

UNIVERSITY OF CAPE COAST

TEACHER QUALITY AS A DETERMINANT OF PUPILS' ACADEMIC
PERFORMANCE IN RELIGIOUS AND MORAL EDUCATION: A SURVEY

COLLINS ASANTE OWUSU

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BY

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Thesis submitted to the Department of Arts and Social Sciences Education of the
College of Education Studies, University of Cape Coast, in partial fulfilment of the
requirements for award of Master of Philosophy Degree in Curriculum Studies

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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: Collins Asante Owusu

Supervisors' Declaration

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

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

Name: Rev. Prof. Seth Asare-Danso

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

Name: Prof. Y. A. Ankomah

ABSTRACT

The study examined the relationship between teacher quality and pupils' performance in RME in basic schools in the Ga-South Municipality. The correlational research design was adopted for the study. Through the use of cluster sampling, multi-stage sampling and proportional allocation of sample size as well as the purposive sampling procedure, 159 basic schools and 532 respondents consisting of 357 pupils and 175 RME teachers were selected to participate in the study respectively. The questionnaire, observation guide and a standardised-achievement-test were used to gather the requisite data for the study. The data were analysed through the computation of descriptive statistics such as frequencies, percentages, mean of means distributions and correlation.

The study among other things found out that RME teachers possess adequate knowledge about the use of technology or instructional resources. However, there was a weak positive correlation between teachers' technological knowledge and pupils' academic performance. Again, RME teachers possess adequate knowledge about the use of pedagogy and content, however, there was a weak positive correlation between teachers' content knowledge and pupils' academic performance.

The study recommended that circuit supervisors should visit remote schools to observe for themselves if teachers are always at post. The Ministry of Education, Ghana Education Service and Curriculum Research and Development Division (CRDD) should organise in-service training for teachers on contemporary pedagogies and the appropriate use of instructional resources for the teaching of RME.

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I first express my profound gratitude to my dynamic and hardworking supervisors, Rev. Prof. Seth Asare-Danso and Prof. Y. A. Ankomah for their promptness in reading and making necessary comments for the successful completion of this work.

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DEDICATION

To my father, Sampson Owusu; and my mother, Janet Asantewaa.

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CHAPTER ONE

INTRODUCTION

Background to the Study

Teacher quality is widely thought of as an essential determinant of academic performance, yet there is little agreement as to what specific characteristics make a good teacher (Hanushek, Kain, O'Brien & Rivkin, 2006). Hence, measurability of the determinants of teacher quality remains elusive over the years. Is it experience? Is it educational level? Can it even be measured by a test, survey, or questionnaire?

Noell (2007) examined a variety of data including pupil achievement, curriculum, and teacher databases. He found out that teachers who had recently graduated from the LSU alternative-certification programs performed at levels 1 and 2, meaning they did better than, or as well as, experienced teachers. If more-experienced teachers are not guaranteed to be better than less-experienced teachers, may be teacher educational-level is what determines a high-quality teacher.

Rice (2003) addressed issues such as educational level as it pertains to teacher quality. She writes that, advanced degrees, particularly master's degrees, have a positive effect on high school mathematics and science achievement.

However, she pointed out that, this holds true only when those degrees were earned in those subjects.

Ferguson and Brown (2002) conducted a meta-analysis of research regarding the correlation between teacher qualification, teacher quality, and pupil achievement. They pointed out that pupil test score gains are an imperfect measure of what we really want to know: the teacher's contribution to producing the gains. Because other factors such as pupil, home, school, and community characteristics affect achievement as well, teachers deserve neither all of the credit for success nor all of the blame for the failures. Many factors affect pupils, yet numerous research studies point to the importance of the teacher in the classroom in relationship to pupil achievement gains.

While the debate continues nationwide as to what exactly constitutes a high-quality teacher, there is little debate as to the importance of high-quality teachers. This is because, there is no question that teacher quality influences pupil achievement. Goldhaber and Anthony (2002) stated that, studies have shown that teacher quality is the most important educational input predicting pupil achievement. Although it is easy to test measurable characteristics such as degree level and years of experience, quality teaching is much more complex. Darling-Hammond (2004) suggested that, teacher quality is the most influential factor in pupil achievement. Hence, the importance of a quality teacher in a classroom is not arguable. No parent wants to put his/her child in a classroom with an ineffective teacher for even one year, much less multiple years.

The need for quality and competent teachers, is a very pertinent issue because Religious and Moral Education as a school subject is structured along the subject pattern of curriculum organization and as Smith, Stanley and Shores (1957) clearly point out, well trained teachers are one of the requirements for the effective operation of the subject curriculum. The role of the teacher in the effective implementation of the Religious and Moral Education curriculum cannot be overemphasized. Marsh and Willis (2003) posit, “whenever policies and programmes have originated from above, teachers must plan their activities around them for periods of time, ranging from a full-year course to a daily lesson of a few minutes” (p. 197). They further explain that teachers rely on the content and methods outlined in textbooks, syllabi, and teachers’ guides for their planning, but what they actually teach depends on their own preferences. They synthesize instinctively, in keeping with their own artistic flairs. Thus teachers, by their own ingenuity, break down the Religious and Moral Education curriculum into a form that could easily be assimilated by the learner in the classroom. The implication of this is that, a case of teacher ineffectiveness in the presentation of Religious and Moral Education lessons is likely to have a debilitating effect on pupils’ performance as well as on the acquisition of the basic skills and knowledge required of them. This calls for regular monitoring of Religious and Moral Education teachers, to ensure effective teaching of the subject at the Basic School level.

It is an undeniable fact that teaching is a challenging profession. The responsibility of organising and planning pupils’ learning is entrusted to the

teacher. “Teaching is not merely instruction, but the systematic promotion of learning by whatever means. Teaching strategy is an important aspect of curriculum” (Stenhouse, 1987, p. 24). It is necessary for stakeholders in Religious Education to provide teachers with the requisite opportunities so that they will acquaint themselves with the nuances of quality teaching – use of suitable and appropriate methods of teaching. In fact “...curriculum development must rest on teacher development and that it should promote it and hence the expertise of the teacher” (Stenhouse, 1987, p. 24).

In relation to this, “Professor Eric Hoyle has drawn attention to varying degrees of teacher quality. Those with limited concern for quality, he described as restricted professionals and those with high interest in teacher quality as extended professionals” (Farrant, 1980, p. 225). He went on to prescribe some areas of professional concern namely, teaching skills, perspectives in the classroom, classroom events, teaching methods, value of teaching and involvement in non-teaching activities.

Statement of the Problem

Tamakloe, Amedahe and Atta (2005) have defined teaching as directing knowledge towards the learner. To Kochhar (2004), teaching is not a mechanical process but a rather intricate, exacting and challenging job. It is therefore not surprising that the technological, pedagogical and content knowledge (TPCK) of teachers has been introduced in this 21st century, as a framework for understanding teacher knowledge required for effective technology integration (Mishra & Koehler, 2006). The model of technological, pedagogical and content

knowledge (TPCK) argues that developing good content requires a thoughtful interweaving of all three key sources of knowledge: technology, pedagogy, and content. The core of the argument is that there is no single technological solution that applies for every teacher, every course, or every view of teaching. Quality teaching requires developing a nuanced understanding of the complex relationships between technology, content, and pedagogy, and using this understanding to develop appropriate, context-specific strategies and representations. Productive technology integration in teaching needs to consider all three issues not in isolation, but rather within the complex relationships in the system defined by the three key elements.

It is clear from the above discussion that efficient or quality teachers must have a sound knowledge of what their people must know and have the ability to relate the subject matter (content), method, sequence and pace of work to individual needs; to use the environment and appropriate media to support learning (technology), use a range of teaching strategies skillfully (pedagogy) and have enthusiasm for the subject (Farrant, 1996). In simple terms, quality teachers should have the ability to combine technology with pedagogy and content that inspires learners to enjoy learning and perform better.

RME as a subject demands good quality teachers in the same direction as well. However, this is not so because; in most of our schools, RME is seen to be an easy subject therefore, anyone at all without appropriate qualifications like degree in religion could be made to handle the subject. From my own personal experience during my junior high school education, a Reverend Father was made

to handle the teaching of Religious and Moral Education because of the assumption that any person at all with a sound Biblical knowledge could be made to handle the subject. Again, during my off-campus teaching practice, I realized that, the RME teachers who were made to teach the subject although were from the training college and had done RME as a core and not as an elective and as a result, they had not done methods of teaching RME which is taught during the second year. This implies that, some of the teachers of RME in Ghana lack the required academic and professional competencies.

With my introduction to Pedagogies of Religious Education, I realized a number pedagogies at the disposal of the Religious and Moral Educator which include: the concept cracking approach, narrative approach, systems approach, gift to the child approach, existential approach, phenomenological approach, interpretive approach as well as the life themes approach to teaching Religion. This presented a significant challenge to me and motivated me to undertake this research to find out teacher quality (technological pedagogical content knowledge) as a determinant of pupil's performance in Religious and Moral Education. Again, despite the plethora of studies conducted in various subject areas, virtually nothing seems to have been done with respect to RME regarding teacher quality as a determinant of pupil performance in Religious and Moral Education. Therefore, this work would also fill the gap in literature so far as RME as a subject is concerned.

Purpose of the Study

This study examined the relationship between teacher quality and pupils' performance in RME in basic schools in Ghana. It sought to find out the:

1. relationship between teachers' technological knowledge and pupils' academic performance in RME.
2. relationship between teachers' pedagogical knowledge and pupils' academic performance in RME.
3. relationship between teachers' content knowledge and pupils' academic performance in RME.

Research Questions

The following research questions guided the study:

1. What relationship exists between teachers' technological knowledge and pupils' academic performance in RME?
2. What is the relationship between teachers' pedagogical knowledge and pupils' academic performance in RME?
3. What relationship does teachers' content knowledge have on pupils' academic performance in RME?

Significance of the Study

This study is geared towards providing information or blueprint on improving teacher quality by exposing the measurable indicators that make a teacher effective which in turn, affect pupils' performance. This would therefore serve as a guide to the practice of teaching the subject at the Basic School level. The study would also serve as a guide to policy makers and curriculum planners

to provide the needed instructional resources and professional training for teachers to enhance the effective teaching of the subject. Again, the study would contribute to research by filling the gaps in literature as virtually no study seems to have been done on the topic so far as RME is concerned. It would therefore serve as a guide to the practice of teaching and learning of Religious and Moral Education as a subject in the Basic School levels and as well serve as a guide to policy makers and curriculum planners by way of providing the needed professional training for teachers to enhance Moral Education.

Delimitations of the Study

It is an undisputable fact that, there are other factors such as class size and socio-economic background that affect pupil performance. Again, there are other immeasurable traits that define teacher quality such as teacher commitment, teacher enthusiasm etc. However, the study considered the technological pedagogical content knowledge (TPCK) of teachers that may affect pupils' performance so far as teacher quality is concerned. The study concentrated on Basic Schools in the Ga-South Municipality. The study also focused on assessing teacher quality as a determinant of pupil performance in Religious and Moral Education by finding out the relationship between teachers' technological knowledge and pupils' academic performance in RME, the relationship between teachers' pedagogical knowledge on pupils' academic performance in RME, as well as the relationship between teachers' content knowledge and pupils' academic performance in RME in the Ga-South Municipality.

Limitations of the Study

The technological, pedagogical, content knowledge (TPCK) was the theoretical framework for the study. A careful study of this framework reveals that, there are seven areas that can be considered when using the framework which are: technological knowledge, content knowledge, pedagogical knowledge, technological content knowledge, technological pedagogical knowledge, pedagogical content knowledge as well as technological pedagogical content knowledge. However, this study was able to consider three of these areas only which were content knowledge, pedagogical knowledge and technological knowledge to the neglect of the other four (technological content knowledge, technological pedagogical knowledge, pedagogical content knowledge as well as technological pedagogical content knowledge) overlaps of the framework which also have a role to play so far as model is concerned.

Again, the use of participant observation might have made some teachers teach the way they taught. However, since they did not know what I was looking for, my presence did not affect their teaching so much. To deal with this, questionnaires were administered after the second observation section.

Also, attitude of some teachers was a source of worry to the researcher as some of them did not answer the questionnaire while others demanded for financial benefits before they responded to the questionnaire. Some even misplaced their questionnaires while others took several days to complete new ones issued out to them.

Definition of Terms

Pupils Performance: Refers to pupils scale scores on the Researcher Made Test.

Teacher Quality: Refers to the technological, pedagogical and content knowledge that RME teachers possess which makes it easier for pupils to learn and understand what they are taught.

Organisation of the Rest of the Study

The study was organized into five main chapters. The first chapter dealt with the general introduction of the study, covering the background to the problem, statement of the problem, purpose of the study, research questions, and significance of the study, delimitation of the study as well as limitations of the study. Chapter Two dealt with the review of related literature. It covered the theoretical framework/conceptual base of the study. It also had a section for empirical review under which studies related to the study were reviewed. Chapter Three also dealt with the methodology which includes: research design; population; sample and sampling procedure; research instrument; validity and reliability of instrument; data collection procedure; as well as data analysis. Chapter Four dealt with the presentation of results/findings of the study. The final chapter, chapter five, covered the summary of the study, conclusions based on the findings, and recommendations.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

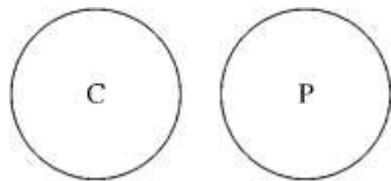
The review of related literature was done in three areas; Theoretical/Conceptual framework as well as Empirical Review. The theoretical framework for this study was based on the Technological Pedagogical Content Knowledge (TPCK) model. Conceptual review included a review of concepts from the following selected areas: technological knowledge, problems associated with the use of technology in teaching RME, pedagogical knowledge, the life themes pedagogy, the existential pedagogy, the concept cracking pedagogy, content knowledge as well as teacher quality in Religious Education. The empirical review included: impact of teacher quality on pupil performance, importance of a quality teacher in the classroom as well as summary of literature review.

Theoretical/Conceptual Review

The Technological Pedagogical Content Knowledge (TPCK) provides the theoretical and conceptual framework for the study. The basis of the framework is the understanding that teaching is a highly complex activity that draws on many kinds of knowledge. Teaching is a complex cognitive skill occurring in an ill-structured, dynamic environment (Leinhardt & Greeno, 1986; Spiro, Coulson, Feltovich, & Anderson, 1988; Spiro, Feltovich, Jacobson, & Coulson, 1991). Like

expertise in other complex domains, including medical diagnosis (Lesgold, Feltovich, Glaser, & Wang, 1981; Pople, 1982), chess (Chase & Simon, 1973; Wilkins, 1980), and writing (Hayes & Flower, 1980; Hillocks, 1986), expertise in teaching is dependent on flexible access to highly organized systems of knowledge (Glaser, 1984; Putnam & Borko, 2000; Shulman, 1986, 1987). There are clearly many knowledge systems that are fundamental to teaching, including knowledge of pupil thinking and learning, and knowledge of subject matter.

