated:

> ''*Yes, I studied it most of the time because there were no other sample questions from anywhere and almost everyone was studying them*''.

This result is in line with Flanagin and Metzger (2008), who asserted that while the internet offers an abundance of valuable and accurate information, it also contains a considerable amount of misinformation, fake news, and unreliable content. This is because the information available on the internet has not been reviewed for quality or reliability. Sahin, Belta, and Ercan (2010) argue that there is no control over any information published through the internet. Relying on materials from the wrong sources online can lead to failure in the GTLE. Based on Elger's performance model, knowledge must be put in context to improve performance. The materials obtained by the newly trained teachers online did not fall in the context of the GTLE and hence the level of failure.

Examination Factors

One major factor identified by the study was complaints on the difficulty level of Numeracy for especially newly trained teachers who are not Mathematics-bias because they did not expect the format in which the numeracy was examined. 208(50.4%) respondents of the study did not expect the format and level of difficulty of the Numeracy paper and so did not prepare for it. This was not different in the qualitative data. The following notes reflect the responses of some of the respondents:

> ''*Already I have difficulties in mathematics because I had a bad Mathematical background and, in the university, too, I did not*

read any mathematics-related courses. I found the numeracy paper difficult because I did social studies and not any mathematics-related course''. (Respondent 1)

Similarly, other respondents also expressed the same concerns regarding their ability in Mathematics. For example, Respondents 2 and 5 respectively had the following to say:

''*It has been a long time since I did any mathematics course. After SHS, I never read any Mathematics. Since my program of study was Art, I spent four years in the university without doing anything mathematics*''. (Respondent 2)

"*I think in the university, I did not read mathematics, so if you examine me in mathematics, I cannot do it. I am going to teach English in the SHS, not mathematics*". (Respondent 5)

Another respondent who did not have any difficulty with the GTLE also had some misgivings about mathematics. According to Respondent 4,

"*I was not having any problem with the fact that they want to license us and the means of getting it done through an official examination, but the kind of questions they were giving us ....*''

Probe: what was the problem with the questions?

''*I did Art Education for the whole four years and in the Art education I did; I did Psychology, African studies, and other subsidiary courses that you do in the university. Those courses help open our mind and broaden our scope so it is all good for us but the questions that they brought in the GTLE, for me, were totally out of the box. If you want to assess me and give me a*

85

license as a professional Art Education teacher who would be handling subjects like picture making, sculpture, and the rest in the senior high school, and you are giving me some senior high school pie charts, bar graph and the likes to assess me to give me a license, then I think you are not doing me any good''.

Probe: why do you say so?

''*This is because if you look at the questions that they set, it was purely meant for the training college examinees. So, a lot of the trainees were not having a problem with that, especially those who were coming out to teach Mathematics and Science because it was purely their field*''.

Probe: But numeracy is a basic requirement for you as a teacher. I guess that is why is being tested.

''*I have always had problems with mathematics so I went to the university to read English. So, to assess me in mathematics is not fair*''. (Respondent 7)

According to the Self-directed Learning Theory (SDL) of Knowles (1975) as cited by Cottrell (2017), the newly trained teacher must take the initiative to determine their learning needs, set learning goals, identify human and material resources for learning, choose and implement appropriate learning strategies, and evaluate learning outcomes. Taking the licensure examination is a tedious and challenging task. Having problems in Mathematics falls within the personal factors considered by the performance model by Elger (2007). This is because finding Numeracy difficult is not the case for all the newly trained teachers who took the GTLE. In this study, the majority of respondents who failed the GTLE

failed in Numeracy, and the general excuse given was that they did not read any mathematics-related course.

Another examination factor identified by the study was allegations of improper marking of examination scripts. From the quantitative data, 306(74.0%) of the respondents agree that they were confident based on what they wrote the first time that they were going to pass all three papers. Out of this number, 9 of them failed the GTLE three consecutive times, 9 failed two consecutive times and 74 failed on the first sitting. Some respondents from the qualitative study added their voices to the allegation that their papers were not fairly marked.

> ''*I wrote it three times. When we failed the second time, we formed a collation and sent a delegation to the NTC. According to our leaders who went to the NTC, they realized that the papers were not marked. For the third time, it took the intervention of the Minister of Education before our papers were marked and we passed this time*''. (Respondent 5)

This was said in another form by Respondent 6

> ''*Honestly, I will say after the three papers I was very sure of the numeracy even more than the other two papers. So, when I failed it, I was very surprised and I interacted with some colleagues just to realize they also suffered the same, especially in numeracy so we concluded that there was something wrong*''.
> (Respondent 6)

In the same vein, Respondent 8 who failed the Essential Skills said;

''*The Essential Skills paper was more like the professional skills required to practice as a teacher since it covered the educational courses we took at the university*''. (Respondent 8)

Probe: So why did you fail?

''*My failure in the Essential Skills paper was not because of anything on my part. I prepared fully. I will attribute my failure to the marking. For the first sitting, I was hopeful due to my input. I thought the first one should have favored me. After that paper, I knew I was going to get it and yet I failed. To the second, I didn't even really prepare like the first one but that turned out to be a pass*''. (Respondent 8)

On what was done by respondents upon the realization that they were not fairly treated, respondent 6 said:

''*We decided to collate ourselves, organize ourselves, and went to petition the NTC to avail our scripts. I was one of the leaders of the collation. We suggested to them that we were sure we passed the numeracy. Because for mathematics when you pass, you will know. Besides this is something basic so when we finished, we were very sure. We were not expecting even a pass. If for anything at all, a distinction. I for instance thought I could get almost everything correct, so we petition the NTC*''.

Probe: What was the response from the NTC?

