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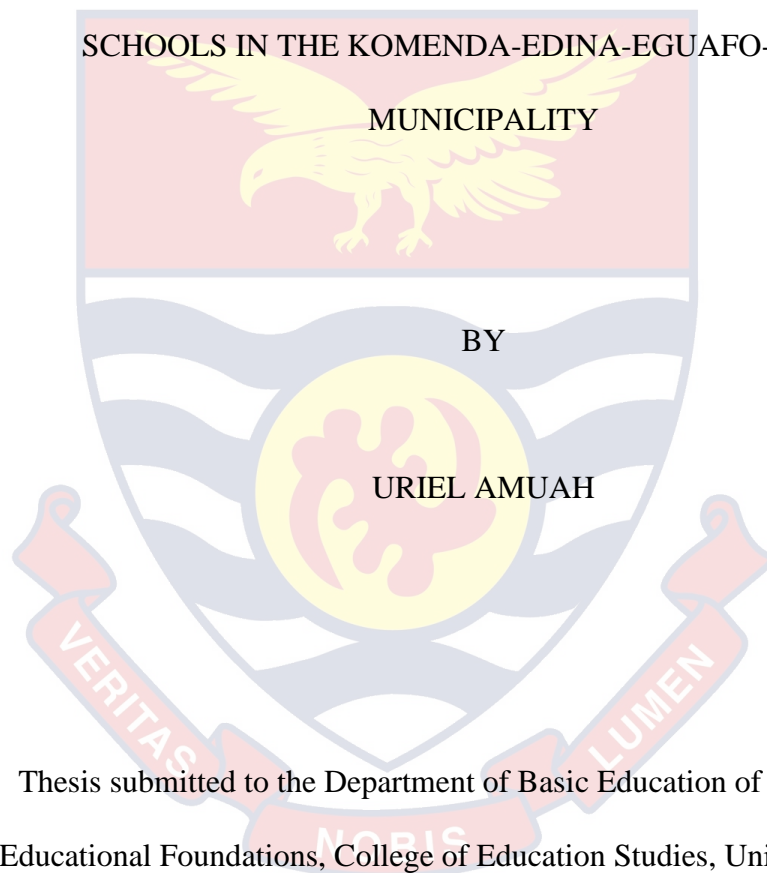
ASSESSING THE PEDAGOGICAL CONTENT KNOWLEDGE OF
RELIGIOUS AND MORAL EDUCATION TEACHERS AT BASIC
SCHOOLS IN THE KOMENDA-EDINA-EGUAFO-ABREM



2021

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Thesis submitted to the Department of Basic Education of the Faculty of Educational Foundations, College of Education Studies, University of Cape Coast, in partial fulfilment of the requirements for the award of Master of Philosophy Degree in Basic Education.

AUGUST2021

DECLARATION

Candidate's Declaration

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

Candidate's Signature: Date:.....

Name:.....

Supervisors' Declaration

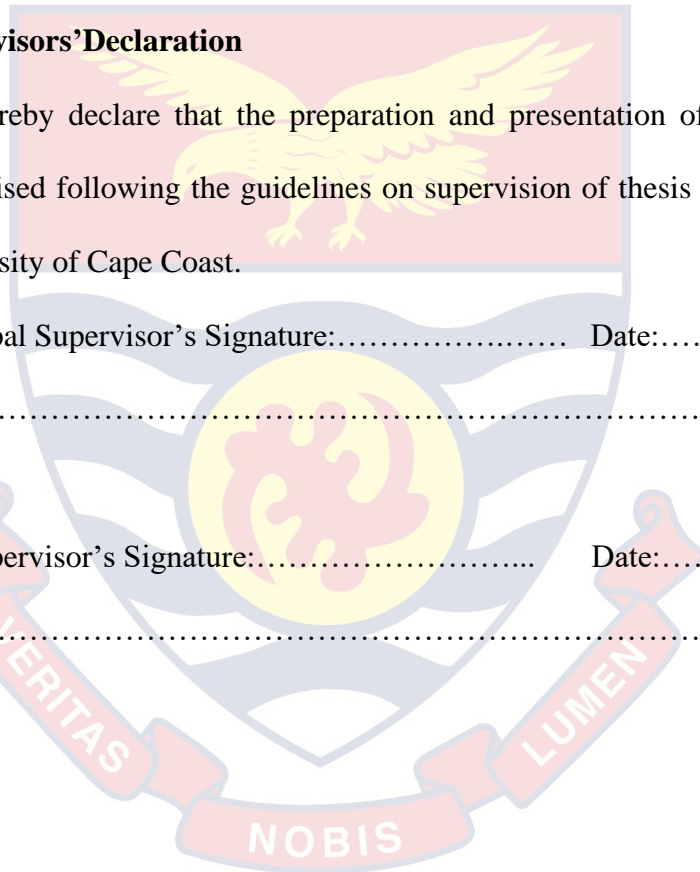
We hereby declare that the preparation and presentation of the thesis were supervised following the guidelines on supervision of thesis laid down by the University of Cape Coast.

Principal Supervisor's Signature:..... Date:.....

Name:.....

Co-supervisor's Signature:..... Date:.....

Name:.....



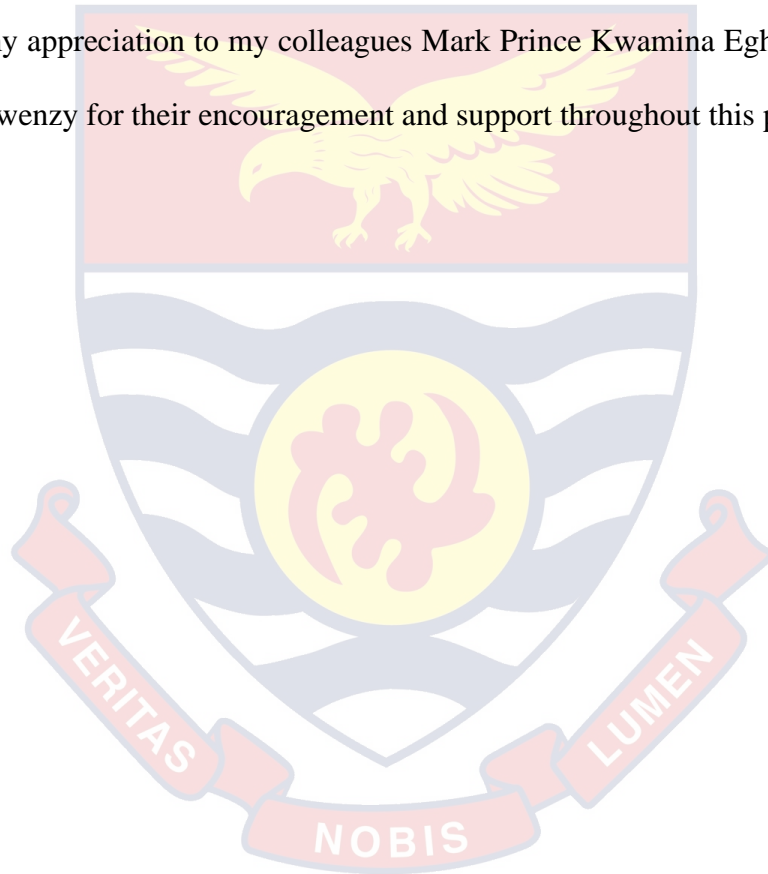
ABSTRACT

The purpose of this study was to ascertain the degree of Pedagogical Content Knowledge (PCK) among Religious and Moral Education teachers in the Municipality of Komenda-Edina-Eguafo-Abirem. A descriptive survey for the research design was used. The study was made up of RME teachers from public junior high schools in the Central Region. The survey sampled 130 instructors from the K.E.E.A Municipality's 68 public junior high schools. The researcher selected all RME teachers in schools using the census technique. The data were gathered using two primary instruments. These were questionnaires and checklists of observations. Cronbach alpha coefficient values of 0.898 were obtained for all questionnaire items. The data were analysed using descriptive statistics, including frequencies and percentages, means of means and standard deviations, and independent sample t-tests and ANOVA. The study demonstrated that RME teachers in the K.E.E.A Municipality had better content knowledge. RME teachers possessed Pedagogical Knowledge to promote the spiritual and moral values of young people. However, in K.E.E.A Municipality, teachers who teach experience and gender were not different from evaluating teachers' pedagogical content knowledge. The report recommended the continuation of in-service training for teachers by RME experts of the K.E.E.A municipality. Ministry of Education should provide teacher educators with state-of-the-art technological resources. Finally, it was recommended that stakeholders in education should encourage female teachers to continue to teach RME and other subjects effectively.

ACKNOWLEDGMENTS

I want to begin by expressing my heartfelt appreciation to my vibrant and dedicated supervisors, Dr Thompson Mumuni and Rev. Prof. Seth Asare-Danso, for the intellectual engagements that enabled the effective completion of this study.

I am also obliged to my family, who contributed in various ways to the highly successful completion of this work. Additionally, I would like to express my appreciation to my colleagues Mark Prince Kwamina Eghan and Isaac Joe Swenzy for their encouragement and support throughout this process.



DEDICATION

To my father, Andrew Amos Amuah, and my mother, Susanna Nancy Amuah.



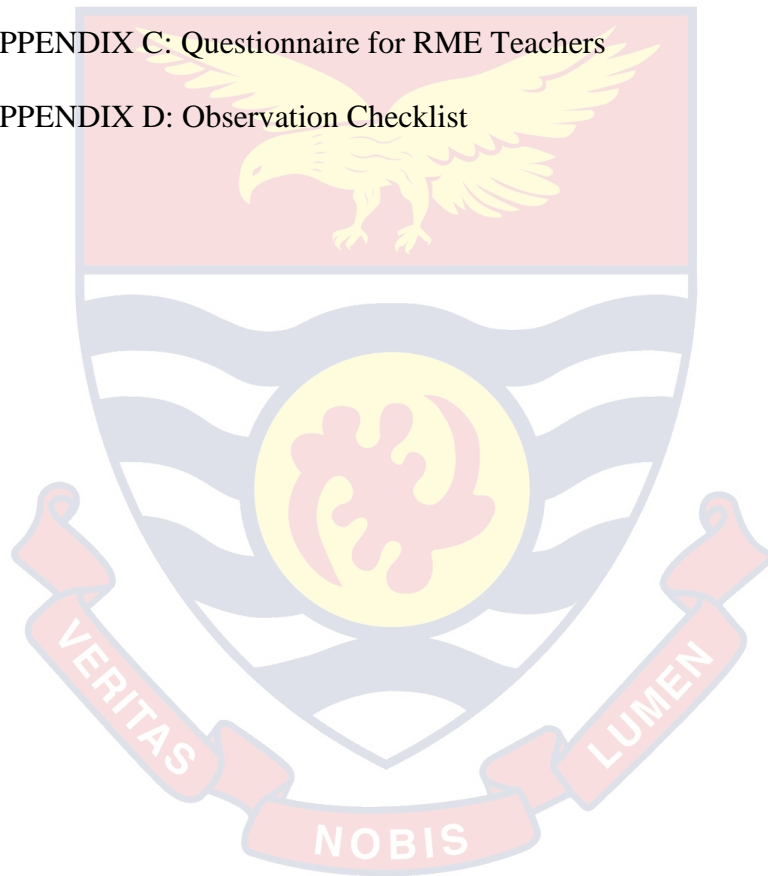
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CHAPTER ONE

INTRODUCTION

Background to the Study

The quality of every nation is dependent on the calibre of its human capital, which is largely determined by the quality of its teachers. This is not surprising because the development of any society is greatly influenced by education. This is significant because education empowers people by providing them with strong analytical power, problem-solving skills, and appropriate values and attitudes. These skills empower them to have questioning minds, enabling them to find solutions to countless societal challenges (Ntim, 2017). However, these skills can only serve useful purposes if the educational process provides an opportunity for learners to become human by using their knowledge, understanding, and skills to advance the cause of humanity (Lickona, 1993). In essence, a citizenry imbued with sound moral and spiritual values who find themselves in leadership positions will exploit the country's natural resources and utilise the proceeds to advance the course of all and sundry.

Preparing quality spiritual (religious) and moral educators is central to developing young people's moral and spiritual values. This is because an increasing number of people, regardless of ideology, believe that society is morally bankrupt (Lickona, 1993). Disappointing signals abound; a decline in civility in public debate and daily life, widespread selfishness when one in five children is in need, a rise in violent juvenile crime, and suicide have prompted many in many nations to declare a moral crisis (Lickona, 1997).

To withstand the moral depravity that has swept the world, Hope (1996) contends that a major and continuing objective of education has been developing children's good moral and spiritual ideals. To accomplish this goal, society calls on all of its social institutions to play critical roles in the upbringing of children. Unique claims are made on the school, a social institution, for its critical role in the development of children. Ghana's basic education system has been obliged to carry out this onerous task through the spiritual (religious) and moral education curriculum (MoE, 2007).

With this in mind, Ghana has prioritised spiritual (religious) and moral education programmes during the last years, which are considered an instrument to restructure society's moral structure. Spiritual (religious) moral education curricula are applied at basic, secondary, and higher education levels as, as Roosevelt says (as quoted in Howe & Strauss, 2009), "to teach a person, not morally, is to threaten society" (p.45). Spiritual (religious) and moral education are, therefore, at the centre of every educational effort. Pring (2001) similarly regards education as a moral and spiritual undertaking and presents an impressive narrative about a major effort to create a spiritual and moral climate within a school that substantially influences his employees in the following letter (Pring, 2001):

Dear Teacher,

I am a concentration camp survivor; my eyes witnessed what no man should experience. Skilled engineers constructed gas chambers. Poisoning of children by educated physicians. Skilled nurses assassinate infants. High school and college graduates shoot and burn women and infants: As a result, I am sceptical about schooling. I request that you assist your students in becoming human.

Your efforts must never result in the development of cultivated monsters and skilful psychopaths. Reading, writing, and mathematics are valuable only if they help youngsters develop into more human beings (p.111).

This insightful letter confirms the reality that if education were focused exclusively on the growth of the mind, a schism in the attitudes of those whose education was entirely related to the development of the intellect would result. However, it needs professional spiritual (religious) and moral educators to instil moral and spiritual values in children and young adults (Darling, 1999).

The development of quality spiritual and moral educators is not an event but a process because it is largely influenced by sound knowledge and understanding regarding insights into content and the corresponding developmentally appropriate pedagogy. Nonetheless, the question is the extent to which teachers knowledge, understanding, and insights regarding how content influences quality spiritual (religious) and moral education within the school settings. Researchers in education (Marks, 1990 & Lee, 2005) have demonstrated that teachers understanding of content and pedagogy invariably enhances and promotes effective teaching and learning. In essence, knowing the content to some extent supports children's spiritual and moral development (this knowledge is called knowledge of content). In the same vein, teachers' nuanced understanding of creating an engaging learning environment for learners to develop moral and spiritual values is significant because learning is an active process, and children learn by doing. This knowledge is called general pedagogical knowledge or how people learn (Shulman, 1987). This claim explains why teacher preparation programmes in Ghana emphasise in-depth content knowledge and insights into diverse pedagogical strategies and their

corresponding content issues. By implication, spiritual (religious) and moral educators should understand how to effectively integrate content and pedagogy, which influences the development of children's moral and spiritual fabric of young people, which constitutes a critical element in nation-building.

This assertion is in sync with the arguments by educators who have concluded that pedagogical content knowledge constitutes a vital part of efficient teaching and learning concepts in spiritual (religious) and moral education. This presupposes that teachers tend to gain knowledge, understanding, and insights regarding effective ways of achieving desired learning outcomes in terms of engendering sound moral values in young people, which impacts the development of every nation.

Shulman (1987) defined pedagogical content knowledge as integrating content and pedagogy within teaching and learning. More importantly, a synergy between the two parts will likely result in successful teaching and learning of spiritual and moral concepts, positively affecting spiritual and moral education quality.

This implies that spiritual (religious) and moral education should be seen as a purposeful intellectual activity exercised by professionals who have insights into how content and pedagogy can effectively be utilised within the classroom setting to impart sound spiritual and moral values in young people. This claim supports Shulman's assertion that effective use of PCK by teachers from diverse educational backgrounds promotes effective teaching of concepts.

Instructional delivery effectiveness is crucial in all areas of teaching and learning. A good teacher is knowledgeable about all facets of the teaching and learning process, including the content, methodology, and understanding of

appropriate language usage at all levels of education and the learner's uniqueness and interests (Fulman & Nichols, 2010). This is significant because it takes into account the various learning demands of learners.

A previous study (Piemick, Duncan & Korcuska, 2008) established that teacher's effectiveness can be expressed in various forms such as knowledge of the subject matter, effective instructional delivery, classroom management, and knowledge regarding the uniqueness that individual learners bring to the teaching and learning context (Guffrey, 2013). It can further be argued that teacher effectiveness is a multifaceted concept. The question that arises is why teacher effectiveness has become an issue of major concern.

Several scholars (Wilson & McDiarmid, 1996) have highlighted the nature and evolution of PCK. However, one issue that comes out strongly is the view that pedagogical content knowledge is a personal construct and individual teachers develop their brand of PCK over a long period as they journey on their professional path. The question that arises is whether this argument can stand critical scrutiny. Grossman, Schoenfield, and Lee (2005) argue that some aspects of PCK develop during teachers pre-service and professional practice. This is significant because acquiring in-depth content knowledge and relevant pedagogy develops and becomes more robust through years of practice. Proficient teaching and learning within spiritual and moral education are influenced by the experiences teachers gain in their past practice. The more experienced a teacher is, the more efficient the teacher is likely to become, and this explains why continuous teachers professional development is a recipe for effective teaching. Also, it is more likely that PCK would engender useful teaching and give teachers insights regarding the uniqueness individual children

bring to the learning context in terms of spiritual and moral values, which informs effective curriculum planning. The extent to which this assertion holds is at the heart of this study.

Statement of the Problem

For an accelerated development of the moral fabric of young people, society demands quality teaching from spiritual (religious) and moral educators. Teachers are envisaged to have comprehensive knowledge, understanding, and insights regarding pedagogical content knowledge (Shulman, 1987). Even though the teachers are taken through in-service training regularly to enlighten their knowledge regarding content and pedagogy closely linked to spiritual (religious) and moral education, from the literature available, it appears there is a dearth of research to inform teachers pedagogical content knowledge. More precisely, research on spiritual (religious) and moral teachers pedagogical content knowledge provides effective classroom teaching and learning (Ayedemir, 2014). Therefore, creating awareness about the state teachers pedagogical content knowledge would likely aid effective classroom teaching and learning.

Several researchers had explored the pedagogical content knowledge phenomenon (Aydemir 2014; Marks 1990 & Gudmundsdottir 1991). Ayedemir (2014) used a qualitative research approach and a sample size of five teachers to explore science teachers content and pedagogical knowledge. Also, Marks (1990) used a qualitative research approach and a sample size of six experienced teachers and two novice teachers to explore mathematics teachers pedagogical content. In the same context, Gudmundsdottir (1990) used a qualitative research approach and a sample of four teachers to explore the pedagogical content

knowledge of two experienced and two beginning social studies teachers. The study's findings showed differences among the four teachers in expertise and curriculum style in curriculum story-making. These researchers explored the phenomenon within an Asian and American context with a different socio-cultural background, so there is the need for a similar study to be conducted within the Ghanaian context. Findings from the various studies indicated that participant teachers did not fully comprehend basic concepts and had limited knowledge of teaching strategies. Also, the researchers used a qualitative research approach; therefore, quantitative research is needed to explore the phenomenon in a larger sample size context.