Historically, knowledge bases of teacher education have focused on the content knowledge of the teacher (Shulman, 1986; Veal & MaKinster, 1999). More recently, teacher education has shifted its focus primarily to pedagogy, emphasizing general pedagogical classroom practices independent of subject matter and often at the expense of content knowledge (Ball & McDiarmid, 1990). We can represent this bifurcated way of looking at teacher knowledge as two circles independent of each other (Figure 1).



Source: Mishra, and Koehler (2006)

For Figure 1. The Two Circles Representing Pedagogical and Content Knowledge.

Different approaches toward teacher education have emphasized one or the other domain of knowledge, focusing on knowledge of content (C) or knowledge of pedagogy (P). Shulman (1986) advanced thinking about teacher

knowledge by introducing the idea of pedagogical content knowledge (PCK). He claimed that the emphases on teachers' subject knowledge and pedagogy were being treated as mutually exclusive domains in research concerned with these domains (Shulman, 1987). The practical consequence of such exclusion was production of teacher education programs in which a focus on either subject matter or pedagogy dominated. To address this dichotomy, he proposed considering the necessary relationship between the two by introducing the notion of PCK.

PCK exists at the intersection of content and pedagogy. Thus, it goes beyond a simple consideration of content and pedagogy in isolation from one another. PCK represents the blending of content and pedagogy into an understanding of how particular aspects of subject matter are organized, adapted, and represented for instruction. Shulman (1986) argued that having knowledge of subject matter and general pedagogical strategies, though necessary, was not sufficient for capturing the knowledge of good teachers. To characterize the complex ways in which teachers think about how particular content should be taught, he argued for "pedagogical content knowledge" as the content knowledge that deals with the teaching process, including "the ways of representing and formulating the subject that make it comprehensible to others" (p. 9). For teachers to be successful, they would have to confront both issues (content and pedagogy) simultaneously by embodying "the aspects of content most germane to its teachability" (p. 9). At the heart of PCK is the manner in which subject matter

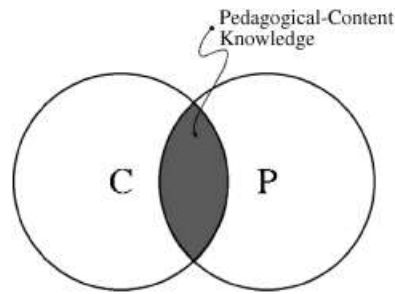
is transformed for teaching. This occurs when the teacher interprets the subject matter and finds different ways to represent it and make it accessible to learners.

The notion of PCK has been extended and critiqued by scholars after Shulman (for instance, see Cochran, King, & DeRuiter, 1993; van Driel, Verloop, & De Vos, 1998). In fact, Shulman's (1986) initial description of teacher knowledge included many more categories, such as curriculum knowledge and knowledge of educational contexts. Matters are further complicated by the fact that Shulman has himself proposed multiple lists, in different publications, that lack, in his own words, "great cross-article consistency" (p. 8). The emphasis on PCK is based on Shulman's acknowledgement that pedagogical content knowledge is of special interest because it identifies the distinctive bodies of knowledge for teaching. It represents the blending of content and pedagogy into an understanding of how particular topics, problems, or issues are organized, represented, and adapted to the diverse interests and abilities of learners, and presented for instruction (p. 8).

The emphasis on PCK is consistent with the work of many other scholars and recent educational reform documents. Since its introduction in 1987, PCK has become a widely useful and used notion. For instance, in the area of science education, scholars such as Anderson and Mitchner (1994); Hewson and Hewson (1988); Cochran, King, and DeRuiter (1993); and professional organizations such as the National Science Teachers Association (NSTA, 1999) and National Council for the Accreditation of Teacher Education (NCATE, 1997) have all emphasized the value of PCK for teacher preparation and teacher professional

development. An analysis of *Teacher Educator's Handbook* (Murray, 1996) shows Shulman as the fourth most cited author of the close to 1,500 authors in the book's author index, with an overwhelming majority of those references made to this concept of PCK (Segall, 2004). The notion of PCK since its introduction in 1987 has permeated the scholarship that deals with teacher education and the subject matter of education (see, for example, Ball, 1996; Cochran, King, & DeRuiter, 1993; Grossman, 1990; Ma, 1999; Shulman, 1987; Wilson, Shulman, & Richert, 1987). It is valued as an epistemological concept that usefully blends the traditionally separated knowledge bases of content and pedagogy.

We can represent Shulman's contribution to the scholarship of teacher knowledge diagrammatically by connecting the two circles of Figure 1 so that their intersection represents PCK as the interplay between pedagogy and content (see Figure 2). In Shulman's (1986) words, this intersection contains within it "the most regularly taught topics in one's subject area, the most useful forms of representation of those ideas, the most powerful analogies, illustrations, examples, explanations, and demonstrations—in a Joined by Pedagogical Content Knowledge.



Source: Mishra and Koehler (2006)

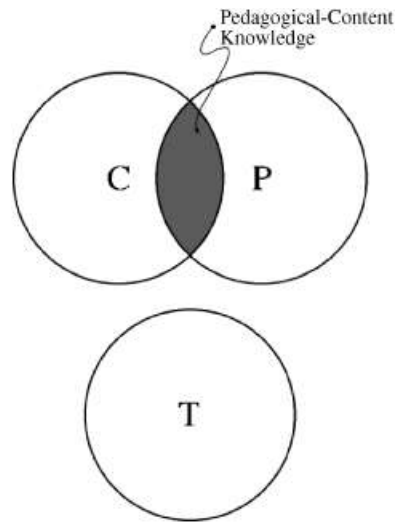
Figure 2: The Two Circles of Pedagogical Knowledge and Content Knowledge

Although Shulman did not discuss technology and its relationship to pedagogy and content, we do not believe that these issues were considered unimportant. When Shulman first made his argument, issues surrounding technologies were not foregrounded to the extent that they are today. Traditional classrooms use a variety of technologies, from textbooks to overhead projectors, from typewriters in English language classrooms to charts of the periodic table on the walls of laboratories. However, until recently, most technologies used in classrooms had been rendered “transparent” (Bruce & Hogan, 1998), or in other words, they had become commonplace and were not even regarded as technologies. In contrast, the more common usage of technology refers to digital computers and computer software, artifacts and mechanisms that are new and not yet a part of the mainstream. Thus, though Shulman’s approach still holds true, what has changed since the 1980s is that technologies have come to the forefront of educational discourse primarily because of the availability of a range of new, primarily digital, technologies and requirements for learning how to apply them to teaching.

These new technologies have changed the nature of the classroom or have the potential to do so. Consider the aspects or examples that Shulman provided as being important to PCK, such as “the most powerful analogies, illustrations, examples, explanations and demonstrations,” or, in other words, “the ways of representing and formulating subject” to make it more accessible and comprehensible. Clearly, technologies play a critical role in each of these aspects. Ranging from drawings on a blackboard or interactive multimedia simulations to etchings on a clay tablet to the pump metaphor of the heart or the computer metaphor of the brain, technologies have constrained and afforded a range of representations, analogies, examples, explanations, and demonstrations that can help make subject matter more accessible to the learner. Though not all teachers have embraced these new technologies for a range of reasons—including a fear of change and lack of time and support—the fact that these technologies are here to stay cannot be doubted.

Moreover, the rapid rate of evolution of these new digital technologies prevents them from becoming “transparent” any time soon. Teachers will have to do more than simply learn to use currently available tools; they also will have to learn new techniques and skills as current technologies become obsolete. This is a very different context from earlier conceptualizations of teacher knowledge, in which technologies were standardized and relatively stable. The use of technology for pedagogy of specific subject matter could be expected to remain relatively static over time. Thus, teachers could focus on the variables related to content and pedagogy and be assured that technological contexts would not change too

dramatically over their career as a teacher. This new context has foregrounded technology in ways that could not have been imagined a few years ago. Thus, knowledge of technology becomes an important aspect of overall teacher knowledge. What is interesting is that current discussions of the role of technology knowledge seem to share many of the same problems that Shulman identified back in the 1980s. For instance, prior to Shulman's seminal work on PCK, knowledge of content and knowledge of pedagogy were considered separate and independent from each other. Similarly, today, knowledge of technology is often considered to be separate from knowledge of pedagogy and content. This approach can be represented as three circles, two of which (content and pedagogy) overlap as described by Shulman, and one circle (technology) stands isolated from these two. Figure 3 represents the knowledge structures that underlie much of the current discourse on educational technology.

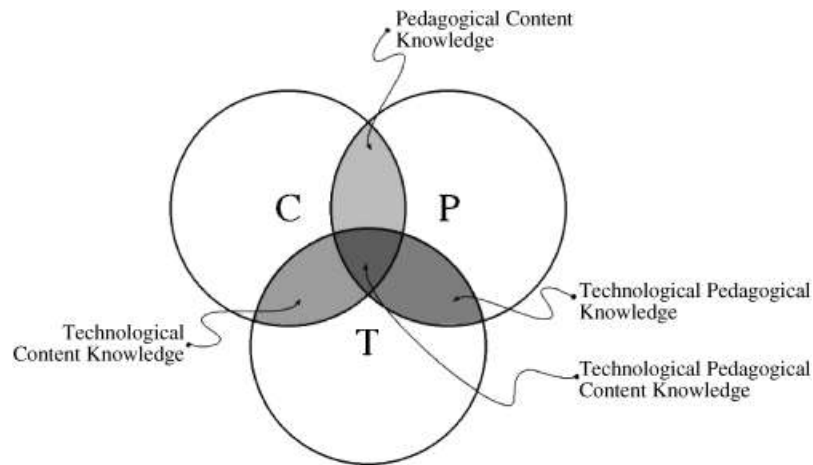


Source: Mishra and Koehler (2006)

Figure 3. The Three Circles Represent Technological, Pedagogical, and Content Knowledge.

Content and Pedagogy overlap to form Pedagogical Content Knowledge. While Technology is seen as being a separate and independent knowledge domain, it is relatively trivial to acquire and implement. The design and implementation of workshops or teacher training programs that promote the learning of specific hardware and software skills as being sufficient to round out teachers' knowledge bases for teaching with technology are direct consequences of this perspective. However, the relationships between content (the actual subject matter that is to be learned and taught), pedagogy (the process and practice or methods of teaching and learning), and technology (both commonplace, like chalkboards, and advanced, such as digital computers) are complex and nuanced. Technologies often come with their own imperatives that constrain the content that has to be covered and the nature of possible representations. These decisions have a ripple effect by defining, or in other ways, constraining, instructional

moves and other pedagogical decisions. So it may be inappropriate to see knowledge of technology as being isolated from knowledge of pedagogy and content. In contrast to the simple view of technology (Figure 3), our framework (Figure 4) emphasizes the connections, interactions, affordances, and constraints between and among content, pedagogy, and technology. In this model, knowledge about content (C), pedagogy (P), and technology (T) is central for developing good teaching. However, rather than treating these as separate bodies of knowledge, this model additionally emphasizes the complex interplay of these three bodies of knowledge. We do not argue that this TPCK approach is completely new. Other scholars have argued that knowledge about technology cannot be treated as context-free and that good teaching requires an understanding of how technology relates to the pedagogy and content (Hughes, 2005; Keating & Evans, 2001; Lundeberg, Bergland, Klyczek, & Hoffman, 2003; Margerum-Leys & Marx, 2002; Neiss, 2005).



Source: Mishra and Koehler (2006)

Figure 4. Technological Pedagogical Content Knowledge. The Three Circles, Content, Pedagogy, and Technology, Overlap to Lead to Four More Kinds of Interrelated Knowledge.

What sets this approach apart is the specificity of our articulation of these relationships among content, pedagogy, and technology. In practical terms, this means that apart from looking at each of these components in isolation, we also need to look at them in pairs: pedagogical content knowledge (PCK), technological content knowledge (TCK), technological pedagogical knowledge (TPK), and all three taken together as technological pedagogical content knowledge (TPCK). This is similar to the move made by Shulman, in which he considered the relationship between content and pedagogy and labeled it pedagogical content knowledge. In our case, a similar consideration leads us to three pairs of knowledge intersection and one triad. One of the pairs, pedagogical content knowledge, was introduced and articulated by Shulman, but we introduce

two new pairs and one new triad. Thus, the following elements and relationship are important in the framework proposed above.

Technological Knowledge

Modern teaching and learning requires that the teacher provides the most congenial atmosphere necessary for meaningful as well as practical instruction to take place. Teachers are entrusted with this key role of creating the most congenial atmosphere for learning to take place.

Thus, a classroom that provides a truly educational environment is a place where children will learn unconsciously as well as consciously. In it they will find interesting things such as pictures about current affairs, working models of things they are learning about display shelves with exhibits of interest for nature study, and toys and books which they can use whenever they have finished their work satisfactorily before the rest of the class (Farrant, 1980, p. 169).

One of the important faculties of using appropriate pedagogy and in fact quality teaching is the teacher's ability to select and use appropriate instructional resources. It is necessary that the teacher acquaints himself/herself with the requisite skills needed for application of instructional resources in the teaching-learning process. Though the importance of the use of instructional resources in teaching cannot in any way be overemphasized, it has its own problems. This underscores the key role that professionalism plays in the effective use of instructional resources.

A well equipped classroom in terms of instructional resources could enhance learning. It is very important, that teachers who are the foot soldiers of curriculum implementation realize the key role that they play in selection, use and maintenance of instructional resources in the classroom. Effective learning could be accomplished through seeing, hearing, feeling, manipulation and examining relevant instructional resources. The various senses of human person become the main vehicle that the mental faculty utilizes in order to retain what is learnt. In line with this, it can be articulated that the various senses are, as it were, transit points for effective teaching–learning process. Singh (2006) opined that instructional resources may be seen as a separate field in the theory of education that deals with the development and application of educational resources. Thus, the development, application and evaluation of systems, techniques, technologies and aids to improve the process of human learning is a very important aspect of teaching and learning. It must be noted that instructional resources are not end in themselves but a means to accomplish instructional objectives.

According to Ornstein and Lasley (2000), “Pedagogical aids sometimes called instructional aids or teaching aids, are materials designed for teacher use that are provided as supplements to textbook” (p. 235). They went on to give teacher’s manuals, transparencies or cut-outs to duplicate, supplementary tables, graphs, charts, maps, bulletin board displays, parent involvement materials, teacher resource binders, computer software, audio and video cassettes as some examples of these instructional resources. These resources according to them are used before, during and after lessons. In the words of Aggarwal (1995),

In addition to reading, vicarious experiences can be gained from still pictures, films, filmstrips, resource persons, simulations, mock ups, television and the like. The more concrete and realistic the vicarious experience, the more nearly it approaches the learning effectiveness of the first levels (pp. 296-297).

It is through the use of appropriate and suitable instructional materials that the RME teacher can provide these experiences. Nacino-Brown, Oke and Brown, (1982) gave four varieties of instructional resources as follows:

1. **Visual:** examples are three dimensional materials, printed materials, chalkboards, flannel or felt boards, bulletin boards, still pictures and graphics.
2. **Audio:** examples include radio, record players, and tape records
3. **Audio- visual:** examples are motion pictures and television.
4. **Community resources:** examples include resource persons and places of interest.