''*The initial response from the NTC officials we met was that they could not allow us to see and verify the scripts and that the*

88

only thing we could do was to pay GH₵ 600.00 for remarking.

(Respondent 6)

Probe: Did you pay for the remarking in-order to ascertain your claim?

‘‘*No, we declined payment of this amount and pushed further through agitation and petition to the Minister of Education*’’.

Probe: What feedback did you get from the petition to the Minister?

‘‘*Through the intervention of the Minister, they availed the scripts of only we the leaders of the collation. Per our observation when the papers were brought, we realized that most of our answers were correct but they were marked wrong*’’.

Probe: Really? Did you observe any other thing?

‘‘*Yeah, also, some of the answers we had right, were just marked as seen. Another observation was that the scripts were marked without scores awarded to them. The whole problem was the marking because the scripts are there to attest*’’

(Respondent 6)

Probe: What was your final decision after all this?

‘‘*One official of the NTC calmed us and asked us to re-register. We later decided to re-register*’’

On writing the GTLE the second time, Respondent 6 passed. He said the following concerning his experiences in the first and second sitting:

‘‘*For the second one, I told my colleagues that this one (the second one) was not better than the first after the paper. I believe I did better in the first one. Though I passed in the second one I*

> *still believe I did extremely better in the first one than the second*
>
> *one yet they passed me in the second one so that is all I can say*''.

The same allegation of papers not being marked fairly was also confirmed by Respondent 7.

> ''*The system is not fair. In-fact we were encouraged that when you get at least 50%, you have passed. I knew I would pass but when it came, I failed and I said it was not fair so I was among some group of people who claimed we were not marked fairly*''.

Probe: what actions did you take?

> ''*We did a lot of demonstrations. In my own view, I think they failed us as a means to reduce the intake. This is because for my second sitting for the examination, I did not even prepare well as the first but I passed the second one. This I believe was because of our previous demonstration and complaint, because at the time we complained our registration numbers were taken. I believe I passed the first one. The system is just not fair*''.

After an exam, people frequently feel confident, especially if they feel they have studied extensively and diligently for it. However, test findings can occasionally be unanticipated, and what one may perceive as favourable based on their input may not always coincide with the evaluation standards or the examiner's viewpoint. Assessments of professional skills, such as teaching, can have a subjective element. Depending on personal viewpoints and how the markers interpret one's performance, one's grade may change. Sometimes the effects of this subjectivity may seem to deviate from what one had anticipated. Notwithstanding, a proper investigation by the Ministry of Education should be

90

made into the allegations of the newly trained teachers who failed for the appropriate actions to be taken.

Also, longer duration spent at home after school before taking the GTLE was a concern to newly trained teachers within the period under study. The table below indicates the level of agreement or disagreement of newly trained teachers on whether the period between their completion of college/ university and the time they wrote the GTLE was too long and so negatively affected their performance in the Examination.

Table 11 illustrates the level of agreement of newly trained teachers on the effect of duration between their completion and writing the GTLE.

Table 11: Level of Agreement of Newly Trained Teachers on the Effect of Duration between their Completion and Writing the GTLE

Scale	Frequency	Percent
Strongly disagree	65	15.7
Disagree	97	23.5
Neutral	20	4.8
Agree	142	34.4
Strongly agree	89	21.5
Total	413	100.0

Source: Field Survey (2022)

On the duration spent at home, 65(15.7%) of respondents strongly disagree that the period between their completion of college/ university and the time they wrote the examination was too long; and so negatively affected my performance, 97(23.5%) Disagree, 20(4.8%) were Neutral, 142(34.4%) Agree and 89(21.5%) Strongly agree.

91

Again, 40(9.7%) of respondents Strongly disagree that they wrote the GTLE during their National Service, and because of their duties and daily activities at the post, they could not get much time to prepare for the examination, 103(24.9%) Disagree, 27(6.5%) were Neutral whiles 123(29.8%) Agree and 120(29.1%) Strongly agree. The results indicate (M=3.44) and (SD=1.383) showing that most respondents agree that they wrote the GTLE during National Service, and because of their duties and daily activities at post, they could not get much time to prepare for the examination. According to Respondent 2;

> ''*More so, I wrote the GTLE about like a year after completing the university. I had just finished the National Service and all my attention was away from studies*''.

This confirms the statement of Aquino and Balilla (2015). The activities that newly trained teachers are interested in during the period of their graduation and writing the licensure examination may have an impact on their ability to pass the Licensure examination. Again, Aquino and Balilla (2015) postulate that newly trained teachers' quest for employment after graduation may distract their preparation for the teacher licensure examination. They found out many of their respondents want to take their teacher licensure examination soon after their graduation. This statement is no different in this study.

When asked the same question, the NTC official responded the following way:

> "*I equally think that the entry characteristics of the student are very poor. For 2021 specifically, I think the factor that may contribute to failures is the new reforms we introduced that year where papers were coded such that candidates do not have the*

92

same arrangement of the questions. Also, candidates were not

allowed to write in their own college or campus. They were

assigned different venues either than their own campuses''.

In times of change and reform, it is essential to strike a balance between innovation and ensuring that students have a fair opportunity to demonstrate their knowledge and skills. While changes can sometimes lead to unexpected challenges, they can also pave the way for improvements in the education system. It is important for both educators and students to collaborate and communicate to address these challenges and work towards creating an environment that supports effective learning and assessment.

Research Question 4

Research question 4 asked respondents to suggest ways to improve performance in the GTLE within the next four years based on the factors they outlined. 251(60.7%) of the questionnaire respondents suggested the NTC should provide learning guides and past questions to guide them in their preparations for the examination. 130(31.5%) of the total 413 respondents also suggested that the numeracy paper should be replaced by the paper on the area of specialization of newly trained teachers. More so, 25(6%) of respondents suggested that the GTLE should be written right after their final examination at the university. In addition, 7(1.8%) suggested that the examination body should ensure fairness by properly marking examination scripts and scoring them. All 8 respondents stated that the NTC should provide learning materials to guide them in the GTLE.