Similarly, Sibuyi (2012) conducted a study with two Grade 12 mathematic teachers from Mpumalanga province (South Africa) and investigated the PCK of quadratic equations. He found that their questioning techniques were not effective. He further interpreted that the two teachers had limited knowledge of identifying learner misconceptions regarding the quadratic equation. Again, in Botswana, a study conducted by Dinama (2013) employed a qualitative research approach to investigate the content and pedagogical knowledge of Religious Education (R.E) teachers. The study concluded that one major problem is teachers' failure to broaden the scope of their approaches and the shortage of teaching and learning resources.

Bosu (2010) conducted a descriptive study in Ghana to ascertain secondary school accounting teachers' understanding of pedagogical concepts in the Central Region. The study indicated that accounting teachers pleaded with students to abstain from strict adherence to accounting standards and principles. Teachers engaged students actively in teaching and learning and simplified

complex activities. Additionally, Asare-Danso (2017) discovered that tutors of RME in Ghana's educational institutes possessed efficient pedagogy and subject expertise. As a result of the majority of research being undertaken in other subject areas, limited information is available about the pedagogical content knowledge of RME teachers at the JHS level, notably in the KEEA Municipality. Additionally, the majority of studies used a qualitative research methodology in a different socio-cultural environment. In this regard, a quantitative study is required to investigate the phenomena utilising a bigger sample size to cover the literature gap.

Finally, the study's anecdotal data indicates that certain RME teachers appear to be lacking. This anecdotal data must be empirically verified or refuted. As such, this study will conduct an empirical examination of the pedagogical content understanding of RME teachers.

Purpose of the Study

The study examined the pedagogical content knowledge of RME teachers at the Basic School level and how it influenced teaching in the K.E.E.A Municipality. Particularly, the study seeks to:

1. Examine the content knowledge of JHS RME teachers in the K.E.E.A Municipality.
2. Determine the pedagogical knowledge of JHS RME teachers in the K.E.E.A Municipality.
3. Assess the pedagogical content knowledge of JHS RME teachers in the K.E.E.A Municipality.
4. Find out how sex and years of experience in teaching influenced teachers pedagogical content knowledge.

Research Questions

The research questions which guided the study were as follows:

1. What content knowledge (CK) do JHS RME teachers in the Komenda-Edina-Eguafo-Abirem Municipality possess?
2. What pedagogical knowledge (PK) do JHS RME teachers in the Komenda-Edina-Eguafo-Abirem Municipality possess?
3. What Pedagogical Content Knowledge (PCK) do JHS RME teachers in the Komenda-Edina-Eguafo-Abirem Municipality possess?

Hypotheses

Two research hypotheses were formulated to guide the study and were tested at 0.05 level of significance:

Hypothesis 1

H₀: Years of teaching experience do not account for significant differences among JHS RME teachers pedagogical content knowledge in the Komenda-Edina-Eguafo-Abirem Municipality.

H₁: Years of teaching experience account for significant differences among JHS RME teachers pedagogical content knowledge in the Komenda-Edina-Eguafo-Abirem Municipality.

Hypothesis 2

H₀: There is no statistically significant difference between pedagogical content knowledge of male and female RME teachers.

H₁: There is a statistically significant difference between pedagogical content knowledge of male and female RME teachers.

Significance of the Study

The study examined teachers of JHS RME in the K.E.E.A Municipality's pedagogical content knowledge. The research findings would provide vivid information about RME teachers pedagogical content knowledge in teaching at the JHS level of education in Ghana and information about the difficulties in-service teachers face when teaching certain concepts in the subject. Additionally, the outcomes of this study will inform the Ghana Education Service, administrators, teachers, and others involved in the educational system about the proper content and pedagogy required for effective religious and moral education teaching and learning.

It is expected that the study results would also enable curriculum planners to identify areas to be reviewed for the benefits of JHS RME teachers. This may include the various methods, strategies, and assessment techniques teachers must employ in teaching religious to moral education. The study results would add to the existing literature for future researchers on similar research activities to further add to the limited literature on pedagogical content knowledge of JHS RME teachers in the K.E.E.A Municipality. The findings may also help other researchers to carry out studies into other related areas.

Delimitation of the Study

The study was delimited to two major areas – geographical area (location) and content of the study. About geographical area, the study was delimited to public Junior High School Religious and Moral Education teachers in the Komenda-Edina-Eguafo-Abrem (KEEA) Municipality in the Central Region of Ghana. With the content, since the topic of teachers knowledge is broad, the researcher delimited the study to only consider the pedagogical

content knowledge of the RME teachers to the neglect of other knowledge like their technological knowledge and their general knowledge pedagogical knowledge, among others.

Limitations of the Study

According to Simon and Goes (2013), limitations are events or circumstances outside the researcher's control that affects the study's outcome and conclusions. These factors could include the instruments, the sample, the analysis, self-report nature, a lack of funding, the chosen research design, and others (Siddiqui, 2010). The major weakness of this study was the instrument, specifically the questionnaire utilised to gather data. This included the risk of respondents interpreting the items differently, the likelihood of ambiguity, and respondent dishonesty. To address these issues, the researcher described the research's objective and interpreted the questionnaire items for the respondents. Again, because the survey was limited to K.E.E. public junior high schools, The study's conclusions cannot be applied universally to all schools (public and private) in the municipality of the Central Region.

Operational Definition of Terms

For this study, the succeeding concepts were operationally defined to suit the purpose of the study. The concepts are:

1. Content Knowledge: This is defined as the teacher's comprehension of the subject being taught. The instructor must not only understand that something is true but also know why it is true.
2. Pedagogical Knowledge: Possess an understanding of the ideas that guide managerial and instructional activities to promote student learning.

3. Pedagogical Content Knowledge: This is described as teachers presentation and representations of content that integrate content knowledge, pedagogy, and students through verbalisation and progression of tasks and feedback interactions.
4. Curriculum knowledge: Knowledge intended towards teachers assisting them in locating instructional materials and curricula and making the most effective use of these resources.

Organization of the Study

The first section of the work contains the Study's Chapter One. This section discusses the study's background, the problem statement, the objective of the study, the research questions, the hypothesis, the study's importance, the study's delimitation and limitation, and the study's organisation. Chapter Two reviews related literature in three sections: theoretical, conceptual, and empirical. Chapter Three discusses the study's research design, methodology, and processes. Additionally, it assesses the population, sample, and sampling techniques, the instrument used to administer data collection, and the procedures utilised to analyse obtained data. Chapter Four is devoted to presenting, analyzing, and discussing the data collected, while Chapter Five is devoted to the study, summary, and conclusion, and recommendation drawing based on the study's findings.

CHAPTER TWO

LITERATURE REVIEW

Introduction

The review of related literature concentrated on three important areas: theoretical/conceptual framework, empirical review, and review of related literature. The Pedagogical Content Knowledge (PCK) model served as the theoretical underpinning for this investigation. The review of prior studies focused on three distinct areas: The conceptual review examined key concepts in the following areas: The creation of the PCK framework; The components of the PCK framework Pedagogical Knowledge (PK); Content Knowledge (CK); Pedagogical Content Knowledge (PCK); teacher belief in pedagogical content knowledge (PCK); the concept of successful teaching; the concept of religious education; the concept of moral education; the historical evolution of religion and moral education in Ghana as a research subject; religious and moral education: definition, the scope of content and characteristics; as well as Gender/sex and Teacher Professionalism.

Theoretical Framework – Teacher Knowledge

This investigation was centred on Shulman's (1986) teacher knowledge model. Shulman (1986) classified teacher knowledge into three main categories: subject content knowledge, pedagogical content knowledge, and curricular knowledge. Shulman's (1986) model of teacher knowledge was chosen because effective teaching is heavily influenced by teachers capacity to synergistically blend material and pedagogy, enhancing and promoting children's conceptual understanding. The model fully demonstrates how the concepts under discussion can be utilised to achieve the ultimate goal of high academic

performance. Teachers may need to display these types of knowledge as they teach and interact with their learners in the classroom. Shulman then divided PCK into three sub-categories: knowledge of learning difficulties, knowledge of teaching strategies, and knowledge of conceptions and misconceptions. Shulman's (1986) model of Teacher Knowledge is shown in Figure 1 below.

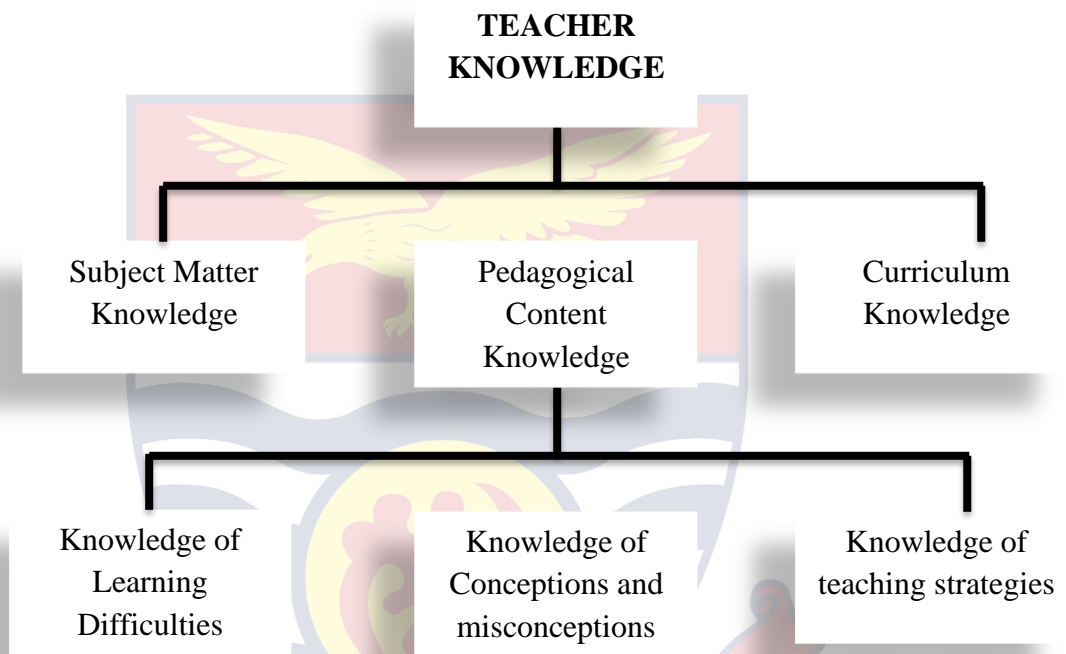


Figure 1: Model of Teacher Knowledge (Shulman, 1986)

Figure 1 highlights the teacher knowledge which is needed in the teaching of Religious and Moral Education. It can be discerned from the figure that teacher knowledge comprises three main sub-areas, namely, knowledge of the subject matter, pedagogical content knowledge, and curriculum knowledge. In context, the Religious and Moral Education teacher at the basic school should possess in-depth knowledge in these three sub-areas. In essence, the teacher's pedagogical subject knowledge must understand learning challenges, common misconceptions, and teaching tactics. This indicates that in the classroom, the Religious and Moral Education teacher can only teach the topic effectively if he

or she has a thorough understanding of the unique learning issues that each student brings to the teaching and learning environment. In effect, the Religious and Moral Education teacher should be proficient in both subject and instructional methodologies to satisfy the students' requirements and accomplish the lesson's instructional purpose.

Historical Development of the Pedagogical Content Knowledge

Framework

According to Shulman (1987), research on PCK has been inextricably linked to three research paradigms throughout several decades: teacher actions, teacher thinking, and teacher knowledge. In the 1950s, research on teacher effectiveness was primarily concerned with observable teacher performance and its causal relationship to student academic outcomes, using a quantitative methodology. According to Richardson (2001), the outcome of this method was critiqued for failing to represent the nuance and complexity of teaching. Thus, in reaction to the older paradigm of "teacher behaviour," alternative research on teacher thought began in the mid-1970s. The following summarises the research findings: Rather than reducing the complexity of teaching-learning settings to a few manageable research factors, one should investigate how teachers deal with these complexities. In summary, what teachers have "in their heads may help understand classroom operations in one way or another (Halkes & Olson, 1984).

Components of the PCK Framework

Shulman's 1985 presidential presentation to the American Educational Research Association instilled pedagogical content knowledge into the debate concerning teacher education. It was defined as "the second form of topic

knowledge required to enhance learners conceptual understanding in a teaching and learning environment (Shulman, 1986).

It was termed “the second type of topic knowledge” to improve learners’ conceptual understanding in teaching and learning (Shulman, 1986). Three important components comprise PCK: content knowledge, pedagogical knowledge, and pedagogical content knowledge. However, due to the critical nature of PCK, numerous studies have been undertaken during the last twenty-five years. The question that arises, however, is what constitutes PCK. While PCK is a conceptually unified and integrated whole, it cannot be divided into its constituents. Numerous studies have been conducted with the PCK concept as a major element.

In his 1986 article, Shulman defined PCK by identifying the most often taught topics in a student’s field of study, the most efficient modes of representation for those beliefs, and the most effective analogies, demonstrations, examples, justifications, and explanations. In essence, it refers to the procedures used to make complex subject matter understandable to others. Additionally, pedagogical subject knowledge comprises a grasp of the factors that affect the ease or difficulty with which specific topics are learned and the concepts and prejudices that students of all ages and cultures present towards the more prevalent studied topics and lessons. Thus, Shulman’s clarification included three components: knowledge of often taught topics in one’s subject area, the numerous methods in which those concepts are expressed, and students mastery of those concepts.

Additionally, in a 1987 study co-authored with Gudmundsdottir, Shulman supplemented and detailed his 1986 remark. They classified PCK into

three categories: (1) knowledge of the central topics, concepts, and areas of subject matter that can and are taught to students, as well as knowledge of the analogies, similes, examples, and metaphors used to explain the subject matter to students, which is influenced by content knowledge; (2) knowledge of the various methods for teaching topics, as well as the benefits and drawbacks of each method; and (3) knowledge of the various assessment tools available (Gudmundsdottir & Shulman, 1987). Comparing these two clarifications reveals that the 1987 clarification contains more sub-components. For instance, the knowledge component of the 1986 clarification included two sub-components: students conceptions and preconceptions; the knowledge component of the 1987 clarification included four sub-components: students preconceived ideas, false assumptions, learning preferences, and learning difficulties.

Despite Shulman's lack of emphasis on technology and its relevance to pedagogy and content, the researcher believes these challenges were not overlooked. When Shulman originally made his case, technological obstacles were not nearly as prevalent as they are today. Traditional classrooms use various technologies, from textbooks to overhead projectors, from typewriters in English classes to periodic table displays on the walls of laboratories. Until recently, however, most technologies used in classrooms had become "transparent" (Bruce & Hogan, 1998); that is, they had become so pervasive that they were no longer classified as technologies. By contrast, the more prevalent use of the term "technology" refers to digital computers and computer software, as well as unique products and procedures that have not yet gained popular acceptance. Thus, while Shulman's theory remains valid, what has

changed in educational discourse since the 1980s is the availability of several new tools, largely digital, and the associated prerequisites for effective classroom use.

These new technologies have altered or altered the nature of the classroom. Decide based on or examples that Shulman identified as critical to PCK, such as “the most effective analogies, illustrations, examples, explanations, and demonstrations,” or in other words, “presentation and formulation techniques that will make this subject more accessible and understandable” (Mishra, & Koehler, 2006, p 144). Without a doubt, technology is critical in each of these sectors. From blackboard drawings to interactive multimedia simulation experiments and paintings on a clay tablet to the heart pump or computer brain metaphor, technologies that aid students in accessing the subject have constrained and enabled various representations, analogies, examples, interpretations, and demonstrations. While not all teachers have embraced these new instruments for various reasons, including fear and ignorance and time constraints and support, it is apparent that they will continue to exist.

In addition, their increasing complexity prevents them from getting “transparent soon.” Teachers should improve using already accessible resources and gain new techniques and skills as existing technology becomes outdated. This is a completely different environment than previous conceptualisations of teacher knowledge, which assumed uniform and relatively stable technologies. One may anticipate that the employment of technology in pedagogy for certain subject matter will remain relatively steady throughout time. Thus, teachers could concentrate on subjects and pedagogy while remaining certain that technical surroundings would not change substantially over their careers as

educators. This new environment has propelled technology to previously unfathomable heights. Thus, technical knowledge becomes an integral part of a teacher's overall expertise. What is noteworthy is that modern debates about the significance of technical knowledge appear to be revisiting several of Shulman's 1980s concerns. Before Shulman's key work on PCK, topic and pedagogical knowledge were regarded as independent and self-contained. Similarly, technical knowledge is frequently deemed distinct from a grasp of pedagogy and content today.

Conceptual Review

Pedagogical Knowledge (PK)

Improving student results also entails improving the teaching workforce's quality. Even when prior student learning and family background traits are considered, teacher quality is a significant predictor of student academic achievement (Darling- Hammond, 2000). Teachers possess high expertise that is continually expanding due to their practice, study, and professional networks. The word "pedagogical knowledge" denotes the distinct body of knowledge teachers must acquire to educate and learn all students effectively. While it is widely accepted that proficient teaching demands a high degree of pedagogical knowledge, there is still a need to study teacher knowledge as an outcome of teacher education systems and a determinant of successful teaching and student achievement (Guerriero & Révai, 2017). Recognise the nature of teachers' educational skills and infuse the profession with new information (Hattie, 2009). Today's classrooms are becoming more diverse, and teachers are required to teach what is referred to as "21st-century skills," which have become a priority for countries and their connected

economies. Today's increasingly complex, knowledge-based, and integrated digital society necessitates a unique set of talents formerly unimportant to job seekers (OECD, 2009).

Teachers are expected to obtain and comprehend new knowledge pertinent to their primary professional activity and consistently maintain a professional depth of knowledge. This includes teaching 21st-century abilities (such as creativity, critical thinking, problem-solving, cooperation, and communication, to name a few) in an increasingly diverse global classroom. These new requirements may push educators to abandon more traditional modes of education in favour of more innovative ones. By evaluating the current state of the knowledge base, one can ascertain whether and how much reskilling is required (Guerriero, 2017). Recognising an individual's existing competency-based qualifications enables them to determine the extent to which they require re-qualification. As a result, assessing teachers' present pedagogical knowledge and its relative importance for the teaching process is critical for developing evidence-based policy recommendations and future studies. While current research indicates that a good amount of pedagogical knowledge is critical for competent teaching, the OECD (2013) emphasises the importance of assessing teacher knowledge as a learning outcome and indicator of effective teaching and student accomplishment.

Content Knowledge (CK)

PCK and CK are essential elements of teacher competency because they affect student achievement. Unfortunately, nothing is known about the effect of teacher education on the development of CK and PCK. Historically, scholars have concentrated on various aspects of teaching but have paid insufficient

attention to how teachers must comprehend their teaching subjects. Additionally, when scholars, educators, and policymakers focused on teacher subject matter knowledge, the underlying assumption was frequently that advanced study in the field was important (Ball, Thames & Phelps, 2005).