These are indispensable as far as effective teaching and learning of RME is concerned.

There is a great variety of materials around that can be used to make our meanings more vivid and more interesting. The mere use of these materials however, does not guarantee effective communication, or effective teaching. It is their careful selection and skilful handling by the teacher that

renders them useful in facilitating learning (Nacino – Brown, Oke & Brown, 1982, p. 165).

It is therefore very necessary that strict professionalism and strategies need to be applied in selecting and using instructional resources in order to achieve maximum impact. In fact the teacher performs very crucial roles in the selection and use of instructional resources. Herein lays the need for teachers to update and acquaint themselves with the requisite nuances of appropriate as well as suitable use of instructional resources in the teaching of RME in the Junior High Schools. Walkin (1982) added his voice on the need to be circumspective in the use of instructional resources when he said that:

To be successful in the classroom, aids must supplement the teacher's work and should be flexible in their application. The learning resources centre may well be jammed full of the latest multi-media teaching aids, but this will be of little use to a teacher who lacks the know-how that they require or who does not have the time to set them up in the instructional situation (p. 261).

He continued to say that before a teacher uses any instructional resources, he/she must be fully conversant with its operation and application and must rehearse his/her presentation before confronting the class. These rules are indispensable in the use of instructional resources in the teaching–learning process because the teacher will be able to assess the efficacy of the resources in helping to achieve the stated objectives and also make up for the weaknesses inherent in the resource in question.

With the effective use of audio-visual resources in the classroom, Ornstein and Lasley (2000) posited that:

Display such aids only when you talk about them; explain visuals to your audience; use a marker or highlighter when using an overhead to focus pupils on key points; use the k – i- s –s (keep it short and simple) principle – minimize detail. Make sure visuals are readable from the back of the room (p. 178).

This underscores the need to follow the principles governing a particular instructional resource. Failure to abide by these principles will definitely undermine and water-down the usefulness as well as the effectiveness of the resource.

With regards to the selection and use of instructional resource, Knirk and Gustafson (1986) said that selection should be done only after the designer has developed instructional, objectives and examined the characteristics media. After a learning problem has been identified and a solution designed, the user determines whether appropriate instructional resources or new materials need to be created. In this case, if the instructional resources do not exist in the school, it is the duty of the teacher to search for them and use them appropriately.

Tickton (1971) believed that instructional resources of all varieties, when used with advanced planning and preparation of pupils have been recognized as the basic means of improving the output resulting from classroom instruction. It should help provide every person with access to excellence. In fact not only can

instructional resources recognize individual taste, needs and services; but it can also make such individualization manageable (Dale, 1969).

According to Nacino–Brown, Oke and Brown (1982) there are five factors that affect the selection and use of instructional resources. The teacher therefore must consider such factors when choosing from a variety of instructional resources especially when they are all suitable for the purposes. They mentioned the subject matter, method of teaching, age of learners, how and when the medium would be used or handled, who will use the medium and where to obtain the resource as some of the factors that are to be considered. In this study, the researcher found out if the RME teachers consider these factors in the selection and use of instructional resources in their teaching.

In the view of Ornstein and Lasley (2000),

The teacher must incorporate instructional materials into unit plan and lesson plan and modify them in a way that considers the pupils; developmental stages or age, needs and interests, aptitudes, reading levels, prior knowledge, work habits, learning styles and motivation. The following factors should be considered when presenting materials (published or teacher-made) (p. 226)

Apart from these factors, a lot of questions, according to them should be raised on a particular material that is purported to be used. Some of them are:

Are the materials understandable?

Are the materials organized clearly?

Are the materials sequenced logically?

Are the materials complementary?

Do the materials complement how pupils learn?

The more the RME teacher answer “yes” to these questions, the more the resource in question is deemed appropriate and suitable. On the contrary, if the teacher answers “no”, to these questions, then the resource under review must be considered again and other alternative chosen.

According to Robens (1970), in order to use instructional resources effectively, the main role of the teacher is to get the learners actively involved with the material. This means that the RME teacher should ensure that pupils have ample experience in interacting with instructional material in question. This will help the learners to acquaint themselves with the requisite skills of manipulating the resources in the real life situation. In fact, “Use of the aid should be validated and its impact evaluated. An aid should be chosen for its function and predicted effect on the audience” (Walkin, 1982, p. 290). This means that the RME teacher should be able to assess the efficacy and efficiency of the resources to be used. In the final analysis, modern curriculum development tends to adopt multi media approach to learning and so competence in the use of instructional resources is essential for learning new curricula (Farrant, 1980).

Problems Associated with the Use of Technology in Teaching RME

Instructional resources will certainly persist in alerting us to problems in education. The use of instructional resources in the classroom is associated with a whole lot of problems. Some scholars in the field of education articulated some of the problems as follows.

With respect to the problem of durability and maintenance of instructional resources, Sarfo (2007) said that they are susceptible to damage and cumbersome. In this way, teachers may not have the expertise of repairing these instructional resources when they get damaged or may decide to stop using them due to the difficulty they encounter in handling them.

According to Stolurow (1961), one problem that can be anticipated in the use of instructional resources is getting teachers to accept, let alone use programmed instructional resources and teaching machines. The teacher's perceptions and attitude towards the use of instructional resources affect positively or negatively their readiness to use it. This becomes serious when "the pressures on teachers to go back to traditional method are strong" (Shipman, 1972, p. 58). Actually, some teachers are so conservative that they always want teaching and learning to go on in a traditional way because of the fear that they may be seen to be inefficient.

According to Farrant (1980), the high cost of electricity operated audio visual equipments and the difficulty in finding satisfactory suppliers and after sale service, together with the problem of supplying schools in the rural areas with electricity has limited the introduction of instructional resources in many countries. The situation in Ghana is no exception. The same problem could be found in some of the Junior High Schools in Ghana. It is very important that the stakeholders of education identify the problems and solve them accordingly in order to promote the use of instructional resources. Farrant (1980) went on to say that complexity of some audio-visual equipment and insufficient number of

manufacturers are some of the problems associated with the use of instructional resources.

According to Aggarwal (1995), “While all these aids are becoming more and more popular day by day, there are still some problems to be faced and solved” (p. 302). He mentioned apathy of the teachers, indifference of pupils, ineffectiveness of the aids, financial hurdles, absence of electricity, lack of facilities for training, co-ordination between centre and states among others as some of the problems associated with the use of instructional resources. Can we talk of these problems as being the case in the Junior High Schools in the Ga-South Municipality of Ghana? The study examined these problems with the related literature serving as the main plumb line for the evaluation.

Having articulated some of the principles and problems associated with the use of instructional resources in the teaching of RME, this study found out whether teachers are of similar views with respect to instructional resources in the area under study.

Pedagogical Knowledge

Every subject has its own peculiar way of transmitting information to its learners and so is RME. Grimmit (1978) stated that, every teacher and educationist of experience knows that even the best curriculum and the most perfect syllabus remain dead unless quickened into life by the right methods of teaching and the right kind of teachers. Grimmit has laid a firm foundation for teaching methods. He asserts that, sometimes even an unsatisfactory and unimaginative syllabus can be made interesting and significant by the gifted

teacher who does not focus his mind on the subject matter to be taught or the information to be imported but on his students - their interest and aptitudes, their reaction and response. He or she judges the success of his or her lesson not by the amount of matter covered but by the understanding the appreciation and the efficiency achieved by students (Colbey & Kohlberg, 1987; Ocitti, 1994). In this work, the life theme approach, existential approach, as well as the value clarification approach to the teaching of Religious and Moral Education have been elaborated on in addressing teachers pedagogical knowledge in teaching RME.

The Life Themes Pedagogy

One of the skills that is pertinent to a particular method 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. Meanwhile, an attempt needs to be made to examine this method as it is used in teaching RME in the Junior High Schools. The following are what some scholars have to say about the meaning of the Life-Approach method.

Langtree (1997) asserted that the confessional approach of teaching religion failed because it made false assumptions about learners' religiosity and failed to relate religion meaningfully to pupils' lives. This is, very unfortunate because "within several of the great world religions moreover, there is wide variety of sects and schools of thought" (Anderson, 1984, p. 13). So is it right for a teacher to try to convert his or her learners to their faith where learners come

from diverse religious denominations in teaching RME through the methods they employ?

Kerry (1984) made his stance clear about the Life-Approach method when he posited 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 own verbal comprehension” (p. 23) (emphasis added). This is a sure way of helping the learners to learn for life and also facilitate the transfer of what has been learnt in real life situations that they face. Kerry (1984) continues to say that:

perhaps it would be useful too, to try to step into the child’s shoes. Again as series of questions might help the teacher to do this, she might ask:

Following this method will the pupils

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 own learning? (p.

69)

There is no way the learner cannot participate actively, and see the relevance of the content of the Bible to their lives, when the teacher is able to link what is to be learnt with the real life experiences of the learners.

Loukes (1965) defined the Life-Approach method as starting to teach with the real, concrete and the present situation of the learners and letting them arrive

at a religious understanding of those experiences. In the same way Muthoni (1992) defines it as the approach which emphasises the human person as receiver of Gods' self-revelation to humanity. The approach demands that God speaks to people through situations and experiences. According to Grimmit (1973), "Religious concepts 'only come alive' when we are able to relate them sometimes partially, sometimes completely to our life experience" (p. 52). From the foregoing definitions of the Life-Approach method, it is obvious that the method essentially emphasises the use of the learner's day-to-day experience as the basis of teaching Religious Studies.

Onsongo (2002) gave the steps involved in the use of the method as follows:

1. Introduction

The teacher involves the learners in reflecting on their day to day experiences related to the subject matter. This stage arouses their interest in the content.

2. Lesson Development

This stage involves four steps where learners are taken through Human experience, The Biblical experience, Explanation and Application and then Response. According to her, these are ideally the steps to go through in using the Life-Approach.

There is a very strong justification for the relevance of the use of the Life-Approach method. Its chief advocates are Harold Loukes, Ronald Goldman and Michael Grimmit. These people saw it as an attempt to correct the body-of-

knowledge emphasis of the Religious Education syllabi existing in Britain during the time (Onsongo, 2002). Some reasons why the Life -Approach method is preferred to other methods of teaching are given in the following statements:

- i. According to DiGiacomo (1989),
the topics should be introduced and illustrated, not just from the Bible and official church but also from a variety of sources, including the minor world of teen, the small world of teens together, the outside world of ordinary people, as well as events featuring famous people (p. 45).
- ii. Religious beliefs cannot be taught as if they were facts; but they are by nature experiential (Grimmitt, 1973).
- iii. The pluralist and materialistic nature of the present-society cannot allow for the use of traditional methods of teaching religion. To some extent, religion has a private affair so the approach in teaching it should be one that can help the learner to make his/her own free choice (Onsongo, 2002). She continues to say that the most important justification for the Life-Approach is that Jesus Christ, the gospel teacher, used the approach.
- iv. The presence of religious education in the school curriculum must be justified on educational grounds. This means a shift from the traditional faith-fostering role to a life-centred education (Loukes, 1965).
- v. “Ideally, education ought to prepare students to face the challenges of life. For this, education has to be linked with different life skills to measure up to these challenges”(Singh & Rana, 2004, p. 201).

On the whole as stated earlier, the degree of participation of the learner (learner centeredness) and how the content is related to the relevant previous knowledge of the learner makes this method a preferable one. Thus “the unique characteristic of the Life-Approach is that it would be performance oriented, based on action and behaviour modification” (Singh & Rana, 2004, p. 201).

Onsongo (2002) conducted a research on how to use the Life-Approach method in teaching Christian Religious Education in Kenyan Secondary Schools. The study found out that teachers were not adequately professionally trained to use the approach in terms of pre-service training. As a result, the teachers used the approach to a limited extent in teaching Christian Religious Education. It was also found out that the teachers encountered a number of problems in their attempts to use the Life-Approach, namely, shortage of time, an overloaded syllabus; inadequate guidance on how to use the approach, and inadequate teaching-learning resources to support the use of the method. It was suggested at the end of the study that, to improve on the use of the method, the inspectorate division of the Kenyan Education Service should intensify supervision of teachers in Secondary Schools so as to guide teachers, organise seminars and workshops on how to implement the syllabi using Life-Approach. Again, curriculum developers and book authors need to update the main Christian Religious Education text books to make it Life centred in approach.

The little problem that I have on the use of the Life-Approach method is the question of how to make up for the diversity or variations in learners’ individual experiences because they come from different religious and social

backgrounds. What should be done in a situation where learners have contradictory experiences because, they come from different religious, economic, and social backgrounds? Here a common life experience which applies to a greater number of them will best suit them for their maximum participation. Learners should be given the opportunity to share their experiences with others and relate what is being learnt to their personal experiences.

Particular attention has been given to this method because undoubtedly, it is a teaching method:

“-that builds on the foundation of knowledge already possessed by pupils

-that encourages children to learn by doing

-that ensures that learning grows out of useful experiences

-that uses teaching aids effectively” (Farrant, 1980, p. 170).

The Existential Pedagogy

The existential pedagogy emphasises individual responsibility, individual personality, individual existence and individual freedom of choice. All people are fully responsible for the meaning of their own existence and creating their own essence of self-definition. Knowledge, as perceived by the existentialist, originates in and is composed of what exists in an individual’s consciousness and feelings as a result of one’s experiences (Anonymous, n. d.).

According to the *Cambridge Advanced Learner’s Dictionary* (2008), “existentialism is the modern system of belief made famous by Jean-Paul Sartre in the 1940s in which the world has no meaning and each person is alone and completely responsible for their own actions, by which they make their own

character” (p. 489). In the same way, Kelly (2004) posits that “every human being, it is claimed, must be defined as a unique individual and not as a mere representative of some wider grouping” (p. 29). In this case the individual must be held responsible for his actions and inactions. In fact, for the existentialist, “The highest interest of the individual must be his own existence” (Onwuka, 1996, p. 153).

Having talked about the meaning of existentialism, the question is what is the role of the teacher in using the existential approach? The teacher must not exert his/her wishes on the members of the class. Each student is an individual and has his or her own personality as reiterated in the explanations above. For a teacher to try to determine what is best for students is effectively to impose his or her wishes on the students, to dominate them. This is destructive of individuality and personality and is wrong in teaching religion. The teacher should rather act as a resource person or a facilitator in the course of teaching RME in Junior High Schools so that he or she will develop understanding of concepts by encouraging creativity and discovery learning. The learner’s individual personality, forming the centre stage of RME lessons, is a sure way of preventing the teachers from implanting their own beliefs into the learners through non rational means.

In the personalist and existentialist approach, religious education offers itself as a contribution to the young person’s quest for meaning in life. This is the religious education which deals with ultimate problems, with mystery and awareness that which seeks to provoke an enquiry into values and commitments in living. This is

another important strand in the British tradition of religious education (Hull, 1993, pp. 16-17).

Thus in teaching RME in the Junior High Schools, the attention of the teacher should be on trying to help the learners to find meaning in their individual lives and not the teacher's own life. We cannot draw a very sharp line between the life of the teacher and the life of the learner because there are cases where the learner's life is influenced partially by the teacher's life. Nevertheless, the RME teacher is expected to teach and not preach.