This is a confirmation of the studies by Smith et al. (2019), and Patel and Jones (2020) where they emphasized the importance of access to high-quality study guides, practice tests, and review sessions. These resources not

only help candidates familiarize themselves with the exam format but also reinforce key concepts and competencies essential for success.

Qualitatively, the suggestions made by respondents are as follows.

‘‘*We should be examined based on our areas of specialization and the Essential Professional skills because that one, everyone will do some class assessment after each term and must have some classroom management skills and the like as a teacher*’’.

Probe: but all the three papers test if you are fit for the classroom. What about that?

‘‘*We should be examined based on our areas of study so that in the end, they don't tell us to go and pass the numeracy before we are posted. Meanwhile, at the end of the day, it is not like we are going to teach Mathematics*’’.

Probe: As a teacher, you will be doing some basic mathematical calculations. Have you thought of that?

‘‘*If I am teaching Social Studies or French or Religious Studies, what will I use mathematics for? Numeracy should not be made general. Like if it is social studies, it is meant for social studies teachers. If it is French, it is meant for French teachers, and if it is science, for science teachers then mathematics for mathematics teachers in that order*’’.

Probe: In my opinion, numeracy is not mathematics as taught in class but being able to make some fundamental calculations. Does the GTLE examine something different from that?

''*Yes, now, if you fail numeracy, you cannot teach. Meanwhile, you might be better than someone who passed the numeracy, but because you did not get the mathematics, you will not be posted*''. (Respondent 1)

When Respondent 2 was asked about his suggestions. He said the following:

''*I suggest the GTLE should be written immediately after our final examinations in the university just like the nursing training students do or at a month's interval before the national service. In so doing, everything is fresh in our minds and at this time you are eager to complete*''.

Probe: would you have passed if you wrote it right after your final examination before your National Service?

''*If we had written the examination at this time, the probability that I would pass would be very high. This is because from level 100 to 400, I have not failed any of my examinations. It should not be like you doing your National Service and, on the field, you are thinking of examinations*''. (Respondent 2)

The following question was posed to Respondent 3. What advice will you give to newly trained teachers who have to write the GTLE?

''*Anyone who would want to write this examination should plan for it and prepare adequately with the right materials because the questions are themselves tricky and involve a lot of application*''. (Respondent 3)

Respondent 4 came up with the following suggestions.

95

''*If they would want to give us a licensure examination, then they should categorize it and structure it per the program you do. Also, it should be done early right after our final examinations in level 400*''. (Respondent 4)

According to Respondent 5,

''*The examination should assess us based on the programs we read and make the Essential professional skills compulsory for all of us since we all do education. The basic school teacher trainees can sit for all three papers since they have been prepared in them and they will be class teachers who will teach all these aspects in the classroom*''. (Respondent 5)

On the contrary, Respondent 6 in his suggestion said:

''*You see, personally, I thought the NTC should come clearly on whether the license system determines or is the actual checking to determine the performance or the quality of teachers.*

Probe: why this assertion?

''*Because we went through several systems. Went through courses and educational courses and came out with a certificate that speaks a lot. We have been able to pass and have the university education certificate which I believe speaks well of us. Using this examination to check our competence, I do not know what to say. I don't know whether it is the best system*''.

Probe: Do you think the GTLE is not serving the right purpose?

''*Yes, I was believing that was a means to control the employment rate. That is how I concluded. Having done well in*

the examination and yet failed and having to check and confirm that I was correct and yet they were marked wrong, I believe either they did not mark the papers originally, there was just something fishy''. (Respondent 6)

Respondent 7 suggested by saying:

''*The examination, in itself, is not a bad idea. It is good to have licensed teachers to teach in our schools just like the medical profession and others, but only if the system can be fair enough. My experience is a clear indication that there was something wrong with the system''*.

Probe: So how should the GTLE be conducted?

''*We can be tested on our subject areas because the examination will only favor training college teachers since they were prepared in all the areas. For people like me who specialized in something different from mathematics because we know it is our problem, should be tested on our subject areas or program of study''*. (Respondent 7)

Finally, Respondent 8 said:

''*I thought we should be tested based on our subject areas. I also think because the essential skills covered in the code of conduct, methodology, and pedagogy should be looked at and used in licensing teachers; then if a person is going to teach any subject say English, Science, or Geography, the person should be tested on that''*. (Respondent 8)