Shulman (1985) classified teacher knowledge into a distinct category called pedagogical content knowledge. He differentiated between the “unique synthesis of content and pedagogy required for teaching the topic” and the “content as explored and mastered in disciplinary contexts.” These ideas dramatically impact the research community, highlighting the critical relevance of instruction, notably pedagogical material comprehension (Shulman, 1987). Shulman’s study concentrated almost exclusively on the basic aspects of teaching, such as classroom management, time management, planning, and leveraging subject knowledge as technical expertise, which is critical for establishing teaching as a profession. Shulman contended that high-quality teaching necessitates substantial professional expertise in addition to fundamental criteria, such as the appropriate length of time to wait for students to answer.

CK is a parameter for evaluating a teacher’s understanding of the subject under discussion. Shulman (1986) asserts that “the teacher must comprehend not just that something is true, but also why it is true” (p. 7). As a result, the attention is laid on gaining a full understanding of the material covered in school. As a result, teachers distinguish themselves from academic research information obtained at postsecondary institutions and everyday mathematical knowledge preserved by individuals after they leave school (Krauss, Brunner, Kunter, Baumert, Blum, Neubrand, & Jordan, 2008). Along these, Shulman

categorised professional knowledge for teaching by defining the following typologies:

1. General pedagogical knowledge emphasises that general classroom management and organisation concepts and practises appear to supersede subject matter.
2. Knowledge of learners and their characteristics
3. Knowledge of educational contexts, ranging from group or classroom dynamics to school district administration and financing, as well as community and cultural factors.
4. Understanding of educational goals, objectives, and ideals, as well as its philosophical and historical foundations
5. Content knowledge
6. Curriculum knowledge, with a special understanding of the resources and programmes that act as teachers tools of the trade.
7. Pedagogical content knowledge is a unique synthesis of content and pedagogy exclusive to teachers and their distinctive mode of professional understanding (Shulman, 1987). These themes were generated to emphasise the critical importance of subject knowledge and to locate it within the greater landscape of professional knowledge for teaching.

Pedagogical Content Knowledge (PCK)

According to Shulman (1987), PCK is the distinctive body of knowledge that is of particular interest because it constitutes a “special synthesis of content and pedagogy that is distinctively the jurisdiction of teachers, their unique mode of deep knowledge” (p. 8). This knowledge enables a teacher to take stuff and

“transform it to learnable by another. Teachers then take on the role of a gatekeeper, intervening between content specialists and discipline students. Additionally, Shulman contends that a well-developed PCK enables teachers to closely match curriculum and pedagogy while simply identifying when students are deviating. Ball, Hill, and Bass (2005) define pedagogical content knowledge (PCK) as consisting of two dimensions: a teacher’s broad comprehension of the subject and knowledge of how to build particular comprehension of the subject. More precisely, this is everything a teacher does or is aware of to facilitate his or her students learning and comprehension. All teachers employ both dimensions of PCK in their professional activity (Loo, 2012); however, some teachers PCK is more developed than others, resulting in varying applications of teaching specific knowledge, which has a varying impact on children’s development (Shulman, 1986).

Moreover, Gudmundsdottir and Shulman (1987); Monte-Sano and Budano (2013) believe that PCK occurs when teachers supply pupils with a fresh representation of the concept/idea. Given that they believe PCK is mostly dependant on “practical wisdom,” it is unsurprising that research on PCK in early career instructors generally believes that PCK exists in such a formative stage to be negligible. On this point, one may argue that PCK implementation begins long before teachers meet students. It begins with determining what information to teach and how to organise it consistent with how subject specialists approach their specialities. In this regard, Shulman (1987) emphasises teaching as “simply originates with the teacher’s understanding of what has to be learned and how it should be delivered.” In essence, no teacher

can perform his or her PCK and convert anything for learners without first possessing the appropriate topic knowledge.

Teacher belief in Pedagogical Content Knowledge (PCK)

Teachers with a strong PCK are regarded to be motivated and feel that almost all children can learn. In summary, teachers with good PCK are self-assured, enthusiastic, thoughtful, and absorbed in their work. Nonetheless, teachers with extensive PCK in one subject may lack it at times. Moreover, this explains why continuous professional development should form a critical element of teacher education (Griffin, Dodds, & Rovengo, 1996). However, certain problems are connected with Pedagogical Content Knowledge (PCK), such as the inability to comprehend activity progressions (e.g., from skills to gameplay). Teachers face this difficulty when they progress from stage 1 (individual skill development) to stage 4 (modified or complete games) without providing appropriate practice in stages 2 and 3 (combining skills and the fundamental offensive and defensive strategies) (combining skills and basic offence and defence strategies). Additionally, early developing PCK consider activities but not their relationship to the program's objectives (missing the big picture). There have been instances where teachers believe that providing information to students who appear to be paying attention constitutes teaching. On the other hand, enable the students to demonstrate their abilities to assist them in acquiring additional practises and utilise a game-question-practice-game cycle to engage students in making judgements about how to apply skills and actions effectively (Griffin et al., 1996).

The Concept of Effective Teaching

Teaching is the process of imparting knowledge to students or guiding them through a series of experiences designed to alter their behaviour. Teaching is a difficult profession. In some ways, a page or two cannot adequately convey the sophistication of what good teachers do. Nonetheless, nothing is more critical to ensuring each student's success than high-quality instruction. Thus, effective teaching is the type of instruction that focuses on the holistic development of pupils or students. In other words, holistic development is a critical component of effective instruction (O'Neill, 2009). On this issue, Alton-Lee (2003) identified 10 well-defined and research-based qualities of successful or excellent teaching. A commitment to student performance, pedagogical practises that foster caring, supportive, and collaborative community of learners, effective links between the school and its social context, interactive teaching that is accessible to student learning progresses, effective and sufficient learning opportunities, multiple tasks and contexts that support learning cycles, and empathetic curriculum goals, a myriad of variables influence effective teaching. Similarly, Gurney (2007) contends that a rich learning environment is heavily influenced by effective teaching, which is frequently defined by assessment activities that promote experiential learning, constructive criticism that specifies the classroom's learning processes, useful engagement between teacher and students, and providing an atmosphere that respects, motivates, and enhances students.

The Concept of Religious Education

Religious Education (RE), which replaced religious instruction (RI), is an adaptation of religious schooling that has been incorporated into the United

Kingdom's school curriculum since 1870 when the Elementary Education Act mandated elementary education for all children aged 5–13. The 1944 Education Act (commonly referred to as “the Butler Act” after the Secretary of State who oversaw its implementation) made religious instruction a mandatory subject in order to lay the groundwork for a morally stable society rooted in “Christianity” (Chadwick, 1997, p.1). Religious education is a required component of the elementary school curriculum, and all schools are required by law and their funding agreements to provide RE to all enrolled children. Parents have a responsibility to opt their children out of Religious Education entirely or in part. This includes parents of children who attend schools with a religious affiliation. Religion is a way of life and an outward manifestation of one's faith. Religious education (RE) is crucial for all pupils because it enables them to build a sense of themselves and others. Religious education encourages individuals' spiritual, moral, social, and cultural development and forming organisations and communities (Qualifications and Curriculum Authority, 2009). RE teaches children with learning difficulties how to cultivate their identity and recognition, understand their worlds independently and in groups, introduce their points of view and experience of reality into the classroom, maintain a positive attitude toward others while respecting their feelings and experiences, and portray on and consider their values.

Pupils can advance in Religious Education by shifting their perspective from personal to global, by increasing their knowledge of religious beliefs, practices, and experiences, by developing an understanding of the meaning of stories, symbols, events, and pictures, and by developing and communicating

their individual responses to a variety of viewpoints (Qualifications and Curriculum Authority, 2009).

Effective RE takes forethought. One of the concerns levelled against previous RE supply, particularly when wholly thematic, was that it usually lacked coherence and transition. According to Bates (1992), the chief critiques levelled at this technique were its “lack of coherence, fragmented approach to information, repetitiveness, and lack of advancement” (p. 12). The situation has, fortunately, improved. Today, all schools recognise the value of long-term, medium-term, and immediate planning in RE and other courses. It is now easier than ever to identify excellent practises in primary school religious education. One explanation for this is because various authors have recently provided explicit definitions of what constitutes good practice (Bastide, 1999).

Following the 1988 Education Reform Act, there was substantial controversy over the usefulness of assessing religious education. Those opposed to the notion noted the personal character of religion, the impracticality of measuring children’s spirituality, and the time constraints such examination would place on teachers. However, most contemporary educators believe it should be assessed to determine whether RE should be treated seriously and accorded equal status with other courses. Additionally, evaluation enables “teachers, governors, and parents to comprehend what is accomplished in religious education and increases professional efficiency by offering clarity to overworked, sometimes non-specialist teachers” (Watson, 1993, p. 40). There is considerable agreement that children’s private beliefs and spiritual growth should not be included in RE assessments.

As a result, schools must consider local prerequisites and regional diversity in cultural and religious experiences when constructing the RE curriculum. This subject guide is meant to augment the direction offered by agreed-upon syllabuses and national curriculum programs of study by demonstrating successful methods of teaching RE to learners.

The Concept of Moral Education

While philosophers and psychologists have defined morality differently, in common parlance, it can be defined as a person's or society's view of what is viewed to be the highest good. Accordingly, Devine (2006) postulates that such a view is founded on a set of principles, ideas, and standards that serve as a guide for determining what "right" and "wrong" are. As Aristotle defines, the "highest" good is frequently defined as those actions, behaviours, and mindsets that contribute to eudaimonia, or human flourishing or happiness. While concepts of what is "good" and what constitutes happiness are culturally contingent, Devine asserts that morality more broadly refers to attitudes and predispositions that promote respect, responsibility, integrity, and honesty. Respect and responsibility.

These are the two fundamental components of morality, according to Lickona (1997), from which all other principles flow. Respect comprises two components: self-respect and regard for others (beliefs, opinions, and culture). Acceptance of one's own life and acts implies a commitment to the general welfare of society by active engagement in the socio-economic, cultural, and political activities within the community. Education appears to be the most appropriate vehicle for transforming and developing a worldview more in line with people's aspirations in the context of globalisation, with its market

imperatives, increased cultural contact, and accelerated pace of technological change. As the primary agent of social transmission, the school plays a critical role in developing and equipping the child's perspective, providing the child with the academic, psychological, social, and moral assets necessary to participate in a common process of valuation and decision-making in a multicultural context (Leming 1994).

Moral education refers to how children acquire necessary knowledge, attitudes, values, and skills. It emphasises the cognitive, social, and emotional capacities necessary for moral reasoning, action, and emotion. Moral education is a term that refers to the practices and tactics employed by socialising agents to provide children with the required tools to deal with questions of good and evil in their daily lives. The purpose of moral education in the classroom is to empower students to make their own choices while also demonstrating fundamental values such as respect and responsibility in all aspects of their lives (Hamm, 1989).

Moral education has been a critical component of education throughout history. The purpose of schools was not only to educate students but also to develop their character. However, as industrialisation progressed, the moral purpose of education took a back seat to the demands of capitalist markets, which centred primarily on the provision of skilled labour that was culturally adaptable to labour markets. The resurgence of moral education is because modern societies are increasingly confronted with disturbing trends both within schools and throughout society. Increasing discipline problems that culminate in violent outbursts, alarming rates of adolescent pregnancy, and drug abuse are all phenomena that are frequently explained by the breakdown of the family or

are generally associated with the aftermath of industrialisation (Straughan, 1992).

Alomari, Abu-Jerban, and Al-Awamleh (2011) make several observations about moral education. Moral education aims to develop morally upright individuals, as it is not enough to learn about virtue; rather, it is necessary to put what has been learned into practice and translate knowledge of virtue into action through virtuous acts. Only enlightened people (whose character is conditioned to do what is right or wrong and to despise evil or wrong) will benefit from moral education and no one else. In terms of moral education. Many people do not do what is right out of a sense of justice but fear of punishment. Alomari et al. (2011) emphasise further that moral education encompasses behaviour, nature, and instruction. They assert that human nature is divinely inspired, but habits are formed through nurture and instruction. Therefore, it is critical to place a high premium on moral education, as its impact on youth is critical for societal stability and development.

Conceptual Framework

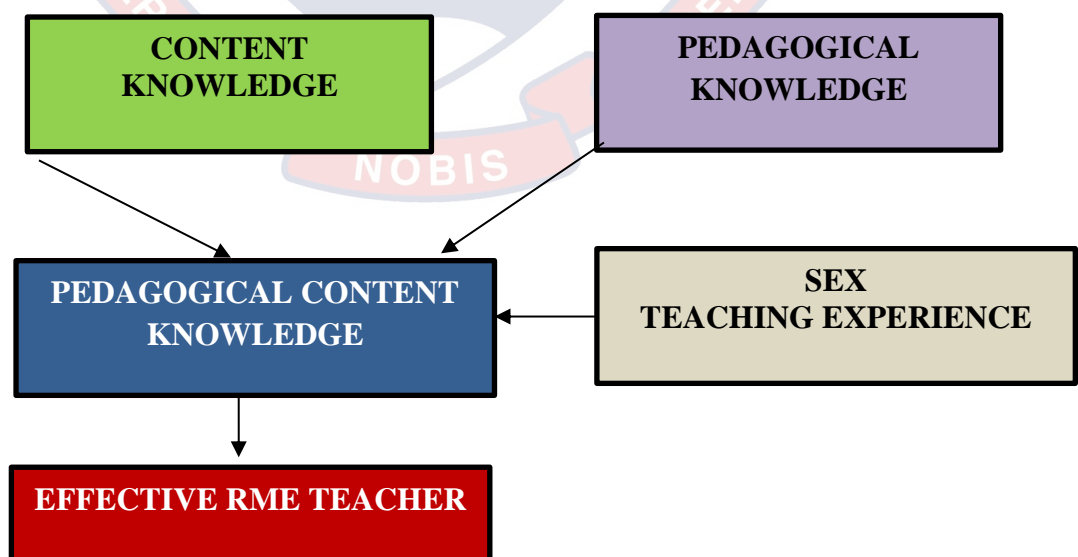


Figure 2: Author's Construct (2019) adapted from Shulman (1986)

The conceptual framework for this investigation is depicted in Figure 2.1. It is stated in this paradigm that every teacher of Religious and Moral Education (RME) must possess Pedagogical Content Knowledge (PCK). As theorised by Shulman (1986), Content Knowledge (CK) alone may not be enough for their effectiveness in the classroom, while Pedagogical Knowledge (PK) devoid of content knowledge may also render the pedagogical knowledge worthless. In essence, the effectiveness of RME teaching rests on the teacher's ability to integrate content and pedagogical skills. Moreover, this explains why the teacher who is acclaimed as the finest of the finest in the world of teaching (Jesus Christ) tends to be reflective whose practices are largely informed by the learner's socio-cultural context, needs, interest, and the challenges each learner brings to the learning context and how the insight of the teacher perform an essential role in addressing the learning needs of individual children or learners. When teaching RME, teachers actions largely depend on the depth of their Pedagogical Content Knowledge, making it a fundamental element of their ongoing learning.

This study further argues that the development of teachers PCK lay heavily on gender and their teaching experiences. Arguably, teachers gender and teaching experiences affect their outlook in the classroom. As such, male teachers and female teachers may not have the same experiences concerning their CK and PK. Again, the number of years a teacher has been in the classroom will shape their pedagogical practices, students knowledge, subjects in the school, and curriculum. Solís (2009) concurs that the PCK is completely rooted in the day-to-day work of a teacher.

This does not contradict theoretical understanding in any case. It combines theoretical information obtained during teacher preparation with hands-on experience gained via ongoing educational activities. Again, factors influencing the development of PCK include the teacher's background and the milieu in which they work (Sols, 2009). The study's conceptual lens is that instructors' PCK is shaped by their background, including their age and teaching experience.

Historical Antecedents of Religious and Moral Education in Ghana

Religion has evolved in Ghanaian public schools to include studying the concepts and practises of various religious traditions. Ghana's population now includes a diverse range of racial, ethnocultural, and religious backgrounds, and pupils in Ghana's public schools are encouraged to develop an appreciation for and understanding of diverse cultures, including their religious expressions (Wiredu, 1980).

Graham (1971) asserts that Portugal was the first European country to have an economic and educational impact on Ghana. They were possibly the first in the country to establish a school, to convert the inhabitants of Elmina to the Catholic faith. In 1529, King John III directed the governor of Elmina to "give a reading, writing, and religious instruction to African pupils" (p1). The Dutch seized Elmina Castle in 1637 and reopened the castle's school. Additionally, the 1621 Dutch Charter (renewable in 1640) directed the establishment of Christian Schools. According to McWilliam and Kwamena-Poh (1975), the society for the Propagation of the Gospel began operations in 1701. (S.P.G.) founded in England sent Rev. Thomas Thompson to Cape Coast, and he started a School at the Cape Coast Castle. He aimed to convert his

students to the Protestant faith. In 1737 the Danes started a school at the Christiansburg Castle; the Moravian church established this school. The French missionaries who came to the Gold Coast also founded a school at Axim from 1638 to 1641. Education in Ghana, both public and private, therefore, had a religious dimension from the beginning.

However, determining when Religious Education began in the Gold Coast, now Ghana, is exceedingly difficult, as it evolved from Ghana's Indigenous Religion (African Traditional Religion), where the primary medium of teaching was formal training for leaders (priests and priestesses) and participant observation for true lay believers. However, Religious Education in the modern sense (as an integral part of formal education) dates back to the contact between the Gold Coast people, now known as Ghanaians, and Western Europeans. From 1471, the Portuguese set foot on the country's beaches for the first time (Buah, 1998). Officials from colonial times initiated formal education in collaboration with missionaries. Education's goal was to prepare students for systematic economic exploitation of indigenous resources and the spread of European culture. Christian missionaries viewed education as a tool for proselytizing indigenous people and converting non-Christians to Christianity (Hagan, 2009, p.3) (Wise, 1956). In other words, it was established to promote the growth of good Christians among its converts. The history of castle schools substantiates this assertion (Anti & Anum, 2003).

The Education Ordinance of 1887 offered government financial support for mission- or church-founded schools under specific conditions. Numerous great Senior Secondary Schools (now Senior High Schools) were created in Ghana by Christian missionaries before becoming state-supported (the

government took full control by recruiting teachers and other supporting staff and paying their salaries). Numerous examples may be provided here: Wesley Girls School was founded in 1836 and Mfantsipim College in 1876 (both Methodist), Adisadel College was founded in 1910 (Anglican), St. Augustine College was founded in 1935, and Holy Child was founded in 1945 (all Roman Catholic), all in Cape Coast, Ghana's educational capital, and the Presbyterian Boys School was founded in 1938 in Odumasi-Krobo and is now located in Legon in Accra. Before government intervention, Religious Education in these mission schools was oriented toward Christian theology, emphasising the principles of their faiths.

In response to the Commission's suggestion, in 1987, the erstwhile Provisional National Defense Council (PNDC) implemented a new Educational Reform Programme. In order to have an educational system that reflected the culture of the people. As a result, cultural studies as a subject was introduced at the Basic Level of Education. This innovation was put in place to widen the scope of the religious studies course to make it comprehensive; hence Religion, Culture (or Social life), and Music were integrated into the Cultural Studies programme.

Again, in 1998, the Cultural Studies Program at the elementary and senior high school levels was renamed Religious and Moral Education. The subject has been added to the list of subjects available for the Basic Education Certificate Examination examination. The inculcation of human values, man's ideas, and religious and moral beliefs are necessary for the educational system. This field of study establishes a solid foundation for developing personality and good character (MOE, 1987).