In the mean time, in teaching RME, there is the need to use the pedagogy that

- i. seeks to create in pupils certain capacities to understand and think about religion as a unique mode of thought and awareness,
- ii. starts with the child's own feelings, acts and experiences and helps children to build conceptual bridges between their existential experiences and the central concepts of religion" (Grimmitt, 1973, p. xv).

The core of the existential approach to the teaching of Religious and Moral Education centres on these three points stated by Grimmitt (1973). This approach to Religious and Moral Education is grounded in making the learner's characteristics, namely the existential experiences become the basis for forming religious concepts. Although it is as important and necessary to the RME teacher to follow the existential approach in teaching, existential approach has its own

limitations in its attempt to enable learners to discover meaning and purposes in their lives, the personal/existential approach tends to become excessively individualistic (Hull, 1993). Obviously this approach tends to personalise religion extremely. Though this would promote peaceful coexistence of the numerous variations in the various religions, it does not capitalise on the strong similarities and commonalities that exist in various religious denominations. After all “All religions have theology of other religions’ whether expressed or not, and today we are all under pressure to review it, relate more positively to people of other faiths and grow, in togetherness and as a community” (World Council of Churches, 1986, p. ix). The question which then comes to mind is: is it possible to individualize the work of the teaching process to provide specifics for each student? What happens if the existential experiences contradict?

In a nutshell, “Religion permeates into all the departments of life so fully that it is not possible to isolate it. A study of these religious systems is, therefore, ultimately a study of the people themselves in all the complexities of traditional and modern life” (Mbiti, 1979, p. 1). Therefore an approach that focuses on the individual lives of the learners is a laudable one which must as a necessity, be employed in teaching RME.

Concept Cracking Pedagogy

The Stapleford Project was set up in 1986 by the Association of Christian Teachers in England with the purpose of producing a range of materials to support teaching about Christianity in school religious education. The methodology of the Project has become known by the catch phrase *Concept Cracking*. This has been

described in detail elsewhere (Cooling, 1994a & Cooling, 1996), but can be summarized as a two stage process.

1. Stage 1 focuses on the importance of teachers understanding their subject matter and being clear as to exactly which concepts will be the focus of their teaching when covering any particular topic. The key tasks in this stage are, firstly, to unpack the range of concepts that are embedded in the chosen topic and might be the focus of teaching and, secondly, to select one or two of these to be the focus of attention in this particular unit of work. Selection will be on the basis of a number of criteria including the appropriateness for the pupils, the balance in a scheme of work and, of course, the importance of particular concepts within Christianity.
2. Stage 2 entails planning teaching activities which translate the selected concept into a form that makes sense in the pupils' world of experience. This stage entails making links or bridges with the pupils' world and then designing learning activities which help the student both to understand the religious concept and its significance for the believer and to re-apply the concept in a way that helps the student in their own understanding of the world. There are parallels here with the work of other projects and in particular the ideas of "bridges" and "edification" in the Warwick RE Project (Jackson, 1997) and the idea of the study of a religion making "a gift to the child" in the Birmingham University Project (Grimmitt, 1991 & Hull, 1996).

As a practical classroom tool, the *Concept Cracking* approach has been broken down into four specific steps, which can be remembered using the acronym USER. Steps 1 and 2 constitute stage 1 and steps 3 and 4 constitute stage 2 above. I will illustrate this 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 topic it is important to be aware of the different theological concepts that underpin it and are important to understanding its meaning and significance. If teachers are not clear about the ideas being covered, the pupils certainly will not be. In this case, the key concepts include anger, injustice, holiness, Jesus as God's son 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 that are being taught, 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 pupils' world which 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 to divide these into occasions when they were right to be angry and occasions when they were wrong to be angry. The purpose of the activity is not so much to make a judgement on the particular instances, but to establish the idea in pupils'

minds that there are right and wrong forms of anger and to begin the process of 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 to ask the pupils to comment on how Jesus' behavior is being portrayed in the painting. In particular they will notice there are two groups of people, those who are the object of his anger and those who are being affirmed. A role play could then be used in which pupils take on the roles of members of the two groups and debate Jesus' behavior. 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 own views, perhaps through the medium of a diary entry from someone who was present in the Temple, as to whether or not Jesus' anger was justified. This can then lead into 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 which must be done by teachers to clarify their own 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 in order to ensure that the lesson is relevant for the pupils. Many lessons will have to begin with an activity that is designed to build the bridge between the pupils' world and the religious topic.

Content Knowledge

Content knowledge (CK) is knowledge about the actual subject matter that is to be learned or taught. Clearly, teachers must know and understand the subjects that they teach, including knowledge of central facts, concepts, theories, and procedures within a given field; knowledge of explanatory frameworks that organize and connect ideas; and knowledge of the rules of evidence and proof (Shulman, 1986).

Many people look up to religion for moral guidance. There cannot be a successful moral education without religion. However, if the content of a moral education programme is based on a particular religion it becomes dangerous because when the religious beliefs are rejected there appears to be no longer any basis for moral principles (Downey & Kelly, 1978). They further explained that there is no justification for teaching religious doctrines or for attempting to establish faith or belief in them since to do so is to discourage the open and critical approach to knowledge which is the essence of education and to offer us "facts", and "knowledge" whose basis are highly problematic. Where links between morals and religion have been claimed, these links are forged with the

doctrinal aspects of the religion, for example it is because “God is love”, that is why we are urged to love our neighbours. This general development draws our attention to the problem surrounding moral assertions as well as those of religious knowledge; it puts religious knowledge at risk. If we cannot justify teaching doctrinal aspects of religion, then we cannot justify teaching moral precepts that are based on them. If our approach to the teaching of religious and moral education is liberal and open ended, the implication of this is that students are to be encouraged to make up their own minds on religious issues to accept or reject, to stand on their own feet in such matters (Smart, 1968).

If however their considered choice is to reject religion, the result of linking religion and morality will be rejection of morality too. Not only is it undesirable, it is also a logical and psychological impossibility. For while it is possible to live without religion, it is clearly not possible to live except at a level of animal existence, without any set of moral values or principles to guide one’s behaviour or one’s human choice, (Kirk, 1979). It needs to be mentioned however, that, religion is not the only means to a moral life as people can be morally upright without necessarily being religious.

Content might be described as the knowledge, skills, attitudes and values to be learned (Nicholls & Nicholls, 1972). They further stated that it is usually acknowledged that there is far more to be learned than is possible during the period of school education. According to Igwe (2003) before the selection of 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 on the basis of the educational purposes and goals decided upon by the society served by the school. It ensures that the content reflects the cumulative traditions, values, needs and aspirations of the society. The emphasis is on inculcating creativity and problem solving skills which emphasises how to think and not simply what to think. Relevance gives curriculum its true cultural base and appropriate context.
3. Utility – utility or functionality means the content must have direct contribution to an individual's personal life and role in the society. Education through the school must be useful to the individual and the society.
4. Interest – it refers to the needs of the individual in terms of motives, readiness, capacity, attitudes, etc. Students' interests relate the curriculum to the child and promote self-esteem, personal fulfillment and mastery learning.
5. Continuity – this demands the selecting of the basis which could progressively be built upon. It involves building appropriate connections

in curriculum content either on the basis of prerequisite or a progression from simple to complex, known to unknown, general to specific or progressive differentiation and refinement of concepts.

Consequently, the scope of content of the R.M.E. programme in the junior high school covers the moral teaching of the three main religions in Ghana – Christianity, Islam and African Traditional Religion. It also covers the basic principles of the religion, moral and traditional values cherished in the country such as: love, honesty, respect, self control, sincerity and cleanliness. Again, it covered objectives on leadership, 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, etc (Teaching Syllabus for R.M.E., JSS).

Applying the TPCK Framework to Teaching

How are teachers to acquire an understanding of the complex relationships among content, pedagogy, and technology? The standard approach suggests that teachers simply need to be trained to use technology. Underlying this approach is a view of technology that sees it as being a universally applicable skill; unlocking the power and potential of technology can be achieved by acquiring basic competency with hardware and software packages. This approach is best exemplified by the plethora of state and national technology standards that have been implemented recently and that emphasize enhancing teachers' knowledge of current versions of hardware and software (CEO Forum on Education and Technology, 2000; Handler & Strudler, 1997; Hirumi & Grau, 1996; National

Council for Accreditation of Teacher Education, 1997; U.S. Congress Office of Technology Assessment, 1995; U.S. Department of Education, 2003; Wiebe & Taylor, 1997; Zhao & Conway, 2001). The leap of faith, however, is that by demonstrating their proficiency with current software and hardware, teachers will be able to successfully incorporate technology into their classrooms. Lankshear (1997) described this emphasis as a form of applied technocratic rationality—a view that technology is self-contained and has an independent integrity, and that to unlock its potential and power requires merely learning certain basic skills. As a consequence of these initiatives by policy makers, teacher educators, and technology enthusiasts, we see a wide range of workshops and teacher education courses about general software tools that have application across content and pedagogical contexts. This content-neutral emphasis on generic software tools assumes that knowing a technology automatically leads to good teaching with technology. Standard techniques of teacher professional development or faculty development, such as workshops or standalone technology courses, are based on the view that technology is self-contained and emphasise this divide between how and where skills are learned (e.g., workshops) and where they are to be applied (e.g., classrooms). This is somewhat akin to the kind of knowledge representation portrayed in Figure 3. Most scholars working in this area agree that traditional methods of technology training for teachers—mainly workshops and courses—are ill suited to produce the “deep understanding” that can assist teachers in becoming intelligent users of technology for pedagogy (Brand, 1997; Milken Exchange on Education Technology, 1999; U.S. Department of Education, 1999).

As we have argued (Koehler & Mishra, 2005; Mishra & Koehler, 2003), this emphasis on competencies and checklists of things that teachers need to know is inherently problematic for a range of reasons.

The use of specific software packages by teachers not only makes their knowledge too specific to be applied broadly, but it also becomes quickly outdated. Technology is changing so fast that any method that attempts to keep teachers up to date on the latest software, hardware, and terminology is doomed to create knowledge that is out of date every couple of years. Most software tools available today are designed for the world of business and work, not education. As Mishra and Koehler (2003) argued, most software tools are rarely created as solutions to pedagogical problems. More often than not, they are created as potential solutions to problems in the world of business as anticipated by programmers and other developers. Converting these general tools for classroom teaching is neither trivial nor obvious. It requires the teacher to engage with the affordances and constraints of particular technologies in order to creatively repurpose these technologies to meet specific pedagogical goals of specific content areas. An emphasis on merely learning the technology may lead to an emphasis on pupils learning technology (technology as the subject and content of learning) rather than the subject matter that they are supposed to learn. Context-neutral approaches to technology integration encourage generic solutions to the problem of teaching. However, technology use in the classroom is context bound and is, or at least needs to be, dependent on subject matter, grade level, pupil background, and the kinds of computers and software programmes available. Our

argument is not that such generic uses are never useful. However, despite valuable generic uses of technology (such as grade books), such approaches do not avail the full potential of technology for teaching specific subject matter.

Finally, standard checklists of technology skills are very efficient means of listing what teachers need to know, but offer little suggestion on how teachers are to achieve these skills. This often leads to the development of technology learning situations that adhere to the letter of the standards but go against the spirit of true technology integration. For example, workshops to teach specific hardware or software packages, we argue, lead to the accumulation of inert facts (Whitehead, 1953), as opposed to knowledge integration or application. Teachers have often been asked to learn to apply these skills in their own classrooms by themselves (Kent & McNergney, 1999), usually through trial and error. Though part of the problem is shortage of resources (time and money), it is believed that there are deeper and more intractable issues related to values, goals, and methods that need to be addressed if we are to develop appropriate and useful ways for teachers to integrate technology in their classrooms. In terms of the TPCK framework that have been proposed, context neutral approaches are likely to fail because they overemphasize technology skills (the “T” in the model) without developing pedagogical technology knowledge, technological content knowledge, or technological pedagogical content knowledge. In other words, merely knowing how to use technology is not the same as knowing how to teach with it. A survey by the Milken Family Foundation and the International Society for Technology Education (ISTE) found out that teacher training programmes in general do not

provide future teachers with the kinds of experiences necessary to prepare them to use technology effectively in their classrooms (Milken Exchange on Education Technology, 1999). Specifically, they found out that formal standalone IT coursework does not correlate well with technology skills and the ability to integrate technology into teaching. They recommended that teacher preparation programmes increase the level of technology integration in their own academic programmes. More recent standards, such as those of the International Society for Technology Education (ISTE) and the National Council for Accreditation of Teacher Education (NCATE, 1997, revised in 2001), have moved away from an emphasis on just basic skills and have enumerated a series of higher order goals that are essential for effective pedagogy with technology (Glenn, 2002a, 2002b; Handler & Strudler, 1997; Wise, 2001). A review of the recent teacher education research regarding technology will show numerous examples of teacher education programmes that have implemented instructional technology in ways that encourage integration (for examples see, Fulton, Glenn, & Valdez, 2003; Fulton, Glenn, Valdez, & Blomeyer, 2002; Hacker & Niederhauser, 2000; Loucks-Horsley, Hewson, Love, & Stiles, 1997; Niederhauser, Salem, & Fields, 1999; Niederhauser & Stoddart, 2001; Strudler & Wetzel, 1999). Most of these approaches have involved providing teachers and teacher candidates with experiences of real educational problems to be solved by technology. Our work on learning technology by design also capitalizes on the idea of involving teachers in authentic problem solving with technology.

Teacher Quality in Religious Education

The need for competent personnel, especially teachers, is a very pertinent issue because Religious and Moral Education as a school subject is structured along the subject pattern of curriculum organization; and as Smith, Stanley and Shores (1957) clearly pointed out, well trained teachers is one of the requirements for the effective operation of the subject curriculum. The role of the teacher in the effective implementation of the Religious and Moral Education curriculum cannot be overemphasized. Marsh and Willis (2003) posited that, “whenever policies and programmes have originated from above, teachers must plan their activities around them for periods of time, ranging from a full-year course to a daily lesson of a few minutes” (p. 197). They further explain that teachers rely on the content and methods outlined in textbooks, syllabi, and teachers’ guides for their planning, but what they actually teach depends on their own preferences. They synthesize instinctively, in keeping with their own artistic flairs. Thus teachers, by their own ingenuity, break down the Religious and Moral Education curriculum into a form that could easily be assimilated by the learner in the classroom. The implication of this is that, a case of teacher ineffectiveness in the presentation of Religious and Moral Education lessons is likely to have a debilitating effect on pupils’ performance as well as on the acquisition of the basic skills and knowledge required of them. This calls for regular monitoring of Religious and Moral Education teachers, to ensure effective teaching of the subject at the Junior High School level.

It is an undeniable fact that teaching is a challenging profession. The responsibility of organising and planning pupils' learning is entrusted to the teacher. "Teaching is not merely instruction, but the systematic promotion of learning by whatever means. Teaching strategy is an important aspect of curriculum" (Stenhouse, 1987, p. 24). It is necessary for stakeholders in Religious Education to provide teachers with the requisite opportunities so that they will acquaint themselves with the nuances of quality teaching – use of suitable and appropriate methods of teaching. In fact "...curriculum development must rest on teacher development and that it should promote it and hence the professionalism of the teacher" (Stenhouse, 1987, p. 24).