97

Examining newly trained teachers outside their subject areas of specialization can have negative effects on their teaching effectiveness and professional development. This is because the examination tends to become a difficult task and very challenging for newly trained teachers. Moreover, when exam questions are either excessively challenging or fall below the expected level, it tends to impact the candidates' performance. As a result, the examination body must consider the candidates' skill level and the educational curriculum utilized in preparing them. Including content in the exam that goes beyond the scope of the curriculum might lead to failure among candidates.
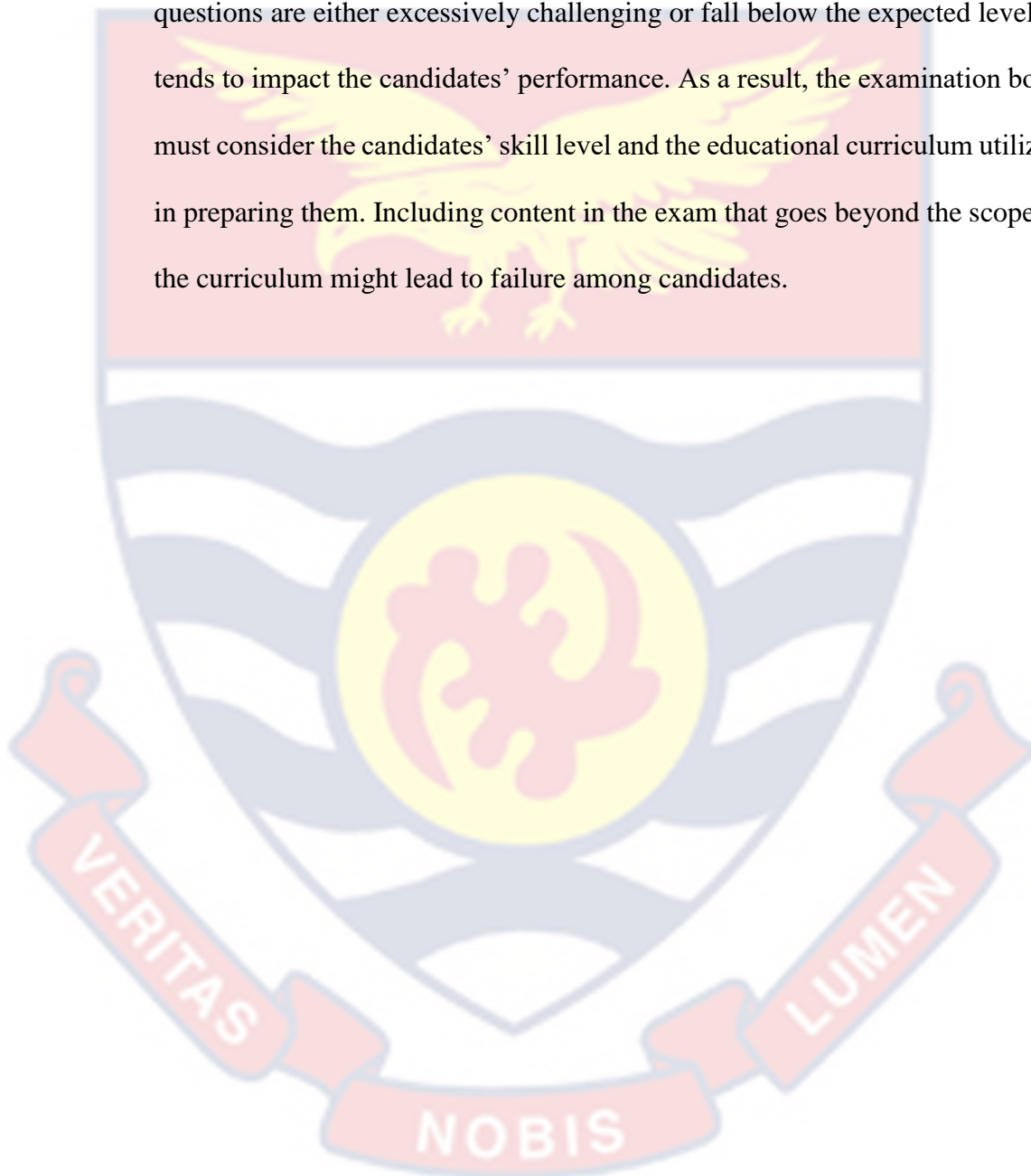
CHAPTER FIVE

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

This chapter presents the summary of the entire research process, key findings, conclusions, recommendations, and suggestions for further studies.

Summary of the Research Process

This study aimed to assess the performance of newly trained teachers in the Central Region of Ghana in the GTLE exploring the factors that affect their performance. This was important as many newly trained teachers who sat for the GTLE over the first four years of the policy implementation failed in one, two, or all three papers in the examination. To get a clearer picture of the factors that affected the performance of these newly trained teachers, a mixed-method research approach was used to gather data from trained teachers who sat for the examination over the period in the Central Region. A convergent mixed-method design was used which allowed the researcher to collect quantitative data and qualitative data at the same time. For the nature of the study group, a simple random purposive sampling technique was employed. A total of 421 newly trained teachers who wrote the GTLE over the period constituted the study sample. Among these numbers, 8 of them who failed in sections of the examination were drawn using snowballing and interviewed. Also, an official of the NTC was interviewed based on the research objectives. To achieve the purpose of this study, the following research questions guided the study:

1. What is the nature of the Ghana Teachers' Licensure Examination?

2. How has the trend in performance in the Ghana Teachers' Licensure Examination been in the Central Region over the first four years?

3. What factors affect the performance of newly trained teachers in the Ghana Teachers' Licensure Examination?

99

4. How can the performance of newly trained teachers in the Ghana Teachers' Licensure Examination be improved within the next four years?

The data gathered by questionnaires was analyzed using descriptive statistics in SPSS. The descriptive statistics included frequency, percentage tables, bar charts, pie charts, and mean and standard deviations. The main findings that emerged from the analysis of all the data are summarized as key findings.

Key Findings

1. **What is the nature of the GTLE?**

The GTLE is made up of three (3) papers: Essential Professional Skills, Literacy, and Numeracy. The study found that the GTLE questions are practical applications and not direct questions as seen in the normal class test or school examinations. The GTLE questions are framed within three domains. Thus; low-level learning (recall and remembering), moderate-level learning (language skills and cognitive learning), and high-level learning (application questions).

2. **How has the trend in performance of newly trained teachers in the GTLE been in the Central Region over the first four years?**

The trend in the performance of Newly Trained Teachers in the GTLE in the Central Region over the first four years has been negative as the general performance keeps dropping and the rate of failure keeps increasing. In 2018, there were 9,361 candidates with a pass rate of 73.7%. This rose to 82.3% in 2019. However, it started declining after 2019. Between 2019 to 2020, there was a drop of 4.5% in the pass rate, and between 2020 to 2021, a drop of 10.9%.