Religious and Moral Education: Definition and Features

Religious and moral education is how children and adolescents discover life's meaning, worth, and purpose. This requires an analysis of one's ideas and values and how those beliefs and values are demonstrated. The subject examines moral and spiritual issues in African Traditional Religion, Christianity, and Islam, intending to arm young children with a moral and spiritual compass that will enable them to develop a sense of right and wrong, which is necessary for the development of an individual whose life is marked by integrity. This is why the curriculum's material concentrates on bribery and corruption, teenage pregnancy, and substance abuse, among other topics (Asiedu, 2009).

In effect, the RME program's content educates students about the universe's origins, its architect, the relationship between humanity and the universe, and how we should behave toward one another. Consequently, the content includes elements both within and outside of our immediate environment, environmental stewardship, and moral values such as humility, kindness, truthfulness, integrity, self-sacrifice, respect, and hard work, among others, as demonstrated by the study of religious institutions and the exemplary lives of religious leaders. More critical and in-depth religious and moral reflections on issues such as work, time and leisure, life cycle rituals, substance use and abuse, socialisation styles, dignity and self-control, sexuality, religious leader mentorship, and the meaning and accountability for life, death, and the hereafter, which are also addressed in junior high school (Curriculum).

It can be discerned from the preceding that content might be described as the knowledge, skills, attitudes, and values to be learned (Nicholls & Nicholls, 1972). In effect, the content of the RME curriculum is to equip the

learner with moral and spiritual competencies. According to Igwe (2003), before selecting content for a course, it should satisfy certain criteria. These are:

1. **Significance:** – This refers to the potentials of the curriculum to contribute to the essential skills, knowledge, abilities, and values. The criterion addresses the issues of value, worth and foundational knowledge. Examples of content that provide basic skills are reading and writing for literacy and communication, arithmetic for numeracy, history for cultural heritage and identity.
2. **Relevance:** – Content is selected based on the educational purposes and goals applicable to serving the demands and pursuits of any given society. In this vein, content should be directly linked to the needs and aspirations of any given society. Decided upon by the society served by the school. It guarantees that the composition is consistent with the society's cumulative traditions, values, needs, and goals. The emphasis is on instilling creativity and problem-solving abilities, prioritising how to think rather than what to think. Relevance provides the curriculum with a proper cultural foundation and context.
3. **Utility:** – Utility or functionality means the content must directly contribute to an individual's personal life and role in society. In effect, education within the school setting must serve a useful purpose by impacting the life of the learner and society.
4. **Interest:** – The curriculum is expected to address individual learners' needs and uniqueness in terms of the rightness and wrongness of their actions and inactions within a different context.

5. Continuity: – The curriculum should be structured so that as the learner progresses from one level of education to the other, the content is broadening and deepened.

The criteria for selecting the scope of the content of the R.M.E. programme in the junior high school content can be discerned from the criteria that include issues directly linked to the three main religions in Ghana, namely Christianity, Islam, and African Traditional Religion. In essence, moral and spiritual principles such as love, honesty, respect, self-control, sincerity, and cleanliness form critical elements of the RME programme. Moreover, patriotism, responsible living, freedom, peace, commitment to duty, festivals, inheritance, and responsible ways for dealing with peer pressure and social vices such as substance abuse, sexual immorality form integral parts of the RME curriculum (Teaching Syllabus for R.M.E., JSS, 2006).

According to School Curriculum and Assessment Authority (1994a; 1994b), Religious and Moral Education focuses on three main strands: developing pupils' knowledge and understanding of religious beliefs and practices, spiritual development, and demonstrating values therein as they interact with the others within the public space. The development of every nation is partly a function of multiple factors, and integrity forms a critical part of these factors. It takes man and woman of integrity, as exemplified in many nations, to propel a country on the path of development. That explains why moral and spiritual education forms an integral part of young children's learning experiences within the school setting within the Ghanaian educational context. The subject is intended to complement the informal religious and moral education that children and adolescents get in their homes and communities.

This is because many households and communities may be incapable of appropriately providing this type of training. The onus falls on the school, one of the social institutions shaping the moral fabric to become morally responsible and patriotic citizens. The advancement in information technology has virtually made people across the racial divide interact with people from diverse backgrounds. Because young people commonly and unknowingly adapt to all types of influences, positive or negative, in the absence of proper guidance, society must provide them with an education that teaches them meaningful religious and moral principles, as well as acceptable attitudes and values that will help in making sound decisions and choices as adults (Curriculum Research and Development Division).

Consequently, RME has been tasked to propagate certain fundamental virtues and values accepted globally. Some of these include the sense of what is right and wrong. (Lemu, 2002). The programme's content emphasises the teachings of moral and spiritual issues across the religious divide, which in turn help young people have a nuanced understanding of the religious practices of other religious groups.

Additionally, education about religion and moral ideals can help reduce misinformation obstacles between communities and foster mutual understanding and respect (Marvel, 2006). In practise, studying other faiths and getting familiar with their religious practises and norms is crucial for developing an understanding of people from diverse backgrounds. Marvel emphasised that children develop values and attitudes that promote social harmony due to their understanding of similarities and differences, such as an appreciation for diversity and tolerance for persons from varied origins.

Another virtue taught by RME is decision-making that is fair and balanced. Willard (1997) observes that “the critical need of presenting many religious traditions fairly and balanced cannot be overstated” (p.20). He asserted that students should be permitted to look beyond specific theological differences in times of religious dispute and instead develop an awareness of social manipulation of religious connections, ignorance, and a lack of information beyond such conflicts. In a peaceful society, students should avoid pandering to their religious convictions.

Finally, after going through the religion and moral education programme, pupils are likely to develop moral judgment skills that will make them rational beings to enable them to make informed decisions. This is significant because they are likely to lead lives worthy of being emulated by other young people.

Gender/Sex and Teacher Professionalism

Women have always dominated the OECD’s teaching profession (2009). Over the recent decade, the proportion of female teachers has climbed, reaching 68% in 2014 across all levels of education. While women comprise the majority of instructors, they are underrepresented in positions of leadership. On average, throughout the OECD countries, women make about 68% of lower secondary teachers, but just 45% of principals (OECD, 2016). This is particularly noteworthy because principals are often recruited from teachers’ ranks, meaning that female instructors are less likely than male teachers to be promoted to principal. Females have long dominated early childhood education. In most of the world’s countries, women outnumber men in education (Drudy 2008). According to a survey done in 41 nations, [school] teaching is female-

dominated (Anker, 1998). In most North America, South America, Europe, and much of Asia and the South Pacific, women make up 80% of primary school instructors (2004). Women account for over 67% of elementary school teachers in Canada. Similarly, women make up over 80% of the teaching staff in public and private schools in Brazil, Russia, Austria, Germany, and the United Kingdom (Organisation for Economic Cooperation and Development) (OECD 2005).

Gender and education research indicates that females are a dominant force in the teaching profession. However, the question is why the teaching profession continues to be so gendered (Asimaki & Vergidis, 2013). Research evidence Morgan (2016) consistently with other findings revealed that women dominate primary school teaching. However, because the study was qualitative, reasons accounting for the dominance of women in the teaching cannot be explained. Even among teaching positions, there are gender imbalances across the different fields of education. The study's findings revealed that women make up a lower share of science, mathematics, and technology (OECD, 2015). However, the OECD study's findings further revealed that the opposite was the case in pre-primary and primary. In pre-primary, the female teachers constituted 97%, whereas, at the primary level, the female teachers constituted 82%. According to the data, female teachers in all nations, excluding Saudi Arabia and Turkey, surpasses 60%.

Throughout 2005 and 2014, the average female employment rate in OECD countries climbed from 56% to 59%. While this association may not be universal, growing female labour market participation almost certainly contributed to the "feminisation" of education. For example, Japan, Germany,

and Greece are the three countries with the biggest growth in the proportion of female instructors (OECD, 2015). Women's employment rates have climbed by more than 11% during the last decade, compared to an average of 8% in certain countries. Additionally, stereotypes about what women and men succeed at and the occupations they can pursue will almost certainly impact gender segregation in many schooling sectors. As the OECD survey suggests, the low percentage of female professors in science may result from science's social stigma as a masculine discipline. This explains why women pursue post-secondary education in that subject in such a small proportion (OECD, 2015).

Teaching young children is considered a soft option for a job in the public domain (Skelton 2009). However, this notion tends to vary from one society to another. A school of thought believes that teaching young children can be equated to child-care within the home setting. Skelton (2009) further argues that there are few similarities in both contexts. Nevertheless, at the same time, teaching within the school setting is more complicated than in the home setting because it takes a religious and moral educator who has insights into pedagogical content knowledge to enhance and promote young people's spiritual and moral development.

According to Smulyan (2006), one of the economic independence alternatives offered to women was teaching. Additionally, Smulyan maintained that education allowed pupils to reinterpret their social roles. Similarly, women are compelled to accept teaching professions by a society's dominant traditions and culture. Teaching was/is one of the few socially approved occupations for middle-class women, as it is seen as an extension of a woman's domestic responsibilities. These and numerous other reasons demonstrate that women

enter the teaching profession for various reasons: they may need to earn money and contribute to the family economy; teaching is the only career option available to them; or they desired a sense of independence (Smulyan, 2006).

Pedagogical Knowledge of RME Teachers

Ackerman, Heafner, and Bartz (2006) argue that education is critical to a country's economy. The heart and soul of any educational system are the teachers. Moreover, the quality of that education system is determined by a variety of variables. However, the most critical factor is the teacher's quality. Ackerman et al. underline the critical impact of teachers abilities on students academic attainment and performance at all school levels. Student achievement can be used to evaluate teacher performance. In essence, the most important predictor of student accomplishment is the instructor attributes, including their education, teaching experiences, pedagogical practices, and professional development. Darling-Hammond (2000) contends that teachers' capacities to arrange information, pose relatively high questions, incorporate student suggestions, and examine student responses contribute to pupils' learning. According to research, teacher quality has a substantial impact on whether or not students reach higher levels of accomplishment. Historically, teacher quality was determined by class size, certification, type of qualification, degrees obtained, and years of experience. Teacher pedagogical knowledge is another less-recognised predictor of teacher quality. The term "pedagogical knowledge" refers to the specialized knowledge acquired by instructors to provide successful teaching and learning environments for all pupils (OECD, 2005).

Similarly, pedagogy or technique is defined as any deliberate action taken by an individual with the intent of enhancing another's learning (Watkins

& Mortimore, 1999). The teaching methodology is an important component of the educational process since it facilitates the teaching-learning process. It is central to student learning. Even if a teacher understands specific subjects, this knowledge may be ineffective without an appropriate teaching style. In effect, each topic has its unique method of imparting knowledge to its students, and RME is no exception. Grimmit (1978) believes that any teacher or educator with experience knows that even the most ideal curriculum and syllabus are ineffective unless the appropriate teaching methods and teachers are at the centre of the teaching and learning process. Grimmit established a solid foundation for instructional methods. In effect, a gifted teacher can sometimes transform an unpleasant and unimaginative course into something intriguing and valuable. A gifted teacher measures the success of his or her session not by the amount of content presented but by student comprehension, appreciation, and efficiency (Ocitti, 1994).

Cullahan and Kellough (1992) observe that “there are no distinct teaching methods uniquely applicable to Religious and Moral Education (p. 144). They further argue that, like the other subjects, the RME teacher uses varieties of teaching methods available. Because they see the methods of teaching as the process through which learning takes place. In the light of this, they observe that strategies are means by which a student learns through an interactive process. They include a field trip, dramatisation, role play, resource persons, project method, lecture method, and question and answer methods. These teaching methods are either learner-oriented or teacher-oriented. Learner-oriented methods enhance students participation in lessons through activities which the teacher provides. On the other hand, teacher-oriented methods

provide the classroom environment for teachers to transmit knowledge to students.

Contemporary Pedagogies for Teaching Religious and Moral Education

In this section, the life theme approach, existential approach, and value clarification approach to the teaching of Religious and Moral Education were extensively discussed.

The Life Themes Pedagogy

One of the skills pertinent to effective teaching is the teacher's "ability to relate content to past and future experiences of learners" (Oliva, 1992, p.142). The heart of the Life-Approach method navigates around this statement. In essence, the learner's life experiences are vital to the teaching and learning procedure because they provide the foundation for bringing new concepts to the learner.

Kerry (1984) recognised the essence of the Life-Approach method when he asserted that "children need to find passages within the Bible which are related to their own experience and understanding of life, as well as being within their verbal comprehension (p. 23). This is significant because it helps learners learn for life and facilitate the transfer of what has been learnt in real-life situations that they face. Kerry (1984) further argues that it is always important for the teacher to mimic how young children construct knowledge within every teaching and learning context. In essence, children learn doing by doing activities such as:

1. be active rather than passive learners?
2. handle real objects and materials?
3. be stimulated to explore ideas, problems, and issues?

4. see the relevance of the task to their own lives?
5. come to share in the planning of their learning? (Kerry 1984, p. 69)

In essence, learning is an active process, and children learn by doing. In effect, the content of a biblical story is likely to be relevant to a young child if it is directly linked to the child's lived experiences.

According to Loukes (1965), the Life-Technique approach involves training pupils using their actual, concrete, and contemporary circumstances and allowing them to develop a theological sense of their experiences. Muthoni (1992) similarly views it as a paradigm that emphasises the human being as the recipient of God's self-revelation to humanity. The idea presupposes that God communicates with humans through circumstances and experiences. According to Grimmit (1973), "religious beliefs" come alive only when we can relate them to our life experience, sometimes partially, sometimes entirely" (p. 52). From the preceding definitions of the Life-Approach approach, it is clear that the technique emphasises utilising the learner's daily experience as the foundation for teaching Religion Studies themes.

The steps involved in the use of the method, according to Onsongo (2002), are as follows:

1. Introduction

The teacher encourages students to reflect on their daily experiences with the subject. To stimulate their curiosity about the subject matter.

2. Lesson Development

This stage involves four steps where learners are taken through specific religious experiences, biblical, explanation, and application of these experiences in a real-life context.

The degree to which the student participates in the learning process and how the content is connected to the learner's relevant prior knowledge makes this method robust. Essentially, it enables learners to acquire knowledge through experience. Onsongo (2002) investigated the Life-Approach technique in teaching Christian Religious Education in Kenyan Secondary Schools. The study discovered that teachers were not appropriately equipped in pre-service training to adopt the Life-Approach technique. In effect, the teachers were unable to employ the strategy effectively. Additionally, the study's findings indicated that the difficulties associated with the instruction technique included insufficient instructions on how to utilise the approach and insufficient teaching-learning materials to support the method's implementation. The study's findings indicated that the Kenyan Education Services inspectorate division should step up teacher supervision, organise seminars and workshops on teaching religious concepts using the life-theme approach technique.

The Existential Pedagogy

The existential pedagogy emphasises individual personality, individual responsibility, individual existence, and individual freedom of choice. In effect, it operates on the principle that every individual can make meaning of their lived experiences within and outside the classroom contexts. The primary responsibilities of the religious educator within the context of the existentialist approach include the following:

The teacher is expected to serve as a resource person. In essence, the teacher is expected to serve as a guide or facilitator by using guided participation activities. Not differently, the teacher is expected to demonstrate how a concept

should be taught, which in turn helps students understand the concept simultaneously.

Second, the learner can become the centre around which an RME lesson can focus, particularly in the Junior High School settings. This is significant because it allows learners to reflect on their personal lives and lived experiences on the topic under discussion (Hull, 1993). The essence is to help the learners find meaning in life. This is significant because if a learner is able to draw on the everyday lived experiences directly linked to moral and spiritual issues, one But it takes activity-oriented pedagogy such as the existential pedagogy to provide an opportunity for learners to use their lived experiences to enhance their understanding of religious issues, which in turn enhances and promotes their moral and spiritual development. This is not surprising because this sort of pedagogy calls for critical thinking.

Concept Cracking Pedagogy

The Stapleford Project was founded in 1986 by the Association of Christian Teachers in England to develop various materials to teach religious education in schools. The Project's methodology has become known as Concept Cracking. This is detailed elsewhere (Cooling, 1994a; Cooling, 1996) but can be characterised as two-stage.

1. Stage 1 emphasises the crucial importance of teachers grasping their subject matter and being knowledgeable about the particular concepts discussed during their lesson on any given topic. The essential objectives at this step are first to identify the variety of ideas incorporated in the selected subject that could be the centre of attention in a given unit of work and, secondly, to select one or two of these concepts as the unit of

work's centre of interest. Selection will be based on some criteria, including suitability for the pupils, balance within a scheme of work, and, of course, the value of particular Christian principles.

2. Stage 2 entails developing activities that contextualise the chosen concept within the pupils' world of experience. This phase entails establishing connections or bridges with the student's world and then developing learning activities that aid the student in comprehending the religious concept and its significance to the belief and re-applying the concept to aid the student in their view of the universe. There are connections here with the activities of other initiatives, most notably the Warwick RE Project's concept of "bridges and "edification (Jackson, 1997) and the Birmingham University Project's concept of religion study as a "gift to the child" (Grimmitt, 1991; Hull, 1996).

As a practical classroom aid, the Concept Cracking technique has been simplified into four distinct processes that the acronym USER may recall. The first and second stages are represented by the first and second stages, respectively, while the third and fourth stages represent the third and fourth stages. This approach to teaching religious concepts can be illustrated using the story from the New Testament where Jesus drives away the traders from the Temple in Jerusalem.

1. Unpack the Concepts

Before teaching any subject, it is critical to understand the various theological notions that underpin it and grasp its meaning and relevance. If teachers are unclear about the concepts being addressed, pupils will

almost probably be as well. The important elements, in this case, are rage, holiness, Jesus as God's son, injustice, and judgement.

2. Select One or Two Concepts as the Focus for the Lesson

If a lesson is not focused on one or two key concepts, the pupils will become confused. In this example, the concept of righteous anger could be a suitable focus.

3. Engage with the Pupils' World of Experience

This is perhaps the hardest and yet the most important stage in the process. The key is to find parallels in the pupil's world that relate to the concept of righteous anger. One possibility would be to ask pupils to give examples of instances when they have been angry and divide these into occasions when they were right to be angry and when they were wrong to be angry. The purpose of the activity is not so much to judge the particular instances but to establish the idea in pupils' minds that there are right and wrong forms of anger and begin searching for criteria to distinguish between them. This will build the bridge between the pupils' world and the religious concept.

4. Relate to the Religious Concept

This is the point at which to introduce the story from the New Testament. An effective way of doing this is to use the painting called *Christ driving the Traders from the Temple* by El Greco (Cooling, 1998) and ask the pupils to comment on how Jesus' behaviour is portrayed in the painting. In particular, they will notice two groups of people, the object of his anger and those who are affirmed. A role play could then be used in which pupils take on the roles of members of the two groups and debate

Jesus' behaviour. Finally, there will be the need for a whole class discussion in which the question of why the Gospel writer thought Jesus' anger was justified would be explored. This should draw out themes like the importance of resisting injustice and exploitation, the holiness of the Temple, and Jesus' special relationship with God, which made his anger uniquely justifiable as far as the Gospel writer is concerned. Then pupils should be encouraged to express their views, perhaps through the medium of a diary entry from someone present in the Temple, as to whether or not Jesus' anger was justified. This can then lead to an activity where pupils reflect on justified and unjustified anger in their own lives and its management.