Right from the outset of this critique, it must be noted that "Educational considerations thus come into the teacher's thinking about the methods they employ in teaching" (Browne & Haylock, 2004, p. 38). Herein lays the necessity for teachers to abreast themselves with effective methods of teaching. In order to achieve qualified teacher status in England, one of the criteria is that teachers should be able to improve their own teaching, by evaluating it, learning from the effective practices of others and from evidence, and lastly take increasing responsibility for their own professional development (Cole, 2002). This is very similar in the Ghanaian setting because all these are taken into consideration before a teacher proceeds through the ranks in the profession. This invariably leads to the maintenance of high professional standards through regulation of the profession by members of the profession and the provision of evidence-led advice, in order to maintain and develop expertise within teaching.

According to DiGiacomo (1989), “Religion teachers need a solid background and willingness to develop their skills through continuing education” (p. 21). This would help them to sharpen their skills in using the various methods of teaching Religion of which the Life-Approach is one of them. Farrant (1980) continued to say that efficient teaching in school demands of the teacher a sound knowledge of all the pupils must know, together with an ability to relate the content, methods, sequence and pace of his work to the individual needs of his pupils, using the environment and appropriate media to support him. It takes professional teachers to go through all these processes successfully. Hence teacher quality depends largely on these.

In relation to how to improve teacher quality in schools, Aggarwal (2001) suggested that “in order to provide guidance to teachers in the techniques of teaching various subjects, subject experts should be appointed at the District level. They should provide guidance to teachers when they visit their schools” (p. 306). Curriculum leaders should be appointed and given the necessary expertise so that they will be able to supervise teachers of RME periodically. This will rekindle their zeal to perform creditably and be circumspective in their choice of methods of teaching. Issues concerning teacher quality are very paramount because “It is agreed by all that in the last analysis the quality of education must necessarily depend on the quality of teachers” (Aggarwal, 2001, p. 307). Although the teachers’ professionalism is seen to be very important, “Professionalism tends to be weak among teachers in the developing countries because the criteria of a true profession are not completely met” (Farrant, 1980, p. 224). I share the concern of

Farrant in that some teachers are left to their fate after completing their professional training without any seminars and workshops to update their skills in teaching. Also, there are situations where Reverend Ministers are made to handle RME without any professional training in education. Why cannot we require teachers to go on contract so that those who do not upgrade themselves have their contracts terminated?

In relation to this, “Professor Eric Hoyle has drawn attention to varying degrees of professionalism among teachers. Those with limited concern for professionalism, he described as restricted professionals and those with high interest in professionalism as extended professionals” (Farrant, 1980, p. 225). He went on to prescribe some areas of professional concern namely, teaching skills, perspectives in the classroom, classroom events, teaching methods, value of teaching and involvement in non-teaching activities.

In the final analysis, quality teaching is the bedrock and backbone of quality education and so it is worthwhile for stakeholders of the teaching profession to try and provide the requisite opportunities and logistics to develop teacher’s professionalism. This will invariably sharpen teachers’ pedagogical skills.

Empirical Review

Impact of Teacher Quality on Pupil Performance

Sanders (1992) examined the impact of quality teachers on pupil achievement by tracking the progress of each pupil in Tennessee through a large database. In his research, Sanders found out that, “low achieving pupils gain

about 14 points each year on the state test when taught by the least effective teachers, but gain more than 53 points when taught by the most effective teachers with good pedagogical knowledge”. Sanders outlines a correlation between quality teaching and pupil performance. Goldhaber (2002) discusses the need to examine the impact of teachers on pupil achievement because of a projected teacher shortage during the next decade. He wrote that, “Good teachers certainly make a difference, but it is unclear what makes for a good teacher”. Darling-Hammond et al. (2004) supported these researchers when they pointed to the importance of a quality classroom teacher to the success of pupils. She suggested that well-prepared, quality teachers have a powerful impact on pupil achievement. Campbell (2007) also corroborates the importance of a quality teacher on pupil achievement. The report by the National Assessment of Educational Progress illustrates that there is a correlation between teacher quality and pupil achievement—particularly for minority pupils (NAEP, 2007). The author indicated that, “The message is clear: having a well-qualified teacher who knows her content material is more important than the name of the course in terms of demonstrated achievement” (NAEP, 2007). There are also factors, both pupil-related and teacher-related, that can influence pupil achievement.

A meta-analysis of current research on the impact of a quality teacher on pupil achievement by the Center for Public Education (2000) defined four dimensions of teacher quality: content knowledge, teaching experience, professional certification, and overall academic ability. Content knowledge is defined as having a major or minor in the field in which they teach. A minimum

of five years teaching experience influences pupil achievement, according to the Center. On the other hand, an inexperienced teacher can hinder pupil achievement. Professional certification is defined as being certified in the subject area. Academic ability is measured through ACT and/or SAT scores, grade point average, or through the selectiveness of the college or university from which the teacher graduated. According to the Center, the possession of these characteristics is “likely to produce effective teaching.” The Center for Public Education was not the only organization to validate these findings as studies from the Texas Schools Project and Tennessee’s Value Added Assessment System and Pupil Teacher Achievement Ratio project also identified these same four qualities as major factors influencing pupil achievement (Center for Public Education, 2000).

However, Ferguson and Brown (2002) conducted a meta-analysis of research regarding the correlation between teacher qualification, teacher quality, and pupil achievement. They points out that pupil test score gains are an imperfect measure of what we really want to know: the teacher’s contribution to producing the gains. Because other factors such as pupil, home, school, and community characteristics affect achievement as well, teachers deserve neither all of the credit for success nor all of the blame for the failures. Many factors affect pupils, yet numerous research studies point to the importance of the teacher in the classroom in relationship to pupil achievement gains.

Importance of a Quality Teacher in the Classroom

Although research is mixed as to what constitutes a quality teacher, there is no question that teacher quality influences pupil achievement. Goldhaber and

Anthony (2002) state that, teacher quality is the most important educational input predicting pupil achievement. Although it is easy to test measurable characteristic such as degree level and years of experience, quality teaching is much more complex. Darling-Hammond (2004) suggested that, teacher quality is the most influential factor in pupil achievement.

More important than the positive impacts of teacher quality on pupil achievement is the negative impact of a poor teacher on a pupil. Studies conducted by Sanders and Rivers (1996) show how the impact of quality teachers can accumulate over time. They purport that, fifth-grade Math pupils who had three consecutive highly effective teachers scored between 52 and 54 percentile points ahead of pupils who had three consecutive teachers who were least effective, even though the Math achievement of both groups of pupils was the same prior to entering second grade. The progress of pupils assigned to the most effective and least effective teachers in grades 3-5 was also tracked. Pupils who had three low-quality teachers from grades 3-5 scored in the 29th percentile in Mathematics, whereas pupils who had three high-quality teachers scored in the 83 percentile. Results such as these show the positive and negative impacts of having quality teachers in every classroom.

Summary of Literature Review

Quality teaching requires developing a nuanced understanding of the complex relationships between technology, content, and pedagogy, and using this understanding to develop appropriate, context-specific strategies and representations. Productive technology integration in teaching needs to consider

all three issues not in isolation, but rather within the complex relationships in the system defined by the three key elements. Good quality teachers must have a sound knowledge of what their people must know and have the ability to relate the subject matter (content) to individual needs; to use the environment and appropriate media to support learning (technology), use a range of teaching strategies skillfully (pedagogy) and have enthusiasm for the subject. In simple terms, quality teachers should have the ability to combine technology with pedagogy and content that inspires learners to enjoy learning and perform better. For this reason, a lot of the instructional strategies namely life themes approach, existential approach, value clarification approach, concept cracking approach, and the use of instructional resources such as audio, video, audio- visual, community resources and content knowledge for the teaching and learning of RME in Junior High schools have been given a critical look in this review.

CHAPTER THREE

METHODOLOGY

This section examined the research methodology that was used to carry out the research. It comprises the research design, the population from which sample was selected, sample and sampling procedure, research instrument, validity and reliability of instrument, data collection procedure and data analysis procedure.

Research Design

Research Design is a plan or a blue print of how a researcher intends to conduct a study (Mouton & Prozesky, 2005). Ghauri and Gronhaug (2005) state that “a research design should be effective in producing the wanted information within the constraints put on the researcher”. Such constraints include time, budget and skills. Similarly, Blanche, Durrheim and Painter (2006) define research design as a “strategic framework, a plan that guides research activity to ensure that sound conclusions are reached”. The essence of research design is to guide the researcher on the type of data to collect, how to collect, process and analyse them in order to answer the research problem(s).

The research design that was used for this study was the correlational research design. Correlation research attempts to investigate possible relationships among variables without trying to influence those variables. Gall, Gall and Borg

(2007) summarise it by saying that “correlational research refers to studies in which the purpose is to discover relationships between variables through the use of correlational statistics” (p. 332). In simplest form, correlational research attempts to determine whether and to what extent or degree a relationship exists between two or more quantifiable variables.

This design was chosen because it offered the researcher the opportunity to find out to what degree a relationship exist between teachers’ technological knowledge and pupils’ performance; teachers’ pedagogical knowledge and pupils’ performance as well as teachers’ content knowledge and pupils’ performance in the Ga-South Municipality. However, the design has its own weakness as correlation does not necessarily establish cause-and-effect relationship. In other words, the fact that there is a relationship between variables does not imply that one is the cause of the other (Amedahe & Asamoah-Gyimah, 2008). However, regardless of whether a relationship is a cause-and-effect relationship, the existence of a high relationship permits prediction. The researcher therefore, deems it appropriate to adopt this research design for this study.

Population

Polit and Hungler (1996) described a population as the entire aggregation of cases that meets a designated set of criteria. In this case, whatever the basic unit, the population always comprises the entire aggregation of elements in which the research is interested. Nwana (1992) also postulates that a population is all the members of the target of the study as defined by the objectives of the study.

The population of the study comprised RME teachers and final year pupils in the basic schools in the Ga-South Municipality. There were 275 basic schools in the Ga-South Municipality with a total RME teachers' population of 318 and final year pupils' population of 5,565 during the 2014/2015 academic year (Ga-South Municipal Assembly, 2015). Pupils were also selected to constitute the study because they are at the center of the teaching and learning process. Therefore, their scores were collated to cater for the performance variable in relation to the teaching quality they received from their respective teachers. RME teachers were selected because of the important role that they play in the selection and application of methods of teaching, use of instructional resources as well as their mastery of content as far teacher quality in RME is concerned.

Sample and Sampling Procedure

Sidhu (2002) postulated that a sample is a small proportion of a population selected for observation and analysis. Thus, observing the characteristics of a sample, one can make certain inferences about the characteristics of the population from which it is drawn. Sampling enables the researcher to study a relatively small number of units in place of the target population, and to obtain a representation of the whole target population. In fact, "samples are expected to be representative. For that reason, samples are expected to be chosen by means of sound methodological principles" (Sarantakos, 1997, p. 140).

Out of the 275 basic schools in the Ga-South Municipality, 159 basic schools were selected to participate in the study based on the Krejcie and Morgan table for determining sample size. The cluster sampling technique was used to

select the various basic schools (both private and public) to participate in the study. The cluster sampling technique was used due to the large and widely dispersed nature of the population, which poses administrative problems gathering a simple random sample. Therefore, the various schools (159) were broken down into clusters of 8 based on the 8 circuits in the area. The proportional allocation of sample size was used to select schools from each circuit based on the number of schools in the circuit to give a fair representation of each circuit (i.e. number of schools in each circuit divided by the total number of schools in all the eight (8) circuits and the result was multiplied by the sample size 159 basic schools). When this was done, the sample of schools that constituted the study were as follows; Bortianor circuit (19), Weija circuit (17), Ngleshie Amanfro circuit (23), Kofi-kwei circuit (20), Oboom circuit (18), Ashalagya circuit (20), Adaisu circuit (19) Nsawam circuit (23). Cluster sampling is considerably more economical and practical than other types of probability sampling, particularly when the population is large and widely dispersed (Heiman, 1996), and that is why the researcher adopted it in this work.

In all, 532 respondents (357 pupils and 175 RME teachers) were selected for the study according to Krejcie and Morgan (1970), for determining a sample size. These constituted the sample size of pupils and RME teachers used for the study.

The multi-stage sampling technique was employed to select 357 pupils for the study. Firstly, a list of all the 159 schools in the Ga-South Municipality was obtained from the Ga-South Municipal Assembly. Secondly, a list of all the pupils

in each school was obtained. The third phase involved proportional allocation of the sample size among each school such that schools with large population size obtained large sample size (i.e. the total population of each school was divided by the total population for all 159 basic schools and the result was multiplied by the total sample size for all the schools). This procedure was applied to all the 159 basic schools until the total sample for each school was obtained. Finally, the purposive sampling procedure was used to select the RME teachers for the study. “In this sampling techniques (also known as judgemental sampling), the researchers purposely choose subjects who in their opinion, are thought to be relevant to the research topic” (Sarantakos, 1997, p. 152). From my own judgement, those who teach RME in the Basic Schools in Ga-South Municipal Assembly could be in a better position to give me the needed information pertaining to the use of content, pedagogy and technology so far as RME is concerned.

Research Instruments

According to Gay (1992), all research studies involve data collection. The instruments that were used to gather the data that served as bases for making inferences, interpretations, descriptions and explanations were questionnaire, observation guide, as well as standardised-achievement-test. Sidhu (1984) said that a questionnaire is a form prepared and distributed to secure responses to certain questions. It is a systematic compilation of questions that are submitted to a sampling population from which information is desired. As to why questionnaire was used, it helped me retrieve relevant information from the RME

teachers easier and quicker rather than to interview every subject in the study. McBurney (2007) gave two basic categories of questionnaires as closed ended and open ended questions. The questionnaire items were grouped into four parts with the first part dealing with the socio-economic background information of the RME teachers and the remaining three sections dealt with the various research questions that were formulated to guide the study. Apart from the socio-demographic background which was a mixture of open and closed ended questions, the rest of the questions were on a five point Likert scale.

Again, an observation guide was used to gather information on how teachers use instructional resources appropriately. According to Sarantakos (1997), “observation is one of the oldest methods of data collection” and “it literally means ... a method of data collection that employs vision as its main means of data collection” (p. 208). The researcher employed a structured non-participant observation. The observation guide was structured by the use of a Likert scale. The application of observation was due to the fact that the researcher wanted to make up for the deficiencies that might occur with the use of only a questionnaire. Besides, the use of observation was relatively inexpensive, not time consuming and allowed for the collection of first hand information.

A standardised-achievement-test consisting of 20 multiple choice items was given to final year pupils in each of the basic schools that was included in the study to answer. The test was collected and marked by the researcher and scores recorded to cater for the performance variable in the study with which dependent variables such as teachers’ technological knowledge, teachers’ pedagogical

knowledge, as well as teachers' content knowledge were compared with. The test was compiled from the B.E.C.E RME past questions from 2008 to 2014.