3. **What factors affect the performance of newly trained teachers in the GTLE in the Central Region?**

100

The findings that emerged from the data analysis relating to this research indicate that no official preparatory materials were provided by the NTC, not even the past examinations samples were available to guide examinees in their preparation for the GTLE. As a result of this, examinees got sample questions from friends, some online outlets, and social media groups like What's App and Telegram and relied mainly on them in preparing for the GTLE which in the end did not reflect the line and format of questioning by the GTLE. Secondly, examinees were not examined based on their programs of specialization but on numeracy, literacy, and professional essential skills. This led to examinees with poor mathematics backgrounds failing the numeracy. In addition, examinees who completed the university stayed too long after completing training before sitting for the GTLE. This made them forget some of the things learned and the duties and activities during national service did not allow them adequate time to prepare for the examination. Another key finding of the study was that a section of the respondents alleged that the examination scripts were not properly marked and scored. Finally, some examinees did not prepare adequately for the examination with the assumption that the passing mark is 50% and therefore would be easy to get.

4. **How can the performance of newly trained teachers in the GTLE be improved within the next four years?**

Regarding research question four, the respondents indicated that the NTC should provide learning materials and past questions to help examinees in their preparation. Also, the GTLE should examine newly trained teachers based on their subjects of specialization, and the Essential Professional skills be made common to all. More so, the GTLE should be written immediately after their

final examinations in the university to avoid forgetting some of the things learned. It is also important that newly trained teachers plan for the GTLE and prepare adequately with the right materials because the questions are themselves tricky and involve a lot of application. The NTC should also be fair in the marking.

Conclusions

In conclusion, the performance of newly trained teachers in the Ghana Teacher Licensure Examination (GTLE) has been impacted by several key factors. Firstly, the absence of official learning materials provided by the National Teaching Council (NTC) has left examinees without proper guidance for preparation, leading many to rely on inadequate resources obtained from social media platforms, ultimately affecting their performance.

Secondly, the examination's focus on numeracy, literacy, and professional skills rather than subjects of specialization has placed many newly trained teachers at a disadvantage, particularly in numeracy, where those without a background in math-related courses struggled to excel.

Additionally, the lack of exposure to GTLE modules during their college or university education has contributed to the difficulty experienced by examinees in navigating the examination's content. Furthermore, concerns regarding the marking of examination scripts have added to the challenges faced by candidates, further impacting their performance.

Addressing these issues will be crucial in ensuring that newly trained teachers are adequately prepared for the GTLE, thus fostering a more effective evaluation process and ultimately enhancing the quality of education in Ghana. Efforts should be made to provide official learning materials, align the examination with candidates' areas of specialization, introduce GTLE modules

102

during teacher training programs, and ensure fairness and transparency in the marking process. By doing so, the GTLE can fulfill its purpose of assessing the competence and readiness of new teachers, contributing to the improvement of the education system as a whole.

Recommendations

Based on the key findings of the study, the following recommendations are made to help improve the performance of newly trained teachers in the GTLE in the subsequent conduct of the examination.

1. The NTC should make available related sample licensure materials and past GTLE papers to examinees after they register for the examination to guide them in their preparations.

2. In place of the numeracy skills paper, specific subject areas for subject teachers where they will be expected to teach after passing the GTLE should be examined by the NTC to test their content knowledge. Entry-level teachers must demonstrate knowledge of the content in their field.

3. Newly trained teachers should register early enough after their final examinations in their institutions. This will prevent losing the knowledge acquired before the GTLE.

4. The NTC should intensify script checking where examination scripts would be well vetted and checked thoroughly for errors in marking and the totaling of scores to avoid complaints about the marking by the NTC.

5. Newly trained teachers should prepare adequately before writing the GTLE.

Suggestions for Further Studies

This study was a central regional case study. I recommend that a national study be conducted to find out the broader picture of the situation as well as

compare the performance of regions in the GTLE. Also, a similar study could be done to evaluate trainee teachers' performance in college or university and how it influences their performance in the GTLE.