Steps one and two represent important preliminary work that teachers must do to clarify their understanding of the topic. This is very important as a way of giving a lesson a clear focus. However, the actual teaching will often begin with step three to ensure that the lesson is relevant. Many lessons will begin with an activity designed to bridge the pupil's world and the religious topic.

Other Pedagogical Strategies for Teaching Religious and Moral

Education

The discussion method: Myers (1986) argues that the discussion method is used in “engaging students interest, Students should be challenged, thinking processes should be presented, and an environment where active reflection and interchange replace caution and apathy should be created” (p. 54). This strategy is ideal for pupils to develop their oral communication abilities; it also aids in the clarification of students' thoughts and listening. It also provides

good practice for problem-solving. On the contrary, the method is not suitable for all topics. It is likely to be dominated by a few students, and it may involve unnecessary arguments, resulting in a waste of instructional time.

Field trip: Bwatwa (1990) argues that a field trip is an event or approach carefully prepared where a group of individuals visit areas of interest for direct observation and research. The tour on-site may range from a quick visit to a single location to a multi-day journey. A field trip technique is taught through organising on-site tours, research, and discovery. Nacino et al. (1982, p. 38) contend that field excursions are often scheduled for sites where students can observe what they have covered in class in practise or actuality. The technique gives first-hand learning experiences, enhances significance and durability. It also improves social ties between pupils and between students and teachers (Nibbelt 1980).

Unfortunately, many teachers lack the skills to organise field trips; it is time-consuming, is usually costly to be undertaken, and can throw the programme of the school out of gear. Despite the cost involved teachers, should occasionally organise field trips for students.

Dramatisation: It is the most structured dramatic activity. It is used to assist students in identifying themselves with persons, activities, and situations being studied. It requires a prepared script, memorisation of sets of lines, rehearsal, and an audience. It is principally used to show linguistic events, present life in another period, demonstrate some problems of living, and prevent the growth of a movement or an idea. Dramatisation helps sharpen the students power of observation, gives students insight into the feeling of others, provide experience in democratic living and contributes to the development of positive

values and attitudes. It also releases emotions and channels them into constructive use; it fosters group identification and social skills by allowing the young to practice various social roles (Salts and Brodie, 1982). The demerits of this method include lack of funds, lack of time, lack of resources, and language constraints.

Roleplay: Roleplay is described by Shaftel and Shaftel (1982) as “a group problem-solving in spontaneous enactment, followed by a guided decision” (p. 17). They describe role play as spontaneous acting out of a situation. It is an efficient technique for gaining insight into sensitivity and awareness. It is a potent technique for training in leadership, human relationship skills, and developing decision-making and problem-solving skills. It makes dull students active and maintains students interest in a lesson. It is also very useful for the extension of vocabulary (Shulman, 1978). The demerits of this method include the lack of time, resources, the dominance of brighter students, and language constraints.

Resource persons: A resource person assists in providing extensive information on topics, resulting in a thorough understanding of teachings. By this, lessons then become meaningful, efficient, and concretised. The use of resource persons prevents teachers from giving wrong information on a topic. Lessons become interesting, lively, and understandable (Awuah, 2000). Lack of funds, lack of resources, and non-availability of resource persons are some of the limitations of this method.

Project method: The project method promotes a democratic way of life, enhances problem-solving, promotes cooperation, creativity, freedom of speech, and generates meaningful and purposeful activities. The method is also

good for character training and creates responsibility (Akinpalu, 1981). On the other hand, the method may lack competent teachers who would use the method. It may not be suitable for students who shirk responsibility, it may be time-consuming, and there may be a lack of requisite books to guide the project work.

Lecture method: The lecture method is teaching by giving spoken explanations of the subject to learn. The lecture method provides information on topics that are not readily available or easily obtainable to students. It trains learners to be good listeners; it ensures the maximum use of students time and efforts; it improves the recall ability of learners; it has high motivational and inspirational values and provides students excellent opportunities to learn to take down notes (Tamakloe et al., 1996). The limitations of this method are that there is very little scope for pupils activity; it does not consider individual differences; it spoon-feeds the students without developing their power of reasoning, and the speed of the lecturer may be too fast for the learner to grasp the line of thought.

Question and answer method: It is a mode of instruction and learning where a teacher asks a series of questions that demands responses from learners. It is used to stimulate thought and lead to a deeper understanding. It clarifies misunderstandings and difficult issues that otherwise might not be understood through the normal teaching method. It also gives opportunities for students to go and carry out further research and inquiry about a topic. The limitations of this method include lack of vocabulary, inattentiveness, and ability to understand questions that may be posed to pupils (Flanders, 1999).

Fontana (1981) argues that some teaching methods are least explored by many teachers within the context of RME. These unexplored teaching methods

are Education drama with its sub-components - scripted and extempore drama, socio drama or role-play, and dance drama. Others are music and art, and films, tapes, and communication media. In search of teaching methods directly linked to RME, teachers Fontana and some other moral and religious education scholars argued for adopting the teaching methods mentioned. These methods of teaching and their corresponding merits are discussed as follows:

Education Drama: Education drama is broad; it includes mime, movement improvisation, play-acting, role-playing socio drama, dance, and storytelling. Education drama as a teaching method has to do with dramatization and its value on the person engaging in it. It has an important contribution to make in schools at all levels (Nduka, 1974). Ocitti (1994) emphasises that most teachers know that drama can capture and stimulate interest, making it a good motivator. Drama should, however, not be seen merely as an educational aid or a teaching method. On the contrary, drama is an imaginative living-learning experience (p.138).

Furthermore, drama is a learning experience or learning situation in its own right. Through drama, we seek to provide the child with an opportunity to expand personal experiences and examine them in depth from many different viewpoints. Majasan (1967) argues that education drama aims at creating personal and social awareness within the mindset of children. Education drama seeks to develop children's imaginative powers, self-expression, communication, awareness of the other's position, empathizing, and fostering group identification.

Music and Art: Music and art play important roles in moral education lessons. Several traditional songs have moral values embedded in them. Moral

educators can select several songs with specific values closely linked to them. Each song would be played one at a time, and the moral lessons therein are deduced by children.

Moreover, art can be used as a means of teaching religious and moral values. For example, how different artists have depicted Christ can help older pupils to appreciate how Christ has been portrayed in different pictures. For example, pictures portraying Jesus healing the sick, providing food for his followers, portraying care, love, and concern for those in need, and the need for children to emulate Jesus' example.

Films, Tapes, and Communication Media: This teaching method comprises films, tapes (compact discs), and communication media.

Films: A good film can project-specific real-life and specific religious activity directly linked to either Christianity or Islam. A case in point is a film dealing with pilgrimage in Islam and communicates essential details regarding what pilgrimage entails, the specific activities that define it, and the spiritual lessons. The timbre that defines pilgrimage is distinctive; its character; is part of the pilgrimage experience. To replace this with the monotonous description is to reduce the effectiveness of even the very best of photography (Woodhouse, 1985)

Tapes: Tape recorders are effective tools for teaching religious concepts. In essence, a tape recorder can be used to present material to pupils and can also be used by pupils to present their work. Teacher-made tapes often take a long time and much patience to produce, but they are very useful in helping students understand concepts. A case is that sounds directly linked to a depth theme meant for a kindergarten class can be introduced by a tape for the

children to interpret the sound therein. Again pupil-made tapes are not easily produced, but the time and effort expended on overcoming the technical difficulties are easily compensated for by the enthusiasm and enjoyment with which work of this kind arose in the pupils. The enthusiasm and enjoyment transferred to the topic or subject matter from simply recording their poems and songs, describing their homes and families, and accounts of their experiences; tend to contribute to children's linguistic development and the skill of looking more deeply into the things around them.

Communication Media: The last part of this subsection is communication media, including radio, telephone, newspapers (magazines included), and the internet. One of the commonest mediums of communication media is the newspaper. Producing a class newspaper with junior high school students is another way to be involved in a learning experience that has ramifications beyond their immediate situation. Hyde (1967) argues that working on a class newspaper, especially with junior high school pupils, should begin with careful consideration of the reason for newspapers; what a newspaper tries to do; what a newspaper should contain; and what goes to make a good newspaper. Hoose (2000), on the other hand, observes that if a class newspaper is decided upon, it is essential that care is taken regarding the allocation of different tasks to pupils. It helps them know what they are expected to do and the specific roles they are expected to play.

Content Knowledge of RME Teachers

Decades of educational research have conclusively proved that teachers' quality of learning opportunities impacts students' learning and motivation (Hattie, 2009). In particular, subject-matter competence is highlighted,

comprising content knowledge (CK) and pedagogical content knowledge (PCK). Both types of knowledge have impacted teachers' instructional approaches and students' mathematics learning (Baumert et al., 2010). Given the essential role of teacher knowledge in student accomplishment, teacher education can be considered a critical objective and lever for educational reform. On the other hand, comprehension of how teacher education programmes help develop professional knowledge remains limited (Cochran-Smith & Zeichner, 2005). A crucial component of teacher education research is assessing teacher knowledge. Recent improvements have led to proximally evaluating teacher expertise components (Tatto & Senk, 2011). The phrase "Content Knowledge" refers to the extent to which a teacher understands the subject being taught. According to Shulman (1986), "the instructor must understand not merely what is true, but also why it is true" (p. 9). That is why the emphasis on education is focused on a complete understanding of the subject matter covered.

On the other hand, teachers' CK is distinct from academic research knowledge obtained at higher education institutions and from the daily mathematical knowledge kept by adults after they graduate from school (Krauss, Brunner, et al., 2008). In essence, multiple decades of teaching experience appear to be a predictor of content mastery among teachers. Furthermore, this explains why instructors' content and pedagogical knowledge and interaction are predictors of good teaching.

Empirical Review

Asare-Danso (2017) evaluated tutors of Religious and Moral Education (RME) in Ghanaian educational institutions on their ability to comprehend

technology pedagogical content. Fifty tutors from Ghana's 38 public colleges of education took part in the study, which responded to a five-point Likert questionnaire with forty-five items. RME tutors in Ghana's educational institutions displayed knowledge and mastery of technological, pedagogical, and topic expertise, according to the study's findings. Additionally, they demonstrated their capacity to use their pedagogical and subject-matter expertise in a cleanroom environment. On the other hand, college tutors demonstrated their incapacity to incorporate technology into their training due to technological resources. According to the poll, college instructors should attend periodic workshops to stay current on RME themes, and instructional practises. Second, RME tutors were encouraged to develop their instructional materials. The Ministry of Education's Curriculum Research and Development Division (CRDD) should offer schools instructional materials. Finally, the Institute of Education at the University of Cape Coast in Ghana should reorganise the RME course to familiarise faculty members with contemporary pedagogical strategies such as Concept Cracking and Gift to the Child.

Owusu (2014) investigated technological pedagogical content knowledge (TPACK) in New Zealand. An online poll was used to examine the TPACK of New Zealand high school science instructors. The study's findings demonstrated that high school science instructors in New Zealand had a positive opinion of TPACK and its related dimensions. Except for technological knowledge, science teachers had high mean ratings on all five-point Likert scale dimensions. The study in question was conducted on New Zealand science instructors. Simultaneously, the study looked at the TPACK of science teachers.

On the other hand, the current study investigates the pedagogical content knowledge of RME teachers in the Ghanaian context.

Multiple embedded case studies of six active technology users in their courses were used to examine the contextual factors that influenced instructors' technology use and TPACK levels. The study discovered that science teachers used technology in various ways to assist inquiry learning at the elementary and middle school levels, but primarily to clarify ideas and techniques at the senior level. Teachers indicated various abilities and involvement in utilising technology to transfer various types of knowledge between teaching and learning environments and address learner discrepancies. This indicated that science teachers' apparent developmental levels of TPACK varied according to the context of their students' assessment requirements. This is a key finding in this study because, although previous research hypothesised that context affected teachers' TPACK characteristics and development, this study illustrates how specific parts of context affect teachers' TPACK. The study in question, however, was restricted to science teachers. However, the current study focuses on religious and moral teachers pedagogical subject understanding.

Kwakye (2016) reviewed the Department of Arts and Social Sciences Education at the University of Cape Coast's student-teacher preparation for Technological Pedagogical Content Knowledge (TPACK) (DASSE). A descriptive survey design was used to conduct the study. Stratified simple random sampling was used to select 370 DASSE student-teachers. The findings of the study indicated that the teachers possessed pedagogical content

knowledge. Alternatively, this study examines pedagogical content knowledge in relation to religious and moral education.

Pinamang and Penrose (2017) investigated pre-service teachers' content knowledge and pedagogical expertise in teaching geometric transformation in Ghana's Ashanti region's colleges of education. The study employed a quantitative approach and relied on a survey to collect data. 82 pre-service teachers from two education colleges in Ghana's Ashanti region were included in the sample. Data collection was completed through the use of the Geometric Transformation Achievement Test (GTAT). The GTAT was used to assess pre-service teachers' material and pedagogical comprehension of geometric transformation. The acquired data were analysed descriptively as well as inferentially. The findings indicated that pre-service geometric transformation instructors have a high degree of material knowledge but a limited understanding of pedagogical content.

Additionally, a correlational study was conducted to evaluate the association between pre-service instructors' content and pedagogical skill in geometric transformation. The data indicated a weak positive correlation between pre-service teachers' content and pedagogical topic knowledge, $r(82) = .044$, $p < .05$, two-tailed. As a result, educational institutions were advised to make geometric transformation content and pedagogical courses more practical and provide abundant opportunities for pre-service teachers to practise the subject they will teach in primary school.

Wahid, Bahrum, Ibrahim, and Hashim (2015) examined the mastery of art teachers in Kuala Lumpur, Malaysia, on PCK in the field of visual art appreciation. Researchers found the characteristics that influence the teaching

of art appreciation. The study employed a qualitative research methodology. Six art teachers were surveyed. They were chosen through purposeful sampling from numerous Kuala Lumpur secondary schools. Interviews and observations were used to acquire data. Art appreciation education should not be overlooked in schools to ensure that pupils appreciate art in vocal or written form. Thus, the visual art education curriculum's purpose of producing pupils capable of describing, analysing, interpreting, and evaluating artwork will be met.

In Lagos State, Nigeria, Odumosu, Ollisama, and Areelu (2018) examined the effect of teachers' content and pedagogical topic expertise on students' Algebra achievement. Using a test-retest quasi-experimental approach with a $3 \times 3 \times 2 \times 2$ factorial matrix, 421 senior high school II students and 12 mathematics teachers were randomly selected from eight (8) public and four (4) private schools in Lagos State's Education District 5. There were three instruments used. To analyse the data, graphs, and ANCOVA were utilised. Following instructors' exposure to content knowledge, the findings suggested that TCK similarly affected algebraic achievement across all subject areas. TPK, on the other hand, did not have an equivalent effect on all kids on the algebraic achievement test. Gender, on the other hand, had a substantial effect on students' algebra achievement following exposure to teachers' material and pedagogical competence.

Additionally, the study discovered that school type did not affect students' algebra achievement following exposure to instructor material and pedagogical competence. Additionally, no significant relationship existed between topic and pedagogical expertise, gender, school type, and algebra achievement. According to the study's findings, only mathematics teachers with

deep subject knowledge and good teaching background and pedagogy should teach algebra in schools.

Josiah and Oluwatoyin (2017) investigated teachers' content knowledge in secondary schools in Nigeria's Edo south senatorial zone to predict students' academic progress. A correlational investigation was conducted utilising a survey methodology. 418 secondary school mathematics and English language educators in Nigeria's Edo South Senatorial District served as the population for this study. The checklists titled "Students Academic Performance Checklist (SAPC)" and "Teacher Quality Checklist" were used to collect data (TQC). The data were analysed using the Pearson product-moment correlation coefficient. We employed frequency distributions, percentages, and the Pearson product-moment correlation coefficient. The data suggested that the quality of teachers in secondary schools in Nigeria's Edo south senatorial district was satisfactory. Academic proficiency was average among secondary school students in Nigeria's Edo south senatorial region. The academic credentials and calibre of teachers had no apparent effect on students' academic progress. It was proposed, among other things, that principals ensure that teachers' potentials are fully realised and maximised in order for their academic performance to reflect their moral excellence correctly.

Danisman and Tanisli (2017) investigated the pedagogical content knowledge of mathematics teachers in Turkey. Secondary school mathematics teachers evaluated their pedagogical content knowledge (PCK), curriculum knowledge, student understanding, and teaching strategies and tactics related to probability. The study adopted a case study design, a qualitative research approach, and enrolled 30 secondary school mathematics teachers. The data

were evaluated deductively utilising observations and semi-structured interviews. The findings reveal that these secondary school mathematics instructors' PCK regarding probability is insufficient; teachers beliefs were the primary determinants of their PCK. Additionally, one of the findings is that professional experience appears to have a limited effect on PCK. It was recommended that the topic of probability be given appropriate attention and not rushed.

Mthethwa-Kunene, Onwub, and Villiers (2015) investigated experienced biology teachers pedagogical content knowledge (PCK) and personal development in terms of school biology education in Swaziland. The study adopted a qualitative research approach, including teacher-created concept maps, pre-and post-lesson teacher interviews, video-recorded Biology lessons, and a post-lesson teacher questionnaire as data sources for the teacher knowledge base. Individual teachers' PCK profiles were dominated by procedural and declarative subject knowledge related to teaching core genetics concepts. Additionally, several teachers exhibited conditional knowledge, a kind of meta-knowledge utilised to integrate declarative and procedural information. Additionally, teachers employed a variety of topic-specific instructional tactics, including context-based instruction, visuals, peer teaching, and analogies, but did not use physical models or individual or group student experimental activities to assist students in internalising knowledge. The researchers recommend that necessary instruction be used in conjunction with teaching.

Lange, Kleickmann, and Möller (2012) examined the relationship between elementary science teachers' pedagogical content knowledge (PCK) in

the content domain “states of matter and changes of state” and advances in elementary students’ grasp of related concepts in Germany. A cross-sectional study with a quasi-experimental design was conducted on 1,326 fourth-grade pupils. The article describes the findings of a value-added research study conducted with 60 fourth-grade science classes and their teachers. Teachers’ prior knowledge and student achievement on the aforementioned scientific issue were assessed directly. Multilevel regression analysis examined the importance of teachers’ “PCK” on students’ progress in elementary science classrooms. After adjusting for significant student and teacher-level confounders, the results suggested that teachers’ PCK was highly related to students’ primary science achievement. The study suggested that increasing teachers’ PCK could increase students’ scientific learning gains.

Brain and James (2005) explored the effect of investigative laboratory instruction on content knowledge and pedagogical skills across learning styles. The authors found that both male and female students showed a significant relationship between content and pedagogical skills.

Turnuklu and Yesildere (2007) investigated the pre-service primary mathematics teachers’ pedagogical content knowledge in Turkey. The study used a survey methodology. They collected data from 45 primary mathematics teacher candidates using four open-ended tasks. Teacher candidates’ responses were evaluated using specific criteria. According to the findings, while a good command of mathematical knowledge is necessary for teaching mathematics, it is insufficient. This study revealed a relationship between mathematics expertise and understanding of mathematics teaching. It has been suggested that

candidates for primary mathematics teachers possess “mathematical knowledge” and “pedagogical content knowledge.”