Validity and Reliability of Instruments

The research instruments were subjected to a validity and reliability test. The instruments were given to an expert, my supervisor for that matter to ascertain how they met face and content validity. The suggestions as given by my supervisor were used to effect the necessary changes to improve upon the instrument. Thereafter, a pilot test of the instruments was conducted whereby the observation guide and questionnaires were administered in thirty (30) selected schools in the Cape Coast Metropolis. This area was chosen for the pilot testing because the curriculum as implemented in this area has the same characteristics in terms of content and pedagogical practices as compared with what pertains in the Ga-South Municipal Assembly. The pupils also bear similar characteristics in terms of age as compared to the students in the Ga-South Municipality. Moreover, pupils from the Ga-South Municipality and those in Cape Coast write the same examination and are expected to relate Religious and Moral lessons to the existential experiences.

The teachers from both regions have similar characteristics in terms of qualifications. The data gathered were analysed and the Cronbach's alpha established for each of the items that fall under the three research questions. The values of Cronbach's alpha of .71 for teachers' questionnaires as well as .83 for the observation guide were obtained. According to De Vellis (1991), such a reliability coefficient is said to be respectable. Therefore, the instrument was

considered reliable and appropriate to collect the relevant data to answer the questions posed. Also Fraenkel and Wallen (2000, p. 17), posited that “For research purposes a useful rule of thumb is that reliability should be at .70 and preferably higher”. The researcher made test was also given to the researcher’s supervisor to scrutinize and ascertain how they met both face and content validity. With these in place, the instruments could be said to be of good quality capable of collecting useful data for the study. The queries that came out of the item analyses were catered for. The reliability of the instruments was determined using Statistical Product for Service Solutions (SPSS). All these actions were taken to ensure that the instrument would be capable of collecting quality and useful data for the study.

Data Collection Procedure

In order to ensure a high return rate, the instruments were administered personally by the researcher. Before data collection, He presented an introductory letter from the Head of the Department of Arts and Social Sciences Education of the University of Cape Coast. The purpose of this introductory letter was to solicit for cooperation and also to create rapport between the researcher and the respondents for the study. A discussion was held with teachers and head teachers of the various basic schools selected for the study to agree on a convenient time to administer the instrument. The teachers were supervised by the researcher to complete the questionnaire.

With respect to the observation, the time for the teaching of RME in the schools involved was used. Each of the accessible schools was observed two

times during the instructional period. Here, the researcher joined them in class and observed closely the proceedings of the lessons while completing the observation guide. In order to prevent teachers from realizing that the researcher was there to assess teacher quality as well as their effective and appropriate use of instructional resources and so attempt to put on a façade and intentionally do things right, the observation preceded the administration of the questionnaire.

Again, in order to get information concerning pupils' performance, a researcher made test was given to the pupils to answer. Each of the final year pupils in the accessible schools was made to answer this twenty-item multiple test in 20 minutes, after which the test was collected and marked by the researcher.

Data Analysis

This study sought to assess teacher quality in Religious and Moral Education as a determinant of pupils' performance in the Ga-South Municipality. To answer the research questions that were formulated to guide the study, the type of statistics that was employed in the analysis of the data was both descriptive and correlational statistics. Specifically, the data was analysed through the computation of frequencies, percentages, mean of means distributions, as well as the computation of correlation coefficient. Particularly, the type of correlation coefficient that was employed in the study was the Pearson's Product Moment Correlation (r) which is by far, the most common correlation coefficient in educational research (Heiman, 1996). The Pearson's Correlational Coefficient was used to describe the linear relationship between each of the variables. This

was done with the use of computer software called Statistical Product for Service Solutions (SPSS).

CHAPTER FOUR
RESULTS AND DISCUSSION

Introduction

The purpose of this study was to assess teacher quality as a determinant of pupils' academic performance in RME in the Ga-South Municipality. A set of questionnaires, an observation guide and a researcher made test were employed to gather the requisite data for the study. The data gathered from both teachers and pupils as well as that of the observation were analysed through the computation of frequencies, percentages, mean of means distributions as well as correlation. This chapter presents the interpretations, discussions and inferences that were made from the output.

Analysis of Data from Teachers and the Observation Guide

Table 1 shows the characteristics of RME teachers in Basic Schools in the Ga-South Municipality, who served as respondents for the study.

Table 1: Characteristics of Sampled Teachers

Variable	Subscale	No.	%
Gender	Male	104	61.5
	Female	71	38.5
Religious Affiliation	Christianity	175	100
Teaching experiences	Less than 1 year	20	11.8

(Table 1 cont'd.)

	1-5 years	90	53.3
	6-10 years	44	26.0
	11-15 years	11	3.0
	16 years and above	10	5.9
Highest academic qualification	Master of Philosophy	10	5.9
	MBA	11	3.0
	Bachelor's Degree	70	41.3
	HND	29	17.2
	Diploma	15	8.9
	WASSCE	35	20.7
	"A" Level	5	3.0
Highest professional qualification	Teacher's Cert "A"	10	5.9
	Diploma in Education	20	11.8
	Post Graduate Diploma in Education	10	5.9
	Bachelor of Education	50	29.6
	Masters in Education	11	3.0
	HND	15	8.9
	None	59	34.9

Source: Field data, 2015

Out of the intended sample size of 318 RME teachers 175 were involved in the study. These were the number of teachers who teach RME in the 159

accessible schools. All the RME teachers were involved in the study. This indicates 100% return rate.

From Table 1, out of the 175 RME teachers who were involved in the study, 61.5% were males, while 31.5% were females. So a greater number of RME teachers in the study area were males. It can also be noted that all the RME teachers in the area of study belonged to the Christian religion.

Again, with respect to how long RME teachers have been teaching the subject, 11.8% have taught for less than a one year, 53.3% for between 1-5 years, 26.0% have taught for 6-10 years, 3.0% have taught for 11-15 years and 5.9% have taught for 16 years and above. It follows that a significant majority have not handled the subject for a long time and so do not have enough experiences.

Also, it is clear from Table 1 that an overwhelming majority of the teachers: 41.3% have the Bachelors Degree, 5.9% had Master of Philosophy, 3.0% had a Masters of Business Administration Degree, 17.2% had HND, 8.9% had diploma, 20.7% had WASSCE and 3.0% had "A" Level. Therefore the teachers have the requisite academic qualifications to teach the subject. What cannot be answered for now is whether the Degrees they pursued were in the field of Religious and Moral Education. Another interesting thing that came up during the data gathering and needs worth mentioning here was that, it was realized that, most of the private schools due to cheap labour employed the services of Senior High School leavers to teach pupils whereas the public schools employed the services of well qualified degree holders with even teaching qualifications in the relevant area of study (RME) to teach. However, what surprised the researcher

most was that, even with this, pupils from the private schools still continued to perform better in the standardised-achievement-test that was given them as well as even their performance in the BECE which is on record far more than those from the public schools. Therefore, it is not really known whether teacher academic and professional qualifications are of value when it comes to assessing teachers' quality as a determinant of pupils' performance in RME or other immeasurable traits such as teacher commitment and dedication, etc are of much importance here.

Lastly, with regards to the respondents' highest professional qualification, 3.0% had Masters Education, 29.6% had Bachelor of Education, 5.9% had Post Graduate Diploma in Education, 11.8% had Diploma in Education, 5.9% had Teachers' Certificate 'A' and 42.0% had no professional teaching qualifications in RME. Thus, majority of the teachers who teach RME in the Ga-South Municipality do not have the requisite qualification to teach RME. This finding confirms Farrant (1980) who said that "Professionalism tends to be weak among teachers in the developing countries, because the criteria of a true profession are not completely met (p. 224). Does it follow that they will not be in the better position to use the Life-Approach, Existential Approach as well as the Value Clarification Method satisfactorily? The rest of the data analysis will try to answer this question.

This section presents the results and discussions of data collected to answer the three research questions formulated to guide the study. It comprised data from the questionnaire, observation guide and the researcher made test.

Research question 1: What relationship exists between teachers’ technological knowledge and pupils’ academic performance in RME?

The responses given by the RME teachers are shown in Table 2.

Table 2: The Views of RME Teachers concerning their Technological Knowledge

Statement	M	SD
I can learn technology easily.	4.36	.64
I keep up with important new technologies.	4.24	.60
I know about a lot of different technologies.	3.82	1.00
I use audio- visuals (example TV and motion pictures) in teaching.	2.68	1.14
I use visual resources (examples chalkboards, felt board, bulletin, boards and flash cards).	4.76	.42
I use community resources (example resource persons and places of interest) in teaching.	3.95	.73
I use audio materials (example radio and tape recorders) in teaching.	2.39	1.09
Instructional resources are not available.	2.91	1.45
Instructional resources are very expensive.	2.86	1.29
Use of instructional resources is time consuming.	2.31	1.29
I am incompetent in using instructional resources.	1.87	1.14
I use instructional resources for lessons.	3.71	1.10
Instructional resources help me to relate religious lessons to real life experiences of pupils	4.47	.61

Scale: 1 = Strongly Disagree, 2 = Disagree,
3 = Uncertain, 4 = Agree
5 = Strongly Agree

Mean of means = 3.41

Mean of Standard Deviation = 0.96

Teachers are the implementers of the curriculum. The responsibility of organising and planning pupils' learning is entrusted to the teacher. "Teaching is not merely instruction, but the systematic promotion of learning by whatever means. In that case they are strategically positioned to determine the technological knowledge they possess and use during the instructional period. A look at Table 2 shows that it was uncertain as to whether RME teachers had technological knowledge in the teaching of RME. A mean of means of 3.41 and a Mean of Standard Deviation of .96 clearly indicates that the RME teachers were uncertain about a lot of the statements which were meant to identify the technological knowledge that RME teachers possess. This is illustrated in the following instances in the rest of the items.

Regarding how teachers can learn technology easily, it was found out that a significant majority of the teachers agreed to the fact. A mean of 4.36 and a standard deviation of .64 were attained. Apart from the fact that the mean is higher than the mean of means of 3.41, the degree of agreement is considered appreciable because the measure of spread is very low. Also, the majority of the teachers agreed to the statement, "I keep up with important new technologies. A

mean of 4.24 and a standard deviation of .60 were attained for this item and this falls within the option “agree” looking at the scale.

A high standard deviation of 1.00 and a mean of 3.82 compared to mean of standard deviation of .96 and a mean of means of 3.41 clearly indicates that teachers know about a lot of different technologies. Even though the respondents agreed, their responses vary since the value of the standard deviation is high. In any case, it could be asserted that majority of the teachers support this statement.

In connection with the statement; “I use audio- visuals (example TV and motion pictures) in teaching”, the majority of the teachers were uncertain about it. The item recorded a mean of 2.68 and a standard deviation of 1.14 which fall under the scale of 3 meaning the respondents were uncertain about the statement.

In line with the statement; “I use visual resources (example chalkboards, felt board, bulletin, boards and flash cards)”, a mean of 4.76 and a standard deviation of .42 was recorded meaning to a large extent, the teachers strongly agreed to the statement. Converting the mean to the nearest whole number it could be seen that the mean falls at 5 which depicts that they strongly agreed to the statement. The extent to which they agreed was also high due to the low standard deviation recorded. Therefore, a significant majority of the teachers support this assertion. According to Nacino-Brown, Oke and Brown (1982), “There is a great variety of materials around that can be used to make our meanings more vivid and more interesting. The mere use of these materials however, does not guarantee effective communication or effective teaching” (p. 165). So it is one thing acquiring the instructional resources and it is another thing using them effectively

to achieve the stated objectives. This is the case that instructional resources are woefully unavailable in the selected schools. What do the teachers do in such a situation? They resort to what they have and leave the rest to chance. In fact the only instructional resources that I saw the teachers use were RME Text books and chalkboard. With respect to whether RME teachers use community resources (example resource persons and places of interest) in teaching, a mean of 3.95 and a standard deviation of .73 were obtained clearly showing that the respondents agree to that. According to Aggarwal (1995), “In addition to reading, vicarious experiences can be gained from still pictures, films, filmstrips, resource persons, simulation, mocking, television and the like. The more concrete and realistic the vicarious experiences, the more nearly it approaches the learning effectiveness of the first levels” (pp. 296-297).

Concerning whether RME teachers use audio materials (example radio and tape recorders) in teaching, a mean of 2.39 and a standard deviation of 1.09 was realised. Hence an approximation of the means to the nearest whole number would fall on scale 2 which is “disagree”. A greater proportion of respondents disagreed that they used audio materials (example radio and tape recorders) in teaching. On the issue of whether instructional resources are not available, greater number of the respondents were uncertain about it. This item had a mean of 2.91 and a standard deviation of 1.45. Though the teachers were uncertain about this statement, the responses varied as the standard deviation is higher than the mean of the standard deviation.

From Table 2, it is obvious that teachers were uncertain as to whether instructional resources are very expensive. With this, a mean of 2.86 and a standard deviation of 1.29 were realised indicating that to a large extent, the respondents were uncertain about it. According to Farrant (1980), the high cost of electricity operated audio–visual equipment and the difficulty in finding satisfactory suppliers and after sale service has limited the introduction of instructional resources in many countries. This is the case in Basic Schools in Ga-South Municipality. When the respondents were asked to respond to the statement: “the use of instructional resources is time consuming”, a greater number of them disagreed to the statement. This item recorded a mean of 2.31 and a standard deviation of 1.29. The teachers disagreed to the statement since an approximation of the mean of the item falls on the scale 2 as stated under Table 2. This means that the teachers disagreed that the use of instructional resources is time consuming.

When RME teachers were asked the statement: “I am incompetent in using instructional resources”, a mean of 1.87 and a standard deviation of 1.14 was realised. Hence a greater proportion of respondents disagree that they were incompetent in using instructional resources. On the issue of whether RME teachers use instructional resources for lessons, greater number of the respondents agreed to it. This item had a mean of 3.71 and a standard deviation of 1.10. Though the teachers agreed to this statement, the responses varied as the standard deviation is higher than the mean of the standard deviation. From Table 2, it is obvious that teachers agreed that, instructional resources help them to relate

religious lessons to real life experiences of pupils. With this, a mean of 4.47 and a standard deviation of .61 were realised indicating that to a large extent, the respondents agreed to it.

A good teacher should have mastery of the knowledge and use of a repertoire of instructional resources or technological knowledge in order to help students to learn and attain academic excellence. These are paramount in facilitating instructional process and achieving success in teaching. In as much as the teacher is entrusted with the selection of methods of teaching in the classroom, it is incumbent on the teacher to play this role tactically and strategically. In fact teachers play very important roles in the selection as well as use of instructional resources.

Analysis of Data from Observation Sections Conducted in the Selected Schools

As a backup data to research question one, teachers were also observed in order to have a vivid picture concerning teachers' technological knowledge and their appropriate use of instructional resources. Two lessons each were observed in the 175 accessible schools that were involved in the study. The data collected with the use of the observation guide was to serve as a back up information to check whether the data gathered with the questionnaires were truly reflecting the situation on the ground pertaining teachers' technological knowledge. The following were the findings as shown in Table 3.