104

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109

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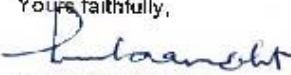
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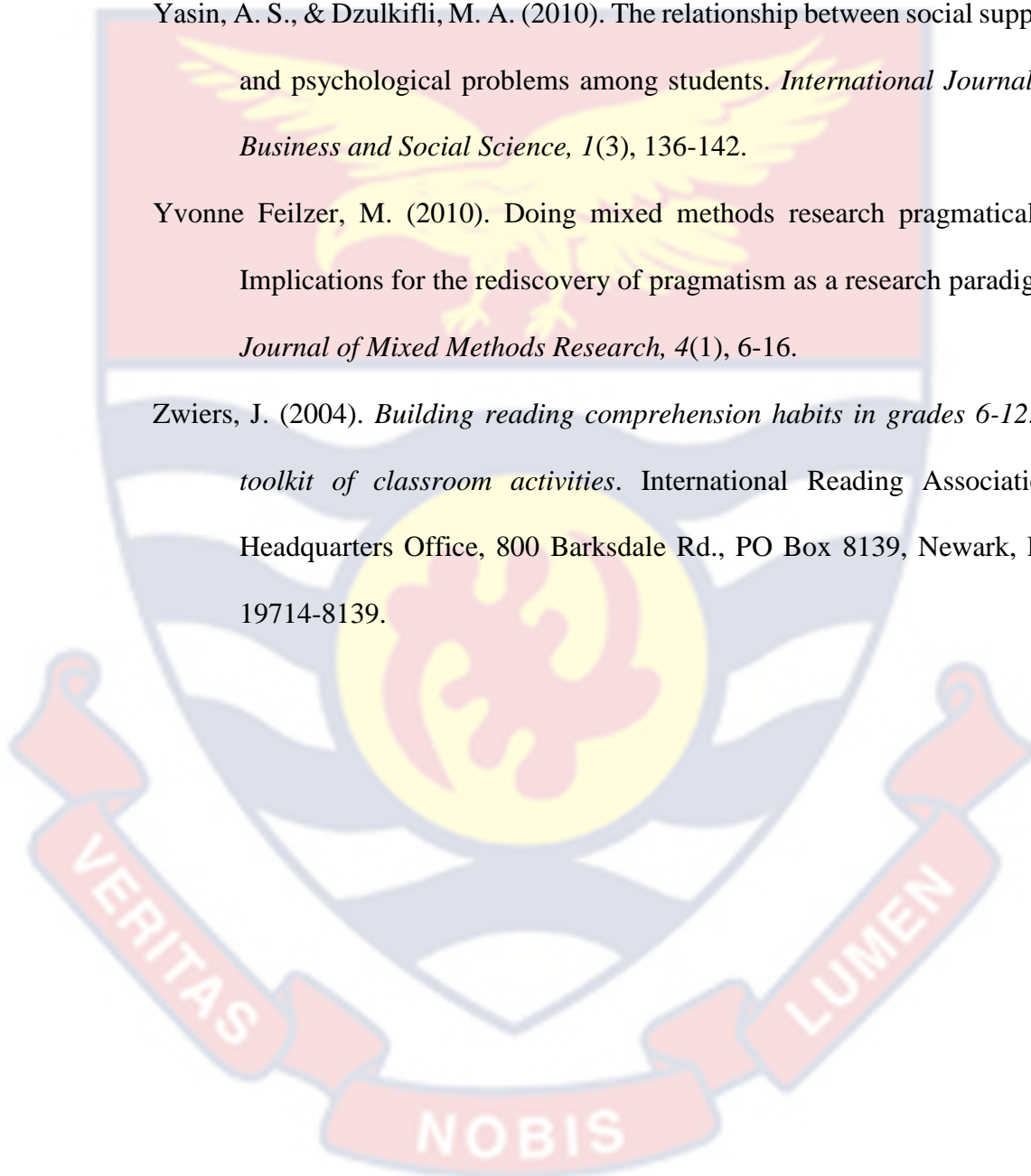
APPENDICES

APPENDIX A: Introductory Letter from Institute for Educational

Planning and Administration

Our Ref.: IEPA-UNESCO /1.2/VOL.1/01   18ᵗʰ July, 2022.

The Director of Examination

National Teaching Council

Accra, Ghana.

Dear Sir/Madam,

LETTER OF INTRODUCTION

The bearer of this letter **Mr. Bright Bekwin Abbiw (EO/EPP/20/0002)** is an M.Phil. student studying at the Institute for Educational Planning and Administration (IEPA) at the University of Cape Coast.

He requires some information from you/your outfit for the purpose of writing her thesis titled: **"Exploring Performance of Newly Trained Teachers in Ghana Teachers' Licensure Examination (GTLE) in the Central Region"** as a requirement for his M.Phil. Programme.

Kindly give the necessary assistance that Mr. Bright Bekwin Abbiw requires to enable him gather the information he needs.

While anticipating your co-operation, we thank you for any help that you may be able to give him.

Thank you.

Yours faithfully,

Dr. Francis Ansah
HEAD, ACADEMIC PROGRAMS
For: DEPUTY DIRECTOR-GENERAL
(ADMIN. & GENERAL SERVICES)

cc: Dr. Alfred Ampah-Mensah, Deputy Director-General

Address : CC 145-9167
Phone : +233 3320-91478 / +23303321-30571
Email : iepa@ucc.edu.gh
Website : iepa.ucc.edu.gh

APPENDIX B: Consent form for participants of the study

CONSENT FORM

Introduction

You are invited to participate in this research that seeks to explore the performance of newly trained teachers in the Ghana Teachers' Licensure Examination (GTLE) in the Central Region. This research is designed and being conducted by Bright Bekwin Abbiw, an MPhil (Educational Planning) student of the Institute of Educational Planning and Administration IEPA, UCC.

This study shall be anonymous as I will not collect or retain any information about your identity. The principal objective is to explore the factors that affect the performance of newly trained teachers in the GTLE to suggest amicable solutions to them to improve the percentage rate of passing to about 90% in the subsequent GTLE.

Also, the records of this study shall be kept strictly confidential- the research will be locked and filed and all electronic information will be coded and secured using a password-protected file stored in clouds. I will not include any information in any report I may publish that would make it possible for you to be identified.

Explaining the research and its rationale

•   This research instrument is designed to explore the performance of newly trained teachers in the Ghana Teachers' Licensure Examination (GTLE) in the Central Region.

•   In particular, the researcher would like to know the factors that affect the performance of newly trained teachers in the GTLE as well as what can be done to improve the performance in the subsequent years?

•   The researcher hopes this information will help the newly trained teachers, principals of colleges of education, and the National Teaching Council to come up with functional strategies on how best to improve the rate of performance to a 95% passing rate within the next four years.

Please read the following statements carefully and append your signature to signify your consent to participate in this study.

Right as a research respondent/participant

The decision to participate in this study is entirely yours. You may refuse to take part in this study at any time. You also have the right to request (before the final research report) that I should not use any of your responses in the research. You have the right to ask questions about the study and have those questions answered by me before, during, and after the research.

Confidentiality and Anonymity

I have read the above document describing the benefits, risks, and procedures for the research title (Exploring Performance of Newly Trained Teachers in the Ghana Teachers' Licensure Examination (GTLE) in the Central Region). I have been given an opportunity to ask any questions about the research before, during, and after the study. I therefore freely give my consent to participate in this study.