Key issues Arising from the Literature Review

This chapter introduces the theoretical framework around which this study is formed, outlining the knowledge that RME teachers need to possess to teach learners effectively in the classroom. Shulman (1986) asserts that teaching requires three distinct types of knowledge: subject content knowledge, pedagogical content knowledge, and curriculum knowledge. Each of the knowledge mentioned above areas is subdivided into subcategories that teachers must demonstrate when teaching the subjects. Various studies have indicated that primary and Junior High School RME teachers have limited or insufficient SCK and PCK. According to several experts, teacher training institutions blame teachers for being unprepared to teach RME at the high school level. In essence, current teacher preparation programmes should emphasise the integration of methodology and content in education. This would promote and enhance student learning and creativity, hence enhancing the effectiveness of RME instruction. The empirical review demonstrated that gender plays a role in both content and instructional knowledge. While some research findings revealed that males and females have distinct RME regarding teaching and learning, some indicated the opposite. As a result, determining whether or not subject knowledge and pedagogical knowledge are gendered sensitives is exceedingly challenging. As a result, it is critical to perform this study to examine the PCK of RME teachers in the KEEA municipality and determine whether their PCK is gender-related.

CHAPTER THREE

RESEARCH METHODS

Introduction

This chapter dealt with how the data was collected and discussed procedures followed in conducting the research. It comprised research design, population, sample size and sampling procedures, the research instrument, data collection procedures, and data analysis procedure.

Research Design

The researcher conducted a descriptive survey to elicit RME teachers' pedagogical subject understanding in K.E.E.A Municipality. According to Best and Khan (2014), descriptive research aims to ascertain conditions or relationships, such as the nature of prevalent conditions, practices and attitudes, held beliefs, ongoing processes, or growing trends. A descriptive survey gathers data on a particular subject using interviews, questionnaires, and observation (Cohen, Manion & Morrison, 2007; Leedy & Ormrod, 2005). Polit and Hungler (1995) argue in favour of this method, stating that a descriptive survey attempts to describe, observe, and document components of a situation as they occur rather than to explain them. As a result, the approach is ideal for researchers interested in examining specific facets of a community by selecting an unbiased sample of persons who possess the necessary knowledge and awareness about the subject under inquiry.

However, the descriptive survey has limitations. Kelley, Clark, Brown, and Sitzia (2003) identified many drawbacks to its use. These include the risk that the data's significance will be overlooked if the researcher is too concerned with the breadth of coverage at the expense of an appropriate analysis of the

data's implications for pertinent issues, problems, or ideas. Additionally, respondents' private lives may be monitored, increasing the likelihood of incorrect responses and complicating the evaluation of the coherence and accuracy of the questions that produce the intended responses (Fraenkel & Wallen, 2000). Though there are limitations and drawbacks, the descriptive survey approach was deemed the most appropriate for determining the extent to which spiritual (religious) and moral teachers perspectives on PCK influence students spiritual and moral growth in a school setting. MacMillan (1996) observes that descriptive studies provide insights regarding a phenomenon by using descriptive statistics. This is significant because it gives the researcher an in-depth understanding of the phenomenon under investigation within a particular research context. The study aims to understand how PCK influences young people's spiritual (religious) and moral fabric within the classroom setting.

The reason for using a descriptive survey is to understand a complex phenomenon such as teachers' PCK in detail, enhancing an in-depth analysis of diverse issues therein. These issues include how to integrate content and pedagogy in an ingenious way to shape the moral fabric of young people and how specific content should be taught to achieve the desired learning outcomes. Moreover, a descriptive survey design would enable the researcher to understand how content and pedagogy can effectively be utilized within the classroom setting to influence effective teaching and learning within the classroom context.

Population

Ary, Jacobs, and Rezavieh (2002) define a population as “the entire group of individuals to whom a study’s findings apply.” It refers to any group from whom the researcher wishes to draw conclusions. Additionally, Agyedu, Donkor, and Obeng (2013) define “population” as “the total collection of humans (subjects), objects, or events that share observable characteristics and are of interest to the researcher” (p. 89). Castillo (2009) attempted to differentiate two distinct populations, namely the target and accessible populations.

The word “target population” refers to the total group of persons about whom a researcher seeks to make generalisations. On the other hand, the accessible population refers to a group of participants who consent to engage in the study, and the study sample can be chosen from this group (Castillo, 2009).

The study’s target population was all teachers at RME Junior High Schools in Ghana’s Central Region. The region is divided into 22 districts and employs approximately 1496 teachers at RME Junior High School. On the other hand, the accessible population includes all RME Junior High School teachers in the Central Region municipality of Komenda-Edina-Eguafo Abirem. The total number of circuits in the Municipality was eight (8), and they were labelled from 1-8; it included the Agona (1), Ayensudo (2), Elmina (3), Kissi (4), Komenda (5), Dominate (6), Essama (7) and Ntranoa (8) circuits. The total number of public Junior High Schools in the municipality was sixty-eight (68), and the total number of teachers who teach at the public junior high schools in the Municipality was five-hundred and ninety-five (595). In these schools, there were 130 RME teachers in all. Therefore, the total number of the teachers who

constituted the accessible population for the study was 130 JHS Religious and Moral Education teachers in the Komenda-Edina-Eguafo-Abirem Municipality. The researcher was interested in focusing exclusively on public JHS since most teachers in public schools are professional, spiritual (religious), and moral educators compared to private institutions. While these non-professional teachers may possess subject-matter expertise, it is considered that they lacked basic pedagogical skills for teaching the subject.

Sample and Sampling Procedure

Sampling is selecting a population to serve as a representative of the total population (Muijs, 2004; Alhassan, 2006). Purposive sampling was used to identify all circuits within the study region, and the same sampling technique was used to identify all public junior high schools inside the Municipality's various circuits. The Municipality had a total of sixty-eight public junior high schools (68). The public schools were chosen because it was anticipated that RME teachers in public junior high schools possessed the necessary content knowledge and instructional skills to facilitate the effective teaching and learning of concepts. This was to ensure that the appropriate participants are used for the research. The purposive sampling technique allowed the researcher to hand-pick the participants (in this case, the circuits and public junior high schools) to be included in the sample based on their peculiar characteristics being sought (Cohen, Manion, & Morrison, 2011). Thus, the researcher develops a sample that is enough for the research's specific demands.

One of the most critical sampling processes in survey design is establishing the sample size that adequately represents the sample's population. If the sample size is sufficiently large in a descriptive survey, the study results

should be generalisable to the entire population (Gay, Mills & Airasian, 2009; Mertens, 2010). Numerous strategies can be employed to guarantee that the sample is representative, including choosing the sample size, accurately characterising the population, and avoiding sampling error and bias (Mertens, 2010). Sample size determination is concerned with the amount of data required to make suitable conclusions about a certain study. If there is sufficient data, it is more probable that mistakes will be reduced (Abraham & Russell, 2008). To ensure that all-important subgroups of teachers were represented in the study, the researcher randomly selected RME teachers based on their training, grade level, years of experience, and school level (Gay, Mills, & Airasian, 2009).

The census technique was used to choose RME instructors at the KEEA Municipality's several public JHS. The study enrolled 130 RME teachers. According to Harding (2013), a census is a term that refers to an attempt to collect data from every member of a population rather than just a sample. According to Harding (2014), a census aims to collect data from every person of interest – the study's universe of targets. Cooper and Schindler (2008) assert that when a population is little, a census is feasible (p.164).

The researcher used this strategy to select and involve all JHS RME teachers in the Municipality in completing the questionnaire. Bhanu (2011) argued that regardless of how correctly a sample from a population is generated, there will always be a margin of error, whereas censuses take the entire population into account and are thus the most accurate. Thus, as Bhanu emphasises, the census was chosen since the estimations are not vulnerable to sampling error. On this score, the census technique was deemed appropriate. The choice is consistent with Patton's (2009) assertion that a large sample size

makes it possible for a study's findings to be generalised to the population linked with the sample that informed the study. The total number of teachers in each of the six circuits is presented in Table 1.

Table 1: Sample frame of teachers sampled from each sampled circuits

Circuit	Sample of JHS	Number of Teachers
Circuit 1	12	23
Circuit 2	9	17
Circuit 3	6	11
Circuit 4	9	18
Circuit 5	7	13
Circuit 6	10	19
Circuit 7	8	15
Circuit 8	7	14
Total	68	130

The data presented in Table 1 indicate eight circuits in the Municipality with 68 Junior High Schools and 130 RME teachers. Out of the 130 RME teachers, 67 were males representing (55.8%), and 53 were females representing (44.2%)

Data Collection Instruments

Two research tools were utilised to obtain important data on public junior high school RME teachers' PCK. This was accomplished through the use of a questionnaire and an observation checklist. The researcher developed and verified the instruments used in the study in cooperation with his supervisor and the literature. Triangulation is possible through the use of multiple data collection procedures or technologies (Creswell, 2003). Triangulation is the

process of correlating facts from disparate sources to throw light on a certain subject or topic. Additionally, these instruments were utilised to compensate for one another's shortcomings.

The self-developed questionnaire was named Pedagogical Content Knowledge Inventory (PCK Inventory) and was anchored on a five-point Likert scale ranging from "Strongly Disagree to Agree Strongly." The PCK Inventory was divided into four (4) sections, A, B, C, and D (Appendix C). "Section A" sought to collect data on the demographic characteristics of the respondents. This data comprised gender, age, teaching experience, and the academic qualification of the respondents. The second section (B) consisted of a five-point Likert scale item that was structured to gather data on the perception of content knowledge of RME teachers (items 6 – 14). Section C focused on items relating to the pedagogical knowledge (items 15 – 24), while Section D focused on pedagogical content knowledge (items 25 – 32). A questionnaire was appropriate for this study it elicits the respondent's views about pedagogical content knowledge (Fraenkel & Wallen, 2009).

The observation was also used to collect part of the data for this study. The observation guide was self-designed and named Pedagogical Content Knowledge Observation Guide (PCKOG). The PCKOG boarded on how RME teachers were implementing their pedagogical content knowledge in the classroom (See Appendix C). The PCKOG was a checklist that contained seven items. The lesson observation guide required background information on the teachers, time and date of observation, as well as the identification of the school. The main part of the PCKOG was a four-item structure that aimed at rating the Pedagogical Content Knowledge of the teachers. According to Randolph

(2007), observation is when a researcher observes the phenomenon under study and records what is seen for analysis. The guide used in this study enabled the researcher to ascertain exactly what was going on in the classrooms. The observation provided the researcher with the opportunity to follow up on the results emanating from the questionnaire.

Validity and Reliability of Instruments

In the understanding of Creswell and Plano-Clark (2007), Validity serves to check on the quality of the data and the results. Golafshani (2003) opined that validity and reliability are very important in a triangulated study where multiple data collection and analysis methods are employed to investigate a phenomenon. The research instruments used in this study (PCK Inventory and PCKOG) were subjected to test reliability and validity.

To check the instrument's content validity, drafts of instruments (questionnaire and observational guide) were given to the researcher's supervisors (2 supervisors), who were content experts in the field of RME and PCK. The experts were asked to state whether or not a certain item on the various instruments was required to operate a construct contained inside a group of items. To this purpose, they were asked to rate each item on a scale of 1 to 3 on a three-degree scale of "not essential," "helpful but not important," and "essential." Polit and Beck (2006) estimate that the content validity ratio ranges between 1 and -1. The supervisory indication outcome was analysed to establish convergence using the Content Validity Index (CVI) formula given by Polit and Beck (2006). The researchers proposed the index by averaging the items and dividing them by the number of items. For the questionnaire, 30 items instrument was submitted to the various supervisors. The number of items on

the questionnaire rated essential by all the experts combined was $25 + 26 = 51$. The total numbers of items rated were 60, thus $30 + 30 = 60$. Dividing the relevant rated items by the total number of items is $51 \div 60 = 0.85$. A similar procedure was followed for the other instrument, and the result that emerged was 0.88. This gave a Content Validity Index of 0.85 and 0.88 to the questionnaire and observational guide, respectively, implying that the instruments would elicit the correct data for the study. The suggestions given were used to effect the necessary changes to improve upon the instrument's validity.

Following validation, a pretest was conducted, during which questionnaires were sent to students at several selected schools throughout the Cape Coast Municipality. The data were analysed, and the instrument's reliability coefficient was calculated using Cronbach's alpha. The outcome indicates that the questionnaire instrument's coefficient of determination is 0.898. Cronbach's Alpha reliability coefficient values of 0.70 and more are regarded as reliable, according to Creswell (2007). The reliability measurements for the various questionnaires indicated that the respondents in the pretest consistently responded to most of the items in the questionnaire for the final draft of both questionnaires (see Appendix C & D).

Data Collection Procedure

An introductory letter was obtained from the Department of Basic Education, which enabled the researcher to obtain permission from the Institutional Review Board and the District Director of Education in the K.E.E.A Municipality. The researcher completed questionnaires. Respondents were informed of their privacy before administration and subsequent

completion of the questionnaire, and all information submitted will be kept confidential. Certain aspects in the questionnaire that did not make sense to responders were clarified and explained.

Data Processing and Analysis

Upon retrieving the questionnaires, the responses were edited to ensure that the responses were completed. Serial numbers were assigned to the questionnaires before they were imputed into the SPSS software to track possible challenges easily. While the negative statements were coded in the reverse order. The scores of the various the positive statements of the Likert scale were coded as “Strongly agree” (SA) = 5, “Agree” (A) = 4, “Disagree” (D) = 3, and “Strongly Disagree” (SD) = 2 and “Uncertain” (U) = 1. Items were then fed into a computer programme known as Statistical Package for the Social Sciences (SPSS) version 22, software for data analysis. The data analysis was informed by the research questions which guided the study. Descriptive statistics were used to analyze the research questions (frequencies, percentages, means, and standard deviation). At the same time, the data for the hypotheses were analysed through ANOVA and an independent-sampled t-test.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

This chapter discusses the data analysis and discussion. The study collected data on Religious and Moral Education teachers' Pedagogical Content Knowledge (PCK) at the junior high school level in the Municipality of Komenda-Edina-Eguafo-Abirem. This study aimed to examine the Pedagogical Content Knowledge (PCK) of Religious and Moral Education teachers at the junior high school level in the Municipality of Komenda-Edina-Eguafo-Abirem. The results were analysed and evaluated in light of the study's research questions. The study gathered data from 120 (92.31%) of the 130 RME teachers who agreed to participate. The chapter is divided into two parts. The first section of the chapter discusses the respondents' backgrounds, while the second section presents and discusses the study's conclusions.

Background Information of the Respondents

This section deals with the information collected on the background of the respondents. The characteristics of the respondents discussed in this section include gender, age, years of teaching experience, educational level, and professional qualification. Table 1 – 4 present the background information of the respondents.

Table 2 – Sex of Respondents

Sex	N	%
Male	67	55.8
Female	53	44.2
Total	120	100.0

Source: Field survey, Amuah (2019).

(N=120)

Table 2 shows the sex distribution of the Religious and Moral Education (RME) teachers involved in the study. The results indicated that 67(55.8%) of the RME teachers were males, and 53(44.2%) teachers were females. By implication, there were more males than female participants in the study.

Table 3 – Age distribution of Respondents

Age	N	%
21-25years	12	10.0
26-30years	16	13.3
31-40 years	44	36.7
41 years and above	48	40.0
Total	120	100.0

Source: Field survey, Amuah (2019) (N=120)

Table 3 displays the ages of the RME teachers involved in the study. From the results, it can be seen that 12(10.0%) of the respondents were between the ages of 21-25years, 16(13.3%) of them were between the ages of 26-30 years, 44(36.7%) were between 31 – 40 and 48(40.0%) were 41 years and above. The finding suggests that a vast percentage of the respondents were aged 41 years and above, totalling 48 (40%) out of the 120 respondents. The age distribution of the respondents suggests that they had the requisite experiences to teach RME. The findings on the years of teaching experience of the respondents are presented in Table 4.

Table 4 – Years of Teaching Experience of Respondents

Year	N	%
Below 1 year	13	10.8
2-5 years	35	29.2
6-10 years	39	32.5
11 years and above	33	27.5
Total	120	100.0

Source: Field survey, Amuah (2019). (N=120)

Table 4 shows that 107(89.2%) of the RME teachers in the Komenda-Edina-Eguafo-Abirem-Municipality had taught for more than two years. It can be discerned that most RME teachers have the requisite teaching experiences to enhance their pedagogical content knowledge.

Table 5 – Professional Qualification of Respondents

Professional Qualification	N	%
Teachers' Cert A	22	18.6
Diploma in Education	53	44.9
Post Graduate Diploma in Education	9	7.6
Bachelor of Education	32	27.1
Masters in Education	2	1.7
Total	120	100.0

Source: Field survey, Amuah (2019). (N=120)

Table 5 shows the professional qualifications of the RME teachers who participated in the study. The results revealed that 22(18.6%) of them had Cert A, 53(44.9%) had a diploma in Education, 9(7.6%) of them had Post Graduate

Diploma in Education (PGDE), 32(27.1%) of them had Bachelor of Education, and 2(1.7%) of them had Masters in Education. The results suggest that more teachers, 87(72.5%), have the requisite pedagogical and/or content knowledge. This implies that most respondents had knowledge and understanding of content and pedagogy and how synergy can enhance moral and spiritual development.

Findings related to Research Questions

Research Question One: What content knowledge do RME teachers in the Komenda-Edina-Eguafo-Abirem Municipality possess?

The first research question aimed at exploring the level of content knowledge of junior high school RME teachers in the KEEA Municipality. The findings in relation to the question are presented in Table 6.

Table 6 - Descriptive Results on Content Knowledge (CK) of RME

Teachers

Statement	M	SD	MR
1. RME can be taught by all teachers	4.63	4.80	1 st
2. I possess knowledge and understanding about the goals of RME teaching in Ghana	4.59	.72	2 nd
3. I demonstrate knowledge and understanding when teaching concepts in contemporary issues	4.51	.81	3 rd
4. I understand RME concepts well enough to be able to teach	4.20	1.03	4 th
5. I possess knowledge and understanding regarding diverse topics in Christian Religion	3.78	1.29	5 th
6. I possess knowledge and understanding regarding all topics on moral issues in the JHS RME syllabus	3.72	2.18	6 th
7. I possess knowledge and understanding regarding all topics in African Traditional Religion topics	3.36	1.35	7 th
8. I possess knowledge and understanding regarding diverse topics in Islamic Religion topics	3.31	1.45	8 th
9. I have in-depth knowledge in topics on social issues in the JHS RME syllabus	3.22	1.38	9 th
Mean of means/Standard Deviation	3.92	1.67	

Source: Field Survey, Amuah (2019)

(N=120)

Table 6 shows the results on the Content knowledge level of RME teachers in the Komenda-Edina-Eguafo-Abirem Municipality in the central region of Ghana. It can be discerned from the table that a majority of RME teachers agreed that RME could be taught by all teachers ($M = 4.63$, $SD = 4.80$). It was also from the responses that RME teachers strongly agreed that they possessed knowledge and understanding about the goals of RME teaching in Ghana ($M = 4.59$, $SD = .72$). Again, the responses as presented in Table 6 revealed that the RME teachers demonstrated adequate knowledge and understanding when teaching concepts in contemporary issues ($M = 4.51$, $SD = .81$). It can be deduced from the study's finding that RME teachers had a mastery of content. Regarding teachers knowledge of RME concepts, the respondents affirmed that they understood RME concepts well enough to teach ($M = 4.20$, $SD = 1.03$). They further revealed that they possessed knowledge and understanding regarding diverse topics in Christian Religion ($M = 3.78$, $SD = 1.29$), in all Islamic Religion topics ($M = 3.31$, $SD = 1.45$), and African Traditional Religion topics ($M = 3.36$, $SD = 1.35$).