Table 3a: Teachers' Technological Knowledge for Teaching RME

Statements	Very much N (%)	Much N (%)	Somehow N (%)	Not at all N (%)
The teacher uses audio-visual materials	0 (0)	0 (0)	0 (0)	175 (100)
Use of visual resources	0 (0)	47 (24.3)	128(75.7)	0 (%)
Use of audio resources	0 (0)	0 (0)	0 (0)	175 (100)
Use of community resources	0 (0)	0 (0)	0 (0)	175 (100)

Source: Field data, 2015**Table 3b: Teachers' Technological Knowledge for Teaching RME**

Statements	Yes N (%)	No N (%)
With the aid of instructional resources the teacher is able to relate the Biblical story to real life situation.	0 (0)	175(100)
The lesson is practical and concrete with the use of instructional resources	0 (0)	175(100)
The lesson is practical and concrete with the use of instructional resources	0 (0)	175(100)

Source: Field data, 2015

From Tables 3 (a and b), it is clear that none of the teachers used audio-visuals, audio, and community resources. Only visual resources were used and even that to a limited extent. The visual resources used were RME textbooks and the chalkboard. Few of the schools had marker boards. In one of the schools, out of the 35 students only 26 were having their own textbooks. On the whole,

technological knowledge or the use of instructional resources to augment teacher quality in RME was nothing to write home about. This view contradicts the data gathered from the teachers. Though the teachers appeared to be technologically knowledgeable based on the responses they gave, this is just a façade because, they do not make use of it probably because, they have not recognized the important role that technology or instructional resources play in the teaching-learning process. It is worthy to note that though the teachers were able to deliver their lessons well, they did it without the use of technology or instructional resources.

With regard to relationship between teachers' technological knowledge and pupils' academic performance, the Pearson Product Moment Correlation Coefficient (r) was used through SPSS Version 15. The result as shown in Table 4 gave a correlation coefficient (r) of .093 between teachers' technological knowledge and pupils' academic performance. When this correlation coefficient ($r=.093$) was tested at 0.5 significant level the result revealed that it was not statistically significant. Since the Pearson's Product Moment Correlation Coefficient (PPMCC) indicated statistically no significant relationship ($r = .093, p < .05$) between teachers' technological knowledge and pupils' academic performance, the null hypothesis which stated that there is no significant relationship between teachers' technological knowledge and pupils' academic performance in RME was accepted.

Table 4: Relationship between Teachers’ Technological Knowledge and Pupils’ Academic Performance in RME

Variable	Pupils’ Academic Performance	
Technological Knowledge	Pearson	.093
	Correlation	
	Sig. (2-tailed)	.275
	N	175

Table 4 indicates a weak positive correlation ($r = .093$, $\text{sig.} = .275$) between teachers’ technological knowledge and pupils’ academic performance. This implies that as teachers’ knowledge about the use of technology or instructional resources increases, pupils’ academic performance in RME increases. In other words, as RME teachers acquaint themselves with the use of different technologies or instructional resources, there is an increase in the pupils’ academic performance as well. When this correlation coefficient ($r=.093$) was tested at 0.5 significant level the result revealed that it was not statistically significant. If this is so, then it means that, perhaps other factors may better predict or influence pupils’ academic performance than teachers merely possessing technological knowledge about the use of instructional resources. This brings back to memory the interesting thing that came up during the data gathering when it was realized that, most of the private schools due to cheap labour employ the services of senior high school leavers (unqualified personnel) to teach their pupils whereas the public schools employed the services of well qualified degree holders with even teaching qualifications in the relevant area of

study (RME) to teach. However, pupils from the private schools performed better in the researcher made test that was given them as well as even perform better in the BECE which is on record far more than those from the public schools. The view is shared by Ferguson and Brown (2002) who conducted a meta-analysis of research regarding the correlation between teacher qualification, teacher quality, and pupil achievement. They pointed out that pupil test score gains are an imperfect measure of what we really want to know: the teacher's contribution to producing the gains. Because other factors such as pupil, home, school, and community characteristics affect achievement as well, teachers deserve neither all of the credit for success nor all of the blame for the failures. Many factors affect pupils, yet numerous research studies point to the importance of the teacher in the classroom in relationship to pupil achievement gains.

However, it needs to be mentioned here that, correlation does not necessarily mean causation and that pupils' poor academic performance cannot be entirely attributed to the mere fact that teachers possess adequate repertoire of technological knowledge about the use of instructional resources as other factors such as socio-economic background of learners, teacher commitment, certification, etc., have a role to play when it comes to this. This notwithstanding, correlation coefficient can predict with some degree of precision the direction and degree of magnitude the relationship between variables of interest. Therefore, this presupposes that, there may be other potent factors which influence pupils' academic performance better than technological knowledge that teachers possess

and a critical investigation need to be conducted in these other areas in other researches.

It can therefore be concluded that, to a large extent, it was uncertain as to whether teachers possessed adequate knowledge about the use of technology or instructional resources when it comes to the teaching of RME and this was also confirmed by data gathered from the observation guide. However, there was a weak positive correlation ($r = .093$, $\text{sig.} = .275$) between teachers' technological knowledge and pupils' academic performance which implies that, as teachers knowledge about the use of technology or instructional resources increases, pupils' academic performance in RME also increases. However, technological knowledge was seen as not a significant factor in influencing pupils' academic performance in RME since a sig. value of .275 was obtained which goes beyond .05 considered for use in the educational field. If this is so, then it means that, perhaps other factors (eg. Teacher commitment, teacher dedication, socio-economic background of pupils etc.) may better predict or influence pupils' academic performance than teachers merely possessing technological knowledge about the use of instructional resources.

Research question 2: What relationship exists between RME Teachers' Pedagogical Knowledge and Pupils' Academic Performance in RME?

The responses given by the RME teachers are shown in Table 5.

Table 5: The Views of RME Teachers concerning their Pedagogical Knowledge

Statement	M	SD
I teach RME with real, concrete and present situation of learners as basis.	4.24	.88
Religious concepts only come alive when they are related to life experiences.	4.21	.91
RME should help pupils to build conceptual bridges between existential experiences and the central concepts of religion.	4.24	.77
Assessment procedures that give pupils opportunity to relate Biblical stories to life are adopted during RME lessons.	4.42	.65
I am conversant with the concept cracking approach to the teaching of RME.	3.95	.81
Pupils who are able to relate Biblical stories to real life experiences are given rewards to serve as motivation.	3.74	1.04
The teacher-learner interaction is very minimal because I mostly use the lecture method in teaching.	2.13	1.15
Any concept could be taught to any child provided it could be appropriately interpreted.	3.06	1.42
Concrete, real and present situation of learners are	4.45	.89

(Table 5 cont'd.)

considered in asking questions in class.		
Pupils' experiences are considered in grouping them in the classroom during RME lessons.	3.51	1.36
Pupils' real life experiences form the basis of discussions in the classroom.	3.63	1.19
I relate RME topics to the life of pupils to a limited extent.	3.81	1.07
I do not relate RME topics to real life experiences of learners during teaching.	1.81	.95
Through the use of role- play, students are offered the opportunity to relate RME lessons to `their own life.	4.56	.50
I am conversant with the Existential Approach to teaching RME.	3.82	.71

Source: Field data, 2015

Scale: 1 = Strongly Disagree, 2 = Disagree,
3 = Uncertain, 4 = Agree
5 = Strongly Agree

Mean of means = 3.71

Mean of Standard Deviation = 0.98

Generally, a careful look at Table 5 shows that RME teachers to a large extent have pedagogical knowledge in the teaching of RME. In line with this, a mean of means of 3.71 and a mean of standard deviation of 0.98 was achieved for

the items designed which clearly indicates that the RME teachers agreed to a lot of the statements which were meant to identify the pedagogical knowledge that RME teachers possess. The following instances from the individual items attest to that fact.

From Table 5, a mean of 4.24 and 0.88 standard deviation was attained meaning that majority of the respondents agree that, they teach RME with real, concrete and present situation of learners as basis. This finding corresponds with the view shared by Loukes (1965) who asserts that religion should be taught with real, concrete and present situation of learners and they should be helped to arrive at religious understanding of those experiences. It is clearly noticeable from Table 4 that majority of the teachers support the view that religious concepts only come alive when they are related to life experiences. With this item, a mean of 4.21 and a standard deviation of .91 which indicate that the mean falls on the scale 4. The plausible conclusion that could be drawn is that a significant majority of the teachers support this view. This finding goes in accordance with Grimmitt (1973) who posits that “Religious concepts only come alive when we are able to relate them sometimes partially, sometimes completely to our life experiences” (p. 52). It is obvious from Table 5 that the RME teachers in the Ga-South Municipality are of the view that, RME should help pupils to build conceptual bridges between existential experiences and the central concepts of religion. Concerning this, 4.24 mean and standard deviation of .77 was achieved for this statement. The mean which falls on scale 4 affirms the position that majority of the teachers support this view. This affirms the claim that Religious concepts should “start with the

child's own feelings, acts and experiences and help children to build conceptual bridges between their existential experiences and the central concepts of religion" (Grimmit,1978, p. xv).

In relation to the statement, "Assessment procedures that give pupils opportunity to relate RME lessons to life are adopted during RME lessons", majority of the teachers agreed to it. A mean of 4.42 and a standard deviation of .65 were obtained for this item. The mean when converted to the nearest whole number falls on scale 4 which represents the option agree. In line with the statement "I am conversant with the concept cracking approach to the teaching of RME", 3.95 was attained as mean and 0.81 as standard deviation. The majority of the teachers agreed to the statement since the mean falls on scale 4 (agree).

From Table 5, the majority of the teachers agreed to the statement: "pupils who are able to relate religious lessons to real life experiences are given rewards to serve as motivation". In connection with this, 3.74 was obtained as a mean and 1.04 as the standard deviation. It could be seen from the scale under Table 5 that the mean could be placed on the scale 4 (agree). It is worthy to note that the measure of spread as stated above is higher than the mean of the standard deviation of 0.98 depicting that not all the respondents agreed to this view as there were variations in the responses. However, bulk of the teachers agree to the assertion.

As pertaining to the statement "any concept could be taught to any child provided it could be appropriately interpreted", 3.06 was recorded as mean and 1.42 was attained as standard deviation. From the forgoing it is obvious that the

teachers were uncertain about this statement since the mean falls on the scale 3 (uncertain). It is also evident that the responses of the teachers vary to a greater extent. One of the pedagogical principles of the concept cracking approach is that, any concept could be taught to any child provided it could be appropriately interpreted (Purple & Ryan, 1976). Again, greater number of the respondents agreed that concrete, real and present situation of learners are considered in asking questions in class. A mean of 4.45 and standard deviation of .89 were recorded for this item justifying that the teachers agree with the statement. A mean of 3.51 and standard deviation of 1.36 was obtained for the statement: “pupils’ experiences are considered in grouping them in the classroom during RME lessons”. This means that majority of the respondents agreed to the statement. When the mean is converted to the nearest whole number, it falls on the scale 4 (agree) supporting this position.

Regarding whether pupils’ real life experiences form the basis of discussions in the classroom, it was found out that a significant majority of the teachers agreed to the fact. A mean of 3.63 and a standard deviation of 1.19 were attained. An approximation of the mean to the nearest whole number falls on scale 4 (agree). The high standard deviation indicates variations in the responses given but it still stands that the majority of the respondents agreed to this view. Also, the majority of the teachers agreed to the statement, “I relate RME topics to the life of pupils to a limited extent”. A mean of 3.81 and a standard deviation of 1.07 were attained for this item and this falls within the option “agree” looking at the scale.

The high standard deviation indicates variations in the responses given but it still stands that the majority of the respondents agreed to this view.

A standard deviation of .95 and a mean of 1.81 clearly indicates that teachers disagree that they do not relate RME topics to real life experiences of learners during teaching. An approximation of the mean to the nearest whole number falls on scale 2 (disagree). In connection with the statements “Through the use of role-play, pupils are offered the opportunity to relate RME lessons to their own lives”, majority of the teachers agreed to it. The item recorded a mean of 4.56 and a standard deviation of .50 which fall under the scale of 5 meaning the respondents strongly agreed to the statement. With respect to whether RME teachers were conversant with the existential approach to teaching RME, a mean of 3.82 and a standard deviation of .71 were obtained clearly showing that the respondents agree to that.

Table 6 presents what the researcher observed during the classroom interactions regarding teachers’ pedagogical knowledge.

Table 6: Teachers’ Pedagogical Knowledge for Teaching RME

Statements	Very much N (%)	Much N (%)	Somehow N (%)	Not at all N (%)
Teacher helps pupils to build conceptual bridges between existential experiences and the central concepts of religion.	80 (47.3)	95 (52.7)	0 (0)	0 (0)
Teacher relates religious	96 (56.8)	79 (43.2)	0 (0)	0 (0)

(Table 6 cont'd.)

concepts to life experiences				
of pupils.				
Teacher guides pupils to	0 (0)	0 (0)	0 (0)	175 (100)
come out with their own				
values				
Teacher makes use of the	0 (0)	0 (0)	0 (0)	175 (100)
Concept Cracking Approach				
to teaching RME.				

Source: Field data, 2015

From Table 6, it is clear that none of the teachers used the concept cracking approach to teaching RME. Only the existential approach and the life theme approach were used. On the whole, pedagogical knowledge or the use of instructional methods to augment teacher quality in RME was used but to a limited extent. This view contradicts the data gathered from the teachers. Though the teachers appeared to be pedagogically knowledgeable based on the responses they gave, this is not entirely so because, they do not make use of some of the approaches probably because, they lack adequate information concerning the use of these contemporary pedagogies to teaching religious education.

With regard to relationship between teachers' pedagogical knowledge and pupils' academic performance, the Pearson Product Moment Correlation Coefficient (r) was used through SPSS Version 15. The result as shown in Table 7 gave a correlation coefficient (r) of .234 between teachers' pedagogical knowledge and pupils' academic performance. When this correlation coefficient

($r=.234$) was tested at 0.5 significant level the result revealed that it was statistically significant.

Table 7: Relationship between Teachers’ Pedagogical Knowledge and Pupils’ Academic Performance in RME

Variable		Pupils’ Academic Performance
	Pearson Correlation	.234
Pedagogical Knowledge	Sig. (2-tailed)	.003
	N	175

Table 7 indicates a weak positive correlation ($r = .234$, $sig. = .003$) between teachers’ pedagogical knowledge and pupils’ academic performance. This implies that as teachers knowledge about the use of appropriate methods of instruction or pedagogy increase, pupils’ academic performance in RME also increase. In other words, as RME teachers acquaint themselves with the use of different pedagogical approaches or various media of instruction, pupils’ academic performance becomes higher. In addition, when this correlation coefficient ($r=.234$) was tested at 0.5 significant level the result revealed that it was statistically significant. This contradicts the findings of Sanders (1992) who examined the impact of quality teachers on pupil achievement by tracking the progress of each pupil in Tennessee through a large database. In his research, Sanders found that, low achieving pupils gain about 14 points each year on the state test when taught by the least effective teachers, but gain more than 53 points when taught by the most effective teachers with good pedagogical knowledge. If

this is so then it would be plausible to accept that, poor academic performance of pupils might be associated with other factors such as socio- economic background of learners, teacher commitment and pupils' attitude to learning RME etc. During the data gathering, the researcher realized that the pupils had a lukewarm attitude towards RME probably due to the perception pupils have towards RME as an easy subject and the fact that it is non- examinable even at the Senior High School level. As indicated earlier, correlation does not necessarily mean causation and that pupils' poor academic performance cannot be entirely attributed to the mere fact that teachers possess adequate repertoire of pedagogical knowledge about the use of instructional methods as other factors have a role to play when it comes to this. This notwithstanding, correlation coefficient can predict with some degree of precision the direction and degree of magnitude the relationship between variables of interest.