Participant Signature: ………………………………….

Date: ……………………………………

Researcher: Bright Bekwin Abbiw

Signature: ………………………………

Date: ………………………

If you have further questions and/ or concerns, feel free to contact me by email

at bright.abbiw@stu.ucc.edu.gh or by phone call on 0242033590.

124

APPENDIX C: Questionnaire for newly trained teachers

This questionnaire seeks to gather information on the factors that affect the performance of newly trained teachers in the Ghana Teachers' Licensure Examination (GTLE). The study is carried out for partial fulfillment of the second degree at the University of Cape Coast. The information in this questionnaire will be treated with confidentiality and in no instance will your name be mentioned in this research. Also, the information will not be used for any other purpose other than this research. I appreciate your voluntary participation in this research. Thank you for your cooperation.

PART A

Demographic Information

Instructions

Please provide the necessary answers as it applies to you.

1. Gender   Male [   ]   Female [   ]

2. Age   19 years and below [   ]   20-25 [   ]   26-30 [   ]   31-35 [   ]   36-40 [   ]

3. Mode of enrolment   Regular [   ]   Distance [   ]

4. Program of study _____

5. Year of graduation from college or university

   2017 [   ]   2018 [   ]   2019 [   ]   2020 [   ]   2021 [   ]

6. Certificate attained   Diploma [   ]   Degree [   ]

7. Number of times you wrote the GTLE

   1 time [   ]   2 times [   ]   3 times [   ]   4 times [   ]

8. Year you wrote the GTLE for the first time

 2018 [   ]   2019 [   ]   2020 [   ]   2021 [   ]

125

9. Duration between the period of completing tertiary and writing your first

GTLE

5-to-10 months [   ]   1 year [   ]   2 years [   ]

3 years [   ]   4 years [   ]   5 years [   ]   Above 5 years [   ]

10. Which paper(s) did you failed. (Choose as many as apply to you).

Literacy [   ]   Numeracy [   ]

Essential professional skills [   ]   None [   ]

11. Did you attend any form of private classes in preparation for the

examination?   Yes [   ]   No[   ]

PART B

In this part, there are a series of statements. Please check (√) based on your level

of agreement or disagreement using the following scale.

Strongly Disagree [SD], Disagree [D], Neutral [N], Agree [A], Strongly

Agree [SA]

		1	2	3	4	5
	Personal Factors	SD	D	N	A	SA
12.	I prepared for the examination through personal studies					
13.	I prepared through group discussions					
14.	I was anxious before the examination					
15.	I read through the questions thoroughly before answering them					
16.	I answered the questions after critically analyzing them					
17.	I was nervous during the examination					
18.	I answered most of the questions required to be answered					

19.	I was physically fit and in sound health while writing the GTLE					
20.	I was going through some personal difficult times while writing the GTLE and it negatively affected my performance					
Learning Material Factors						
21.	My college/University organized preparatory classes after our final year examinations to prepare us for the GTLE					
22.	The NTC provided sample questions and previous examinations to guide us in our preparation for the examination					
23.	I used the materials and sample questions provided by the NTC					
24.	I got sample questions from friends, some online outlets, and social media groups like What's App and Telegram					
25.	I relied mainly on the sample questions I got from friends, online outlets, and social media groups in preparing for the examination					
26.	The sample materials I got from the online outlets and social media groups like What's App and Telegram were relevant to the GTLE					
27.	I used my lecture notes and handouts from my college/university in preparing for the examination					
Examination Factors						
28.	The line and format of questioning in the GTLE were the same as the sample questions I got from the online outlets and social media groups					
29.	The Essential Professional Skills paper examined items in line with the educational					

127

	courses that I have taken in College/ University					
30.	The Literacy skills paper examined listening, speaking, reading, and writing skills					
31.	The Numeracy skills paper examined our ability to recognize and apply mathematics concepts in all areas of education and more importantly the teaching profession					
32.	In general, I think the GTLE questions were standard for trainee teachers					
33.	I was prepared for and expected the format of questions brought in the GTLE					
34.	The time allocated for writing the papers was adequate enough to complete answering them					
35.	I finished answering all questions before the stopping time					
36.	The examination was taken under the normal examination conditions with good invigilation					
Contextual Factors						
37.	The period between the time I completed college/ university and the time I wrote the examination was too long and so negatively affected my performance					
38.	I wrote the GTLE during my National Service, and because of my duties and daily activities at the post, I couldn't get much time to prepare for the examination					
39.	My college/university training prepared me adequately for the kind of application questions in the GTLE					
40.	I think the GTLE questions were standard for all newly trained teachers irrespective of the					

	program one offers at the College or University					
41.	In all three papers, the GTLE examined our knowledge of education, pedagogy, and issues relating to the teaching profession					
42.	In my own perspective, I think the GTLE is the appropriate means to license trainee teachers to practice the profession					
Self-efficacy and Motivation						
43.	I understood the importance of the GTLE in licensing teachers and this motivated me before writing					
44.	I had adequate social support from my family and friends before and during the examination					
45.	I was emotionally and psychologically prepared for the GTLE at the time of writing the examination					
46.	I studied well enough and was well prepared academically for the GTLE at the time I wrote it					
47.	After the examination, I was confident I was going to pass all the three papers					

48. What do you suggest should be done to improve performance of newly trained teachers in the GTLE?

…………………………………………………………………………

……………………..…………………………………………………

…………………………………………………………………………

…………………………………………………………………………

Available on:

https://forms.gle/M5M9jaMXzCLpZGr8

APPENDIX D: Interview Guide for newly trained teachers who failed any of the papers

1. By the system of education in Ghana, teachers are trained in the colleges of education or in the Universities of Education. Which of them did you attend?