From Table 6, it can further be discerned that the teachers possessed knowledge and understanding regarding all the topics in African Traditional Religion ($M = 3.36$, $SD = 1.35$). The study further established that they had in-depth knowledge ($M = 3.31$, $SD = 1.45$) regarding all the topics in Islamic as well as having in-depth knowledge in topics on social issues ($M = 3.22$, $SD = 1.38$). This finding corroborates Clark's (2013) assertion that in-depth content knowledge serves as one of the key elements that define quality education because it serves as a critical element of quality education delivery in schools.

In all, the overall mean of means, standard deviation, and kurtosis values for the Content Knowledge preparedness of Religious and Moral Education teachers in Komenda–Edina–Eguafo–Abirem Municipality in the central region of Ghana rated 3.92, and 1.67 respectively. In essence, the research evidence suggests that the RME teachers content knowledge was robust.

Research Question Two: What is the pedagogical knowledge (PK) of JHS teachers in teaching RME in the Komenda-Edina-Eguafo-Abirem Municipality?

Research question 2 (two) sought to explore the pedagogical knowledge (PK) level of JHS Religious and Moral Education teachers in the Komenda-Edina-Eguafo-Abirem Municipality in the central region of Ghana. The results are presented in Table 7.

Table 7- Results on Pedagogical Knowledge (PK) of RME Teachers

Statement	M	SD	MR
	Test Value=3.0		
1. I have an adequate understanding of the lesson plan preparation	5.13	4.61	1 st
2. I employ a variety of teaching approaches in a classroom setting	5.09	4.63	2 nd
3. I have knowledge in the classroom and maintenance of discipline in the classroom	4.77	.53	3 rd
4. I have much knowledge about the application of cognitive, social development theories of learning in the classroom	4.69	.61	4 th
5. I often employ the discussion method in teaching	4.66	.53	5 th
6. I mostly use problem-solving and discovery learning during the instructional period	4.60	.61	6 th
7. I often employ role-play in teaching	4.59	4.78	7 th
8. I adopt my teaching technique to different learners	4.57	.93	8 th
9. I often employ video in teaching	4.25	1.10	9 th
10. I have adequate knowledge and understanding of how to apply value clarification in teaching	4.23	1.10	10 th
Mean of Means/Average Standard Deviation	4.69	1.32	

Source: Field Survey, Amuah (2019)

(N=120)

Table 7 shows the results on the pedagogical knowledge of RME teachers in the Komenda-Edina-Eguafo-Abirem Municipality in the central region of Ghana. It was observed from the table that respondents possess adequate understanding regarding lesson plan preparation ($M=5.13$, $SD=4.61$). The RME teachers further indicated that they employed various teaching approaches in their classrooms ($M=5.09$, $SD=4.63$). Also, the teachers revealed that they had insights into how to promote discipline in their classroom ($M=4.77$, $SD=.53$). Judging from the results, it can be concluded that RME teachers possessed adequate pedagogical knowledge to enhance and promote students understanding of concepts taught in class, promoting the development of children's moral and spiritual in diverse ways (Koehler & Mishra, 2005).

On the issue of teacher's level of understanding of the organisation of their lessons, the study's finding indicated that RME teachers had an in-depth knowledge regarding concepts they teach ($M=4.69$, $SD=.61$). The RME teachers further pointed out that they often employed the discussion method in teaching ($M=4.66$, $SD=.53$). Teachers showed that they were knowledgeable on problem-solving and discovery learning during the instructional period ($M=4.60$, $SD=.61$). The study's findings suggest that RME teachers had an in-depth knowledge of the different teaching methods, lesson preparation, and classroom assessment techniques. Furthermore, RME teachers pointed out that they often employ role-play in teaching ($M=4.59$, $SD=.478$).

Finally, the teachers indicated that differing learning needs of learners informed their choice of instructional strategy ($M=4.57$, $SD=.93$). They further revealed that they often employ video in teaching ($M=4.25$, $SD=1.10$) and have adequate knowledge and understanding of the value clarification approach

($M=4.23$, $SD=1.10$). By implication, content knowledge is closely linked to the teacher's ability to identify and use appropriate pedagogy within the context of a specific lesson because the individuality or the uniqueness that children bring to the learning context determines the choice of instructional strategy. The overall mean of means and standard deviation values for the Pedagogical Knowledge level of Religious and Moral Education teachers in Komenda-Edina- Eguafo-Abirem Municipality in the central region of Ghana was rated 4.69 and 1.32, respectively. In effect, the Pedagogical Knowledge (PK) level of RME teachers was very high.

Research Question Three: What is Pedagogical Content Knowledge (PCK) of RME teachers in the Komenda-Edina-Eguafo-Abirem Municipality?

Research question three explored the Pedagogical Content Knowledge (PCK) of Religious and Moral Education teachers in the Komenda-Edina-Eguafo-Abirem Municipality in the central region of Ghana. The results are presented in Table 8.

Table 8 presents the Pedagogical Content Knowledge of RME teachers in the Komenda-Edina-Eguafo-Abirem Municipality. It can be observed from the table that they have the knowledge and how to effectively combine content and pedagogy within the teaching and learning process ($M=4.77$, $SD= 1.70$). Again, the study finding revealed that RME teachers could present content that met the learning needs of students ($M=4.74$, $SD= 1.71$). The teachers further revealed that they could effectively integrate subject matter and instructional strategies to meet the learning needs of individual learners ($M=4.06$, $SD=1.07$).

Table 8 - Results on Pedagogical Content Knowledge of RME Teachers

Statement	Mean	SD	MR
	Test Value=3.0		
1. I can combine content and pedagogy effectively in the teaching and learning process	4.77	1.70	1 st
2. I can present the subject matter to diverse interests and abilities of students	4.74	1.71	2 nd
3. I can effectively integrate subject matter and instructional strategies to meet the learning needs of individual learners	4.06	1.07	3 rd
4. I have techniques in assessing students understanding and diagnosing the level of understanding of concepts during teaching	4.01	1.13	4 th
5. I possess the essential characteristics required for teaching and addressing complex issues	3.93	1.15	5 th
6. I can establish a purposeful learning environment	3.81	1.18	6 th
7. I can select appropriate teaching methods to teach a specific content	3.61	1.17	7 th
8. I can foster critical thinking in students by relating content to students lived experience	3.57	1.32	8 th
Mean of means/Standard Deviation	4.10	1.10	

Source: Field Survey, Amuah (2019) (N=120)

Key-SD =Standard Deviation, MR=Means Ranking, N=Sample Size

On assessing students learning outcomes, the study's finding revealed that the teachers had several assessment strategies to determine learner's level of achievement in any teaching and learning context (M=4.01, SD=1.13). Whether teachers could address complex issues in class (M=3.93, SD=1.15) suggests that they could address such issues because they could effectively blend content and pedagogy to deal with complicated issues whenever they are confronted. On the issue of whether the teachers could establish a purposeful

learning environment ($M=3.81$, $SD=1.17$). In effect, the study's findings suggest that the learning needs were effectively dealt with in class, finally, on the issue of whether the content was directly linked to children's lived experiences ($M=3.57$, $SD= 1.32$). In essence, the concepts thought in the class had a bearing on the children's everyday experiences within and outside the home setting.

Overall, the study's findings suggest that the teachers had a piece of in-depth knowledge and understanding about pedagogical knowledge because they had insight regarding how to use effective pedagogy to enable children's understand complex concepts taught in class. This is not surprising because every child can understand concepts that appear difficult to explain. Because if a teacher has insights into the nature of children and how they learn, the teacher can use developmentally appropriate strategies to enhance and promote children understanding of concepts taught within and outside the classroom setting. The overall mean of means and standard deviation ($M= 4.10$, $SD= 2.10$) implies that RME teachers in the Komenda-Edina-Eguafo-Abirem Municipality possessed pedagogical Content knowledge.

The result from the observation checklist shows a mean value of ($M =4.89$; $SD = 0.62$), attesting that RME teachers in the Komenda-Edina-Eguafo-Abirem municipality were very competent because they were able to effectively combine content and pedagogy in every teaching and learning context. The study's findings support Dinama's (2013) claim that teachers can integrate content and pedagogical knowledge. But the mean value ($M = 2.69$; $SD = 1.05$), ($M = 2.63$; $SD = 1.09$) and ($M = 2.58$; $SD = 1.07$) suggest RME teachers in the

study context were somehow competent in blending teaching strategies with the subject matter to enhance students understanding of concepts.

Results from Observation Check List

Table 9- Results from Observation Check List

PCK	Mean	SD
1. Teachers can combine content and pedagogy effectively in the teaching and learning process	4.89	0.62
2. RME teachers apply values clarification in teaching specific subject matter.	2.69	1.05
3. RME teachers have techniques in assessing students understanding and diagnosing the level of understanding of concepts during teaching.	2.45	1.14
4. Teachers possess the essential characteristics required for teaching and addressing complex issues	2.52	1.20
Mean of Means/Average Standard Deviation	2.96	1.02

Source: Field survey, Amuah (2019). (N=120)

Scale: 1= Not at all competent, 2=Somehow competent, 3=Competent, 4=Very competent

Overall, the study's findings revealed that the RME teachers possessed the essential characteristics required for teaching and addressing complex issues (M=2.52; SD=1.20). An overall mean score of (M= 3.13; SD=1.00) was found for the observation checklist. These findings agree with the earlier findings that the PCK level of RME teachers in the Komenda-Edina-Eguafo-Abirem Municipality was high.

Results from the Hypotheses

The following hypotheses were formulated to guide the study and were tested at 0.05 level of significance:

Hypothesis 1

H₀: Years of teaching experience do not account for significant differences among JHS RME teachers pedagogical content knowledge in the Komenda-Edina-Eguafo-Abirem Municipality.

The purpose of hypothesis one was to find out whether a significant difference existed within teachers years of teaching experience in terms of their Pedagogical Content Knowledge (PCK). Table 10 – 12 presents the obtained results of the differences.

Table 10 – Test of Normality

	Years of teaching experience	Shapiro-Wilk		
		Statistic	Df	Sig.
Pedagogical Content Knowledge	Below 1 year	.894	13	.109
	2-5 years	.957	35	.188
	6-10 years	.703	39	.000
	11 years and above	.744	33	.000

Source: Field survey, Amuah (2019).

(N=120)

From Table 10, the result for the “Below 1 year and “2-5 years groups on the dependent variable, “Pedagogical Content Knowledge (PCK),” was normally distributed. This is because of the Sig. value of the Shapiro-Wilk Test is greater than 0.05. However, for “6-10 years and “11 years and above groups, the dependent variable “Pedagogical Content Knowledge (PCK)’ was not

normally distributed. This is because of the Sig. value of the Shapiro-Wilk Test is lesser than 0.05.

Table 11 – Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
.929	3	116	.429

Source: Field survey, Amuah (2019). (N=120)

Table 12 – ANOVA of Years of Teaching Experience with Regards to Pedagogical Content Knowledge

Group	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	382.664	3	127.555	1.024	.385
Within Groups	14455.302	116	124.615		
Total	14837.967	119			

Source: Field survey, Amuah (2019). (N=120)

From the one-way ANOVA, $F(3, 116) = 1.024, p = .385$. The result shows no significant difference within teachers years of teaching experience in terms of Pedagogical Content Knowledge (PCK). Hence, the researcher failed to reject the null hypothesis. The study’s finding was not in sync with Dinama’s (2013) assertion that teachers who had taught for several years tended to have robust content knowledge.

Hypothesis 2

H_0 : There is no statistically significant difference between pedagogical content knowledge of male and female RME teachers.

H_1 : There is a statistically significant difference between pedagogical content knowledge of male and female RME teachers.

The essence of this hypothesis was to find out whether a statistically significant difference existed between pedagogical content knowledge of male and female JHS RME teachers. In order to identify the significant difference between the gender of teachers and their pedagogical content knowledge, the obtained data were analysed using an independent sample t-test. The independent variable was the gender of Religious and Moral Education student-teachers, and the dependent variable was pedagogical content knowledge.

In order to obtain the dependent variable, items on the questionnaire which sought to measure pedagogical content knowledge of Religious and Moral Education teachers were transformed to obtain the mean value. The independent sample t-test was used to identify the difference between the dependent and independent variables at a significance level of 0.05. Table 13 presents the obtained results of the differences.

Table 13 – T-test Results on Difference between Gender and Pedagogical Content Knowledge of Religious and Moral Education Teachers

Gender	Mean	SD	<i>T</i>	Df	<i>P</i>
Male	3.945	0.958	0.461	118	0.650
Female	3.859	1.090	0.454		

Source: Field survey, Amuah (2019). (N=120)

Table 12 shows the difference between pedagogical content knowledge (PCK) of male and female Religious and Moral Education Teachers. Results from Table 12 indicate no statistically significant difference between Pedagogical Content Knowledge (PCK) of male and female Religious and Moral Education Teachers. This is evident as (M= 3.96, SD = 0.958) was found

for RME male teachers and RME female teachers ($M = 3.86$, $SD = 1.090$); $t(118) = 0.461$, $p > 0.05$, ($p=0.650$). This means that there is no statistically significant difference between gender and Pedagogical Content Knowledge (PCK) of Religious and Moral Education Teachers. Therefore, the researcher failed to reject the null hypothesis.

Discussion of the Findings

The purpose of this study was to assess the pedagogical content knowledge of RME teachers at the Basic School level and its impact on teaching in the K.E.E.A Municipality. The findings of the study are addressed in this section under five subheadings: Content Knowledge (CK); Pedagogical Knowledge (PK); Pedagogical Content Knowledge (PCK); and the influence of years of teaching on the PCK of JHS RME teachers in the Komenda-Edina-Eguafo-Abirem Municipality. The results are discussed in light of both international and domestic literature.

Content Knowledge (CK) of RME Teachers

The first theme, which was encapsulated in the first research question, sought to explore the level of content knowledge of junior high school RME teachers in the KEEA Municipality. From the analysis, there was clear evidence that most respondents possessed an in-depth knowledge of the junior high school RME subject. Based on this finding, it could be inferred that the teachers had the requisite knowledge and understanding to teach RME concepts effectively. The result of the study on the Content Knowledge (CK) of RME teachers is consistent with previous literature. This finding is in tandem with the findings of Archambault and Crippen (2009) designed a survey instrument to assess teachers' TPACK for K-12 online teachers and reported that teachers

expressed confidence in their subject knowledge. It is also in tandem with the findings of O'Brien (2015) and Jordan (2013), who argued that teachers content knowledge is more highly rated than any of the other components of TPACK. Again, Kankam, Bordoh, Eshun, Bassaw, and Andoh-Mensah (2014), Hughes (2004), McCrory (2004), Margerum-Leys and Marx (2002); Niess (2005); Slough and Connell (2006) revealed that most teachers have some appreciable level of content knowledge in their field of study. As observed by Pundt and Duit (2000), content is not static but an evolving phenomenon.

Moreover, teachers who fail to recognise this fact would at a point be found wanting. The implications underpinned in the result support the argument of Koelher and Mishra (2009) that teachers who have the requisite knowledge can effectively teach every aspect of the RME content. This is not surprising because content knowledge is a key element in teacher education programmes in Ghana and many parts of the world. The study's finding aligns with Dinama's (2013) claim that content knowledge forms part and parcel of critical elements that enhance and promote effective teaching and learning of concepts directly linked to young people's moral and spiritual development.

The study's conclusions were inconsistent with those of other studies. For instance, an Obeng, Opare, and Dzinyela (2003) study discovered that trainees lacked sufficient subject area content knowledge. Akyeampong and Furlong (1999) previously noted that graduates are ill-equipped to facilitate learning in elementary schools. Quagrain (1999) also made a similar observation that most beginning teachers are seen as woefully unprepared for the complex and demanding tasks of the classroom.

Pedagogical Knowledge (PK) of RME teachers

Research question two also aimed at exploring the pedagogical knowledge (PK) level of JHS Religious and Moral Education teachers in the Komenda-Edina-Eguafo-Abirem Municipality in the central region of Ghana. The study's finding suggested that Religious and Moral Education teachers in the study area possessed an appreciable degree of pedagogical knowledge. In other words, the respondents possessed knowledge on how students constructed knowledge and what it took to enhance and promote young people's spiritual and moral values. This confirms the findings of Archambault and Crippen (2009), who in a study reported that the pedagogical knowledge of teachers was adequate. Jordan (2013) also reported that teachers pedagogical knowledge was rated high in the TPACK model. This is welcome news as Farrant (1980) believes that teachers' high pedigree in pedagogy enables them to deliver for the benefit of most learners in a particular class. More so, these findings resonate with that of several scholars such as Mishra, Koehler, Shin, Wolf, and DeSchryver (2010), who posited that teachers insights about methods of teaching, the nature of the learner, and how learners learn, which in turn, deal with the learning needs informs spiritual and moral values that every learner brings to the learning context. The study's findings corroborate Abbitt's (2011) argument that pedagogical knowledge covers instructional strategies, theories, and concepts. Harris Mishra and Koehler (2009), Koehler and Mishra (2005) stated that pedagogical knowledge is more than that. It comprises an understanding of how kids learn, the development and implementation of instructional activities, classroom management, and student assessment. In effect, pedagogical content knowledge is a complex topic. Moreover, teachers

acquire this intelligence via years of practice and continued professional development.

Pedagogical Content Knowledge (PCK) of RME teachers

The third research question intended to explore the Pedagogical Content Knowledge (PCK) of Religious and Moral Education teachers in the Komenda-Edina-Eguafo-Abirem Municipality in the central region of Ghana. The findings revealed that the Pedagogical Content Knowledge (PCK) level of Religious and Moral Education teachers in the study area was above average, and they were able to effectively blended pedagogy and content in the teaching of the RME.

This was consistent with O'Brien's (2015) results that teachers did not prove that technology might transform material or taught, hence how students learned. To this end, he determined that technological knowledge influenced teachers' self-assessment across TPACK categories compared to their pedagogical and content expertise. Abbitt (2011) asserted that pedagogical content knowledge entails the teacher's ability to choose an educational method supported by developmental processes that contribute to children's conceptual understanding. This assertion is consistent with Schmidt, Baran, Thompson, Mishra, Koehler, and Shin's (2009) finding that PCK is a vital component of teacher education programmes because it provides teachers with insights about acceptable content and pedagogy teaching specific concepts.

Influence of years of teaching on JHS RME teachers PCK

The purpose of this theme was to find out whether a significant difference existed within teachers years of teaching experience in terms of their Pedagogical Content Knowledge (PCK). The study found no statistically

significant difference among the years of teaching experience of JHS teachers with regard to their pedagogical content knowledge in RME. The study's finding was not in sync with Dinama's (2013) assertion that teachers who had taught for several years tended to have robust content knowledge.