It can therefore be concluded that, to a large extent, teachers possess adequate knowledge about the use of pedagogy or instructional methods when it comes to the teaching of RME. However, despite the fact that the teachers appeared to be competent and knowledgeable in the use of methods of instruction, it was realized that, there was a weak positive correlation ($r = .234$, $\text{sig.} = .003$) between teachers' pedagogical knowledge and pupils' academic performance which implies that, as teachers knowledge about the use of pedagogy or instructional methods increase, pupils' academic performance in RME also increases. Also, pedagogical knowledge was seen as a significant factor in influencing pupils' academic performance in RME since a sig. value of .003 was

obtained which is considered significant in the educational field. If this is so, then it means that, perhaps other factors (eg. Teacher commitment, teacher dedication, socio- economic background of pupils etc.) might influence pupils’ academic performance and a careful investigation needs to be conducted in these areas as well.

Research question 3: What relationship exists between RME Teachers’ Content Knowledge and Pupils’ Academic Performance in RME?

The responses given by the RME teachers are shown in Table 8.

Table 8: The Views of RME Teachers concerning their Content Knowledge

Statement	M	SD
I have sufficient knowledge about RME.	4.06	.81
The content of RME should be selected based on the concepts, taking into consideration its appropriateness for the level of learners.	4.35	.85
I have various ways and strategies of developing my understanding of RME.	4.42	.55
I believe that the content of moral education should be based on a particular religion.	1.32	.76
I believe that the approach to the teaching of religious and moral education should be liberal and open ended.	4.07	1.24
The content of RME should be related to the life experiences of pupils.	3.81	1.07

Table 8 cont'd

Topics in RME should cover more than one religion.	4.53	.78
RME lessons should start from the known to the unknown.	4.30	1.13
The subject matter of RME should focus on the needs and interests of the pupils.	3.59	1.38
The teaching of RME should aim at improving pupils moral standards.	4.82	.71

Source: Field data, 2015

Scale: 1 = Strongly Disagree, 2 = Disagree,
 3 = Uncertain, 4 = Agree
 5 = Strongly Agree

Mean of means = 3.93

Mean of Standard Deviation = 0.93

A look at Table 8 shows that RME teachers to a large extent have content knowledge in the teaching of RME. A mean of means of 3.93 and a Mean of Standard Deviation of .93 clearly indicates that the RME teachers agreed to a lot of the statements which were meant to identify the content knowledge possessed by RME teachers. This is illustrated in the following instances in the rest of the items.

When RME teachers were asked: “I have sufficient knowledge about RME”, it was found out that a significant majority of the teachers agreed to the fact. A mean of 4.06 and a standard deviation of .81 were attained. Though the

mean is lower than the mean of means of 3.93, the degree of agreement is considered appreciable because the measure of spread is very low. Also, the majority of the teachers agreed to the statement, “The content of RME should be selected based on the concepts, taking into consideration its appropriateness for the level of learners”. A mean of 4.35 and a standard deviation of .85 were attained for this item and this falls within the option “agree” looking at the scale. This assertion is shared by Nicholls and Nicholls (1972) that, the content of RME should be selected based on the concepts, taking into consideration its appropriateness for the level of learners.

A standard deviation of .55 and a mean of 4.42 compared to mean of standard deviation of .93 and a mean of means of 3.93 clearly indicates that teachers have various ways and strategies of developing their understanding of RME. A very low standard deviation of .55 shows that variations in the responses were low and that, majority of the teachers support this statement. In connection with the statement the researcher believes that the content of moral education should be based on a particular religion, majority of the teachers strongly disagreed to it. The item recorded a mean of 1.32 and a standard deviation of .76 which fall under the scale of 1 (strongly disagree) when approximated to the nearest mean indicating that, the respondents strongly disagreed to the statement. If the content of a moral education programme is based on a particular religion it becomes dangerous because when the religious beliefs are rejected there appears to be no longer any basis for moral principles (Downey & Kelly, 1978).

In line with the statement the researcher believe that the approach to the teaching of religious and moral education should be liberal and open ended, a mean of 4.07 and a standard deviation of 1.24 was recorded meaning to a large extent, the teachers agreed to the statement. Converting the mean to the nearest whole number it could be seen that the mean falls at 4 which depicts that they agreed to the statement. Although they agreed, the extent to which they agree is low due to the high standard deviation recorded indicating that there were variations in the responses. However, it still stands that the significant majority of the teachers support this assertion. If our approach to the teaching of religious and moral education is liberal and open ended, the implication of this is that students are to be encouraged to make up their own minds on religious issues to accept or reject, to stand on their own feet in such matters (Smart, 1968).

With respect to whether the content of RME should be related to the life experiences of pupils, a mean of 3.81 and a standard deviation of 1.07 were obtained clearly showing that the respondents agree to that. Concerning whether topics in RME should cover more than one religion, a mean of 4.53 and a standard deviation of .78 was realised. Meaning that, a greater proportion of respondents strongly agreed that indeed topics in RME should cover more than one religion. The scope of content of the R.M.E. programme in the junior high school covers the moral teaching of the three main religions in Ghana – Christianity, Islam and African Traditional Religion (Teaching Syllabus for R.M.E., JSS). On the issue of whether RME lessons should start from the known to the unknown, greater number of the respondents agreed to it. This item had a

mean of 4.30 and a standard deviation of 1.13. Though the teachers agreed to this statement, the responses varied as the standard deviation is higher than the mean of the standard deviation. It involves building appropriate connections in curriculum content either on the basis of prerequisite or a progression from simple to complex, known to unknown, general to specific or progressive differentiation and refinement of concepts (Igwe, 2003).

From Table 8, it is obvious that teachers agreed that the subject matter of RME should focus on the needs and interests of the pupils. With this, a mean of 3.59 and a standard deviation of 1.38 were realised indicating that to a large extent, the respondents agreed to it. Although the teachers agreed to this statement, the responses varied as the standard deviation is higher than the mean of the standard deviation. Yet it still remains that majority of the respondents agreed to the statement. This confirms the view shared by Igwe (2003) that, Students' interests relate the curriculum to the child and promote self-esteem, personal fulfillment and mastery learning. When the respondents were asked to respond to the statement: "The teaching of RME should aim at improving pupils moral standards", a greater number of them strongly agreed to the statement. This item recorded a mean of 4.82 and a standard deviation of .71. The teachers strongly agreed to the statement since an approximation of the mean of the item falls on the scale 5 (strongly agree) as stated under Table 8. This means that the teachers strongly agree that the teaching of RME should aim at improving pupils moral standards. If however their considered choice is to reject religion, the result of linking religion and morality will be rejection of morality too. Not only is it

undesirable, it is also a logical and psychological impossibility. For while it is possible to live without religion, it is clearly not possible to live except at a level of animal existence, without any set of moral values or principles to guide one's behaviour or one's human choice, (Kirk, 1979).

Concerning the relationship between teachers' content knowledge and pupils' academic performance, the Pearson Product Moment Correlation Coefficient (r) was used through SPSS Version 15. The result as shown in Table 9 gave a correlation coefficient (r) of .328 between teachers' technological knowledge and pupils' academic performance. When this correlation coefficient (r=.328) was tested at 0.5 significant level the result revealed that it was statistically significant.

Table 9: Relationship between Teachers' Content Knowledge and Pupils' Academic Performance in RME

Variable	Pupils' Academic Performance	
	Pearson	.328
Content	Correlation	
Knowledge		
	Sig. (2-tailed)	.000
	N	175

Table 9 indicates a weak positive correlation (r = .328, sig. = .000) between teachers' content knowledge and pupils' academic performance. This implies that as teachers knowledge about the content or subject matter of RME increases, pupils' academic performance in RME also increases. In other words,

as RME teachers become knowledgeable about what to teach so far as content is concerned, pupils' academic performance becomes high and they perform better. When this correlation coefficient ($r=.328$) was tested at 0.5 significant level the result revealed that it was statistically significant. This is in line with the report by the National Assessment of Educational Progress which illustrated that, there is a correlation between teacher quality and pupil achievement—particularly for minority pupils (NAEP, 2007). The author stated, “The message is clear: having a well-qualified teacher who knows her content material is more important than the name of the course in terms of demonstrated achievement” (NAEP, 2007). There are also factors, both pupil-related and teacher-related, that can influence pupil achievement. If this is so then it would suffice to concede that, poor academic performance of pupils might be associated with other factors such as socio-economic background of learners, teacher commitment and dedication, etc. As indicated earlier, correlation does not necessarily mean causation and that pupils' poor academic performance cannot be entirely attributed to the mere fact that teachers possess adequate content knowledge about RME as other factors have a role to play when it comes to this. This notwithstanding, correlation coefficient can predict with some degree of precision the direction and degree of magnitude the relationship between variables of interest.

It can therefore be concluded that, to a large extent, teachers possess adequate content knowledge when it comes to the teaching of RME. However, despite the fact that the teachers appeared to be competent in terms of content knowledge, it was realized that, there was a weak positive correlation ($r = .328$,

sig. = .000) between teachers' content knowledge and pupils' academic performance which implies that, as teachers knowledge about the content of RME increases, pupils' academic performance in RME also increases. Again, content knowledge was seen as a significant factor in influencing pupils' academic performance in RME since a sig. value of .000 was obtained which is considered significant in the educational field. If this is so, then it means that, perhaps other factors (eg. Teacher commitment, student attitude to the subject, socio-economic background of pupils etc.) might influence pupils' academic performance and a careful investigation needs to be conducted in these areas in further research.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

An Overview

This chapter marks the concluding part of the study. It aims at highlighting the main findings. It also presents a summary of the research process, the conclusions and offers the implications for future research.

Summary of Research Process

Teacher quality is widely thought of as an essential determinant of academic performance, yet there is little agreement as to what specific characteristics make a good teacher (Hanushek, Kain, O'Brien & Rivkin, 2006). Hence, measurability of the determinants of teacher quality remains elusive over the years. Is it experience? Is it educational level? Can it even be measured by a test, survey, or questionnaire? While the debate continues nationwide as to what exactly constitutes a high-quality teacher, there is little debate as to the importance of high-quality teachers. This is because, there is no question that teacher quality influences pupil achievement. Hence, the importance of a quality teacher in a classroom is not arguable. Quality teaching requires developing a nuanced understanding of the complex relationships among technology, content, and pedagogy (TPCK), and using this understanding to develop appropriate, context-specific strategies and representations (Mishra & Koehler, 2006). The

need for quality and competent teachers, is a very pertinent issue because Religious and Moral Education as a school subject is structured along the subject pattern of curriculum organization. It is of crystal importance that researchers assess the role each of these variables (technology, pedagogy, content) play when it comes to the knowledge of RME teachers of these variables and how each of them influences the academic performance of pupils in the Ga-South Municipality. In order to find answers to the research questions that were formulated to guide the study, the descriptive survey research design as well as the correlational research design were employed. The study covered 159 accessible Basic Schools in the Ga-South Municipality. In all 175 RME teachers and 357 pupils of RME were involved in the study. The cluster sampling, multi-stage and proportional allocation of sample, as well as simple random sampling procedures were used to select the various schools, pupils and teachers respectively to serve as respondents.

Three main instruments namely questionnaire and observation guide and the standardised-achievement-test were used to gather the requisite data for the study. One set of five-point Likert scale type of questionnaires was used to gather data from teachers of RME. An observation guide was designed to back up the data that were gathered with the questionnaires and a researcher made test was given to the pupils to answer to cater for the performance variable in terms of pupils' academic performance. It is worthy to note that, these instruments were subjected to reliability and validity test. The data gathered from the pupils, teachers and the observation of classroom interactions were analysed with

statistical tools such as frequencies, percentages, means and standard deviations as well as correlation. The following were the main findings of the study.

Summary of Key Findings

1. Generally, it was uncertain as to whether RME teachers possessed adequate knowledge about the use of technology or instructional resources. However, there was a weak positive correlation between teachers' technological knowledge and pupils' academic performance. But, technological knowledge was seen as not a significant factor in influencing pupils' academic performance in RME.
2. RME teachers possessed adequate knowledge about the use of pedagogy or instructional methods. However, it was realized that, there was a weak positive correlation between teachers' pedagogical knowledge and pupils' academic performance. On the other hand, pedagogical knowledge was seen as a significant factor in influencing pupils' academic performance in RME.
3. RME teachers possessed adequate content knowledge when it comes to the teaching of RME. However, it was realized that, there was a weak positive correlation between teachers' content knowledge and pupils' academic performance. Yet, content knowledge was seen as a significant factor in influencing pupils' academic performance in RME.

Conclusions

The following conclusions could be drawn from the findings of the study. With respect to the relationship between RME teachers' technological knowledge and pupils' academic performance, it can be concluded that, it was uncertain as to

whether teachers possessed adequate knowledge about the use of technology or instructional resources when it comes to the teaching of RME. Again, they did not make effective use of the technology or instructional resources as observed, probably because they do not recognize the important role the use of technology plays in the teaching and learning process, they did not know how to use some of these technologies. Besides, some of these technologies were not available for use in the schools. Although, there was a weak positive correlation between teachers' technological knowledge and pupils' academic performance, the important role that technology plays in the teaching and learning process cannot be ruled out.

Concerning the relationship between RME teachers' pedagogical knowledge and pupils' academic performance, it can be concluded that, teachers possessed adequate knowledge about the use of pedagogy or instructional methods when it comes to the teaching of RME. However, as observed, teachers use of the existential approach and the life theme approach only, and that, teachers did not make use of the concept cracking approach to teaching RME probably because they lacked adequate information about how to use them. Since pedagogical knowledge was identified as significant in pupils academic performance, the need for RME teachers to be abreast with some of these contemporary pedagogies cannot be underestimated.

With regards to the relationship between content knowledge and pupils' academic performance, it can be concluded that, teachers possessed adequate content knowledge when it comes to the teaching of RME and content knowledge was seen as a significant factor in influencing pupils' academic performance in

RME. However, the weak positive relationship between teachers' content knowledge and pupils' academic performance in RME raises a lot of questions. Perhaps, teachers are not at post all the time as they are suppose to be or teachers find it difficult to find effective means of translating content to their pupils. It could also be that pupils simply lack interest in the subject.

Recommendations

Based on the findings and conclusions drawn from the study, the following recommendations could be made to stakeholders of education.

1. Although it turned out that technology does not have any significant relationship with pupils' academic performance, technology still plays a vital role in education and instruction. It was uncertain as to whether teachers were competent when it comes to the use of technology or instructional resources. Therefore, the Ministry of Education, Ghana Education Service and Curriculum Research and Development Division should organise in-service training for teachers, since it turned out