2. By which mode, were you enrolled? Regular, Sandwich or Distance?

3. Which year did you graduate from college or university?

4. What was your program of study?

   (Probe: Was your program a degree, diploma, or a post graduate diploma

5. Which year did you write the GTLE for the first time?

6. What was the duration between the time you completed training and the time you wrote your first GTLE?

7. Which of the papers did you fail in?

8. Tell me from your own point of view regarding the GTLE, what factors contributed to your failure in this paper/ what went wrong?

9. Have you written the GTLE again after the one you failed?

   (Probe: How many times have you written the GTLE?)

   If yes, how different has the second experience been and what is the factor for the difference?

   Regarding the factors you just outlined, what do you think should be done to help others from failure the GTLE?

 APPENDIX E: Interview Guide for NTC official

1. The GTLE seeks to license qualified teachers for the GES to employ. Over the periods, there have been perceptions of some newly trained teachers who sat for the GTLE that the NTC has a specific number of teachers they seek for each year and so some examines are failed intentionally by the NTC. Does the

NTC have any target point for each year as far as the total number of examinees who pass is concerned?

- Probe to find the target if there is and why.

- Also probe if the target has been achieved over the period.

2. Considering the fact that the GTLE is written by newly trained teachers in order to license them to practice as teachers in Ghana, kindly tell me the factors that you consider in setting the GTLE questions?

3. By principle and for standardization, some difficulty level will be ensured in setting the GTLE. So, in practice, what determines the difficulty level of the GTLE questions?

    Probe: What does the difficulty level of the GTLE seek to bring out in examinees?

4. Considering the rate of failure in the GTLE over the period, what factors has the NTC identified as affecting the performance of newly trained teachers in the GTLE over the years?
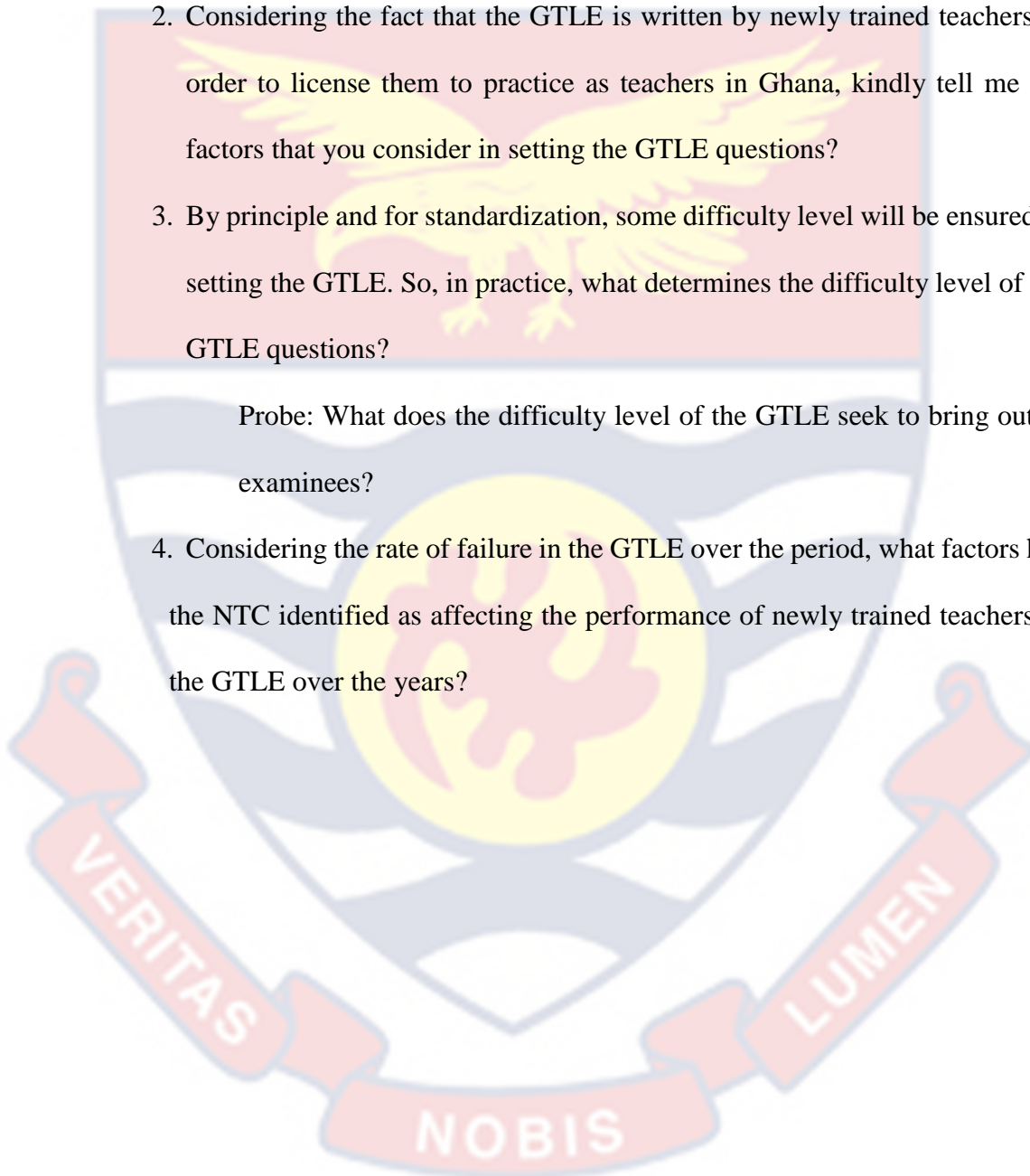
APPENDIX F: Reliability Test Results

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.816	.782	21

132