Difference between male and female JHS RME teachers PCK

The purpose of this theme was to determine whether a statistically significant difference existed between male and female JHS RME teachers in the study area in terms of pedagogical content knowledge. The findings suggest no statistically significant difference in pedagogical content knowledge between male and female JHS teachers in K.E.E.A. The findings from this study and debate suggested that the gender of teachers does not affect their Pedagogical Content Knowledge (PCK) in Religious and Moral Education. In essence, gender has little bearing on Religious and Moral Education instructors' Pedagogical Content Knowledge (PCK). The findings contradicted Jordan's (2013) findings, which revealed significant differences in PCK between male and female teachers. According to Jordan's findings, female teachers evaluated their knowledge higher than male teachers in one domain: Pedagogy Knowledge, while male teachers rated their knowledge higher in six more categories.

CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

This chapter highlights the summary of the research process and the key findings that emerged from the study. The chapter further addresses issues such as conclusions and recommendations closely linked to the findings of the study. Areas for further research have been addressed.

Overview of the Study

The purpose of the study was to examine the Pedagogical Content Knowledge (PCK) level of Religious and Moral Education teachers in the Komenda-Edina-Eguafo-Abirem Municipality. Specifically, the study sought to find out the Content Knowledge (CK) of RME teachers, Pedagogical Knowledge (PK), and the Pedagogical Content Knowledge (PCK) of RME teachers in the Komenda-Edina-Eguafo-Abirem Municipality.

The research design was a descriptive survey because it allows researchers to analyse respondents responses through views about an issue under investigation. The study employed quantitative approaches of data collection to investigate the Content Knowledge (CK), the Pedagogical Knowledge (PK), the Pedagogical Content Knowledge (PCK), Content Knowledge (CK) of Religious and Moral Education teachers in Komenda-Edina-Eguafo-Abirem municipality. The sample of the study was RME teachers from 68 public junior high schools in the Komenda-Edina-Eguafo-Abirem municipality. The total number of RME teachers from these schools was 130.

Nevertheless, the researcher was able to retrieve 120 of the questionnaires from the respondents. The researcher employed the census

technique to select all RME teachers in the schools.

The data were gathered using two instruments. These were questionnaires and a checklist for observation. The questionnaire and observation checklist both contained closed-ended questions. The questionnaire was separated into sections, each of which was devoted to a certain aim. Section “A” included questions about the respondents’ demographic information. Section “B” addressed elements about the Content Knowledge (CK) of RME teachers. Section “C” discussed elements about the Pedagogical Knowledge (PK) of RME teachers. Section D emphasized the teachers’ Pedagogical Content Knowledge (PCK). The study used a Likert-type scale with a five-point range. There were five responses: “Strongly Agree” (SA) =5, “Agree” (A) =4, “Disagree” (D) = 3, “Strongly Disagree” (SD) =2, and “Uncertain” (U) =1. Additionally, an observation checklist was employed to collect data on the RME degree of preparedness of RME teachers for pedagogical topic understanding. The researcher observed a nonparticipant in an organised manner. The observation checklist was structured using a Likert-type scale. The researcher incorporated observation to compensate for any inadequacies using a single piece of data collection equipment.

To ascertain the direction of the responses, the data were analysed using descriptive and inferential statistics. The study’s questions and hypotheses were analyzed using descriptive statistics, including frequency and percentage counts, means of means, standard deviations, and an independent-sample t-test.

Key Findings

1. It was discovered that Religious and Moral Education teachers in Komenda-Edina-Eguafo-Abirem Municipality had in-depth content

knowledge. It can be inferred that the teachers had the requisite knowledge and understanding to teach RME concepts effectively.

2. The study's finding suggested that Religious and Moral Education teachers in the Komenda-Edina-Eguafo-Abirem municipality in the central region of Ghana possessed Pedagogical Knowledge. In other words, they possessed knowledge on how students constructed knowledge and what it took to enhance and promote young people's spiritual and moral values.
3. Regarding, Pedagogical Content Knowledge (PCK) level of Religious and Moral Education teachers in the Komenda-Edina-Eguafo-Abirem Municipality in the Central Region of Ghana, the study's findings revealed that Religious and Moral Education teachers had Pedagogical Content Knowledge and effectively blended pedagogy and content in the teaching of the RME.
4. The study found no statistically significant difference among the years of teaching experience of JHS teachers regarding their pedagogical content knowledge in RME $F(3, 116) = 1.024, p = .385.$
5. The findings from the second research hypothesis indicate that there was no statistically significant difference between male and female JHS teachers in K.E.E.A regarding their pedagogical content knowledge. This was the results for RME male teachers ($M = 3.95, SD = 0.958$) and RME female teachers ($M = 3.86, SD = 1.090$); $t(118) = 0.461, p > 0.05,$ ($p = 0.650$).

Conclusions

It can be discerned from the study's finding that the teachers in the study area had adequate and requisite content knowledge and understanding to teach concepts in the JHS RME syllabus effectively. This is not surprising because Content Knowledge is a critical element of effective teaching. Because it provides, learners need to enhance young people's moral and spiritual fabric development. Religious and Moral Education teachers in the Komenda-Edina-Eguafo-Abirem Municipality in the central region of Ghana, it can be concluded that teachers can teach the content of the Religious and Moral Education subject very well with little or no difficulties in the presentation of the contents

Moreover, the study's finding points to the fact that the teachers employed the constructivist approach to teaching in their quest to shape young people's moral and spiritual fabric within the classroom context. This is significant because learning is an active process, and children can learn and apply spiritual and moral values by doing (Rhodes, 2017).

It can further be argued that the teacher's pedagogical content knowledge is critical when it comes to children's moral and spiritual development because content and pedagogy have to be presented and adopted to the learning needs, interests, and uniqueness each learner brings to the learning context. And this is where the usefulness of teachers pedagogical content knowledge becomes a useful tool.

Based on the research hypotheses findings, it can be concluded that years of teaching experience do not always guarantee the development of PCK for RME teachers in the K.E.E.A. Finally, it can be concluded that the gender

of JHS teachers in K.E.E.A was not a differentiator for assessing teachers pedagogical content knowledge in RME.

Recommendations

Based on the study's findings, the following recommendations are made:

1. Based on the findings on research question one, the study recommended that RME specialists and GES within the K.E.E.A. Municipality should continue to organize regular CPD, professional learning teams, and in-service training for Junior High RME teachers to enable them to continue to keep abreast with the current evolving issues, trends, and content in the subject area.
2. Again, it is recommended that the Ministry of Education provide teacher educators with state-of-the-art resources such as computers, projectors, interactive boards, internet connectivity, and books to enhance effective teaching of moral and religious concepts in class.
3. It is recommended that RME teachers pursue further education and learn about emerging issues in the teaching of RME for effective teaching and learning in the 21st century RME classroom.
4. Based on the study is the first hypothesis, it is recommended that the teacher training institutions, NTC, and GES should enhance the development and improvement of PCK for both pre-service and in-service teachers. This is because years of teaching experience have been found not always to ensure the development of PCK of RME teachers but rather well-researched 21st-century theories.

5. It further recommended that the Ministry of Education and other stakeholders encourage female teachers to effectively teach RME and other equally important subjects in our Basic Schools.

Suggestion for Further Research

1. The current study can be replicated in a different research area to determine whether similar findings can be established or not.



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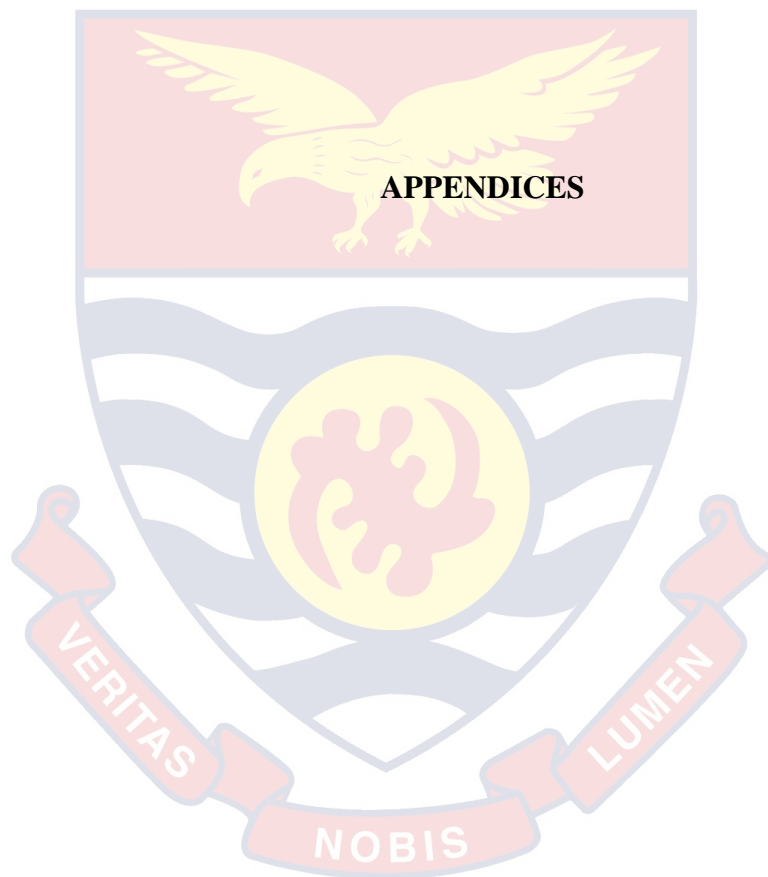
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APPENDIX A

INTRODUCTORY LETTER

UNIVERSITY OF CAPE COAST
COLLEGE OF EDUCATION STUDIES
FACULTY OF EDUCATIONAL FOUNDATIONS
DEPARTMENT OF BASIC EDUCATION

Telephone: +233-(0)3321-33379
Cables: University, Cape Coast
Email: basic.education@ucc.edu.gh



UNIVERSITY POST OFFICE
CAPE COAST, GHANA

Our Ref:

Your Ref: DBE/

19th November, 2018

Dear Sir/Madam,

LETTER OF INTRODUCTION

The bearer of this letter **Mr. Uriel Amuah** is a level 850 student at the Department of Basic Education, University of Cape Coast.

He is undertaking a study on "Assessing The Pedagogical Content Knowledge of Religious and Moral Education Teachers at the Basic Schools in the KEEA Municipality". In connection with this, he needs to collect data.

The study is academic in purpose and data collected will be treated as confidential. We would, therefore, be grateful if you could give him the necessary assistance.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'Dickson H. Angbing'.

Dickson H. Angbing (Ph.D)
(Head)

APPENDIX B

ETHICAL CLEARANCE

UNIVERSITY OF CAPE COAST
COLLEGE OF EDUCATION STUDIES
ETHICAL REVIEW BOARD

UNIVERSITY POST OFFICE
CAPE COAST, GHANA



Our Ref: CES-ERB/ucc.edu/13/19-34
Your Ref:

Date: June 6, 2019

Dear Sir/Madam,

ETHICAL REQUIREMENTS CLEARANCE FOR RESEARCH STUDY

Chairman, CES-ERB
Prof. J. A. Omotosho
jomotosho@ucc.edu.gh
0243784739

Vice-Chairman, CES-ERB
Prof. K. Edjah
kedjah@ucc.edu.gh
0244742357

Secretary, CES-ERB
Prof. Linda Dzama Forde
lforde@ucc.edu.gh
0244786680

The bearer, Uriel Amuah....., Reg. No. EF/BEP/17/0001 is an M.Phil. / ~~Ph.D.~~ student in the Department of Basic Education..... in the College of Education Studies, University of Cape Coast, Cape Coast, Ghana. He / She wishes to undertake a research study on the topic:

Assessing the pedagogical content knowledge of Religious and Moral Education teachers in basic schools in the Komenda-Edina-Eguafo-Abrem Municipality.

The Ethical Review Board (ERB) of the College of Education Studies (CES) has assessed his/~~her~~ proposal and confirm that the proposal satisfies the College's ethical requirements for the conduct of the study.

In view of the above, the researcher has been cleared and given approval to commence his/~~her~~ study. The ERB would be grateful if you would give him/~~her~~ the necessary assistance to facilitate the conduct of the said research.

Thank you.
Yours faithfully,

Prof. Linda Dzama Forde
(Secretary, CES-ERB)

APPENDIX C

UNIVERSITY OF CAPE COAST

COLLEGE OF EDUCATION STUDIES

DEPARTMENT OF BASIC EDUCATION

QUESTIONNAIRE FOR RME TEACHERS

This questionnaire aims at investigating Religious and Moral Educators Pedagogical Content Knowledge in the Junior High Schools in the Komenda-Edina-Eguafo-Abirem Municipality. The information provided will be kept strictly confidential.

Instructions

Kindly answer the questions that are in this questionnaire. Using the scales assigned to each statement, indicate by ticking (✓) the appropriate bracket that answers the questions. Please tick [✓] the correct response from the options given.

SECTION A: BIOGRAPHIC DATA

1. Sex:
 - a. Male [] b. Female []
2. Age of Respondents
 - a. 21-25 years []
 - b. 26-30 years []
 - c. 30 -40 years. []
 - d. 41 years and above []
3. Years of teaching Experience
 - a. Below 1 year []
 - b. 2- 5 years []

c. 6-10 years []

d. 11 years and above []

4. What is your highest academic qualification?

a. Bachelor's Degree []

b. Master of Arts []

c. Master of Philosophy []

d. Other (specify).....

5. What is your highest professional teaching qualification?

a. Teacher's Cert "A" []

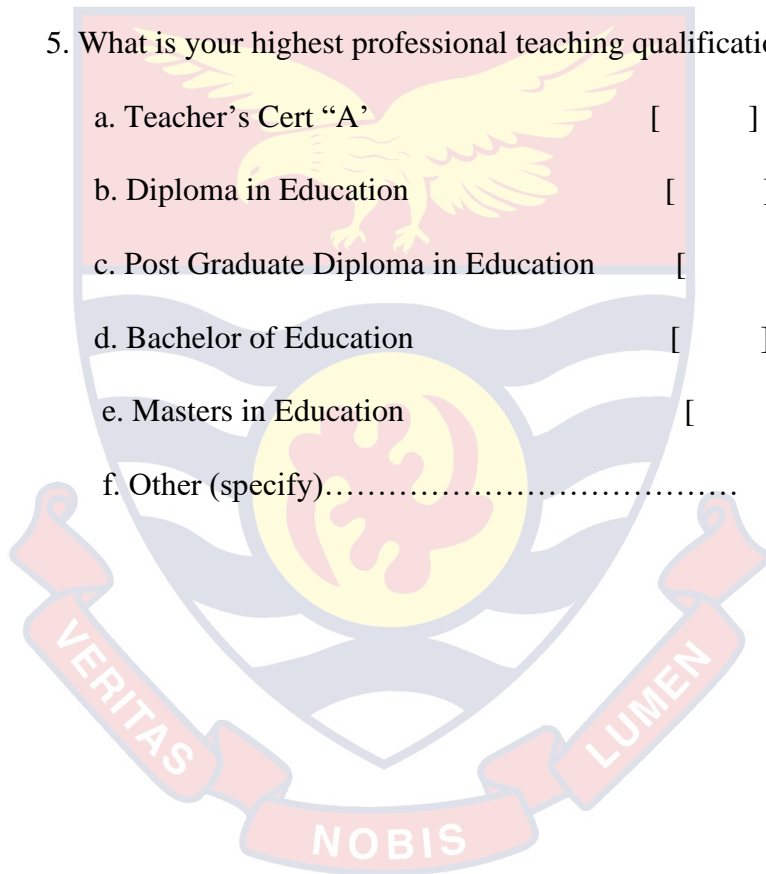
b. Diploma in Education []

c. Post Graduate Diploma in Education []

d. Bachelor of Education []

e. Masters in Education []

f. Other (specify).....



SECTION B: CONTENT KNOWLEDGE (CK) OF RME TEACHERS

Please indicate the extent of your agreement or disagreement with each statement by ticking [√] **Strongly Agree (SA), Agree (A), Uncertain (U), Disagree (D), and Strongly Disagree (SD)**. Please select only one response choice to reflect your opinion.

Statement	SA	A	U	D	SD
6. I understand RME concepts well enough to be able to teach					
7. I possess knowledge and understanding regarding all topics on moral issues in the JHS RME syllabus					
8. I possess knowledge and understanding regarding topics in Christian Religion.					
9. Religious and Moral Education can be taught by all teachers.					
10. I possess knowledge and understanding regarding diverse topics in Islamic Religion.					
11. I possess adequate knowledge regarding all topics in African Traditional Religion.					

12. I demonstrate knowledge and understanding when teaching concepts in contemporary issues.					
13. I possess knowledge and understanding about the goals of RME in Ghana					
14. I have in-depth knowledge in topics on social issues in the JHS RME syllabus					

SECTION C: PEDAGOGICAL KNOWLEDGE (PK) OF RME

TEACHERS

Please indicate the extent of your agreement or disagreement with each statement by ticking [✓] **Strongly Agree (SA)**, **Agree (A)**, **Uncertain (U)**, **Disagree (D)**, and **Strongly Disagree (SD)**. Please select only one response choice to reflect your opinion.

Statement	SA	A	U	D	SD
15. I adopt different teaching techniques for different learners.					
16. I employ a variety of teaching approaches in a classroom setting (reflective learning, collaborative learning, direct instruction, inquiry					

learning, problem/project-based learning, etc.)					
17. I have the knowledge in the organization and maintenance of discipline in the classroom					
18. I have an adequate understanding of the lesson plan preparation					
19. I have much knowledge about the application of cognitive, social, and developmental theories of learning in the classroom					
20. I often employ video in teaching.					
21. I mostly use problem-solving and discovery learning during the instructional period					
22. I often employ discussion methods in teaching.					
23. I have adequate knowledge and understanding of how to apply values clarification in teaching.					
24. I often employ role-play in teaching.					

SECTION D: PEDAGOGICAL CONTENT KNOWLEDGE (PCK) OF RME TEACHERS

Please indicate the extent of your agreement or disagreement with each statement by ticking [√] **Strongly Agree (SA)**, **Agree (A)**, **Uncertain (U)**, **Disagree (D)**, and **Strongly Disagree (SD)**. Please select only one response choice to reflect your opinion.

Statement	SA	A	U	D	SD
25. I can combine content and pedagogy effectively in the teaching and learning process.					
26. I can present the subject matter to the diverse interests and abilities of students.					
27. I can effectively integrate subject matter and instructional strategies to meet the learning needs of individual learners.					
28. I have techniques in assessing students understanding and diagnosing the level of understanding of concepts during teaching.					
29. I possess the essential characteristics required for teaching and addressing complex issues					

30. I can select appropriate teaching methods to teach a specific content.					
31. I am able to establish a purposeful learning environment					
32. I am able to foster critical thinking in students by relating content to students lived experiences.					



APPENDIX D

OBSERVATION CHECKLIST

RME TEACHERS' PEDAGOGICAL CONTENT KNOWLEDGE (PCK)

Statement Scale: 1= Not at all competent, 2=Somehow competent,
3=Competent, 4=Very competent

PCK	1	2	3	4
1. Teachers can combine content and pedagogy effectively in the teaching and learning process.				
2. RME teachers apply values clarification in teaching specific subject matter.				
3. RME teachers have techniques in assessing students understanding and diagnosing the level of understanding of concepts during teaching.				
4. Teachers possess the essential characteristics required for teaching and addressing complex issues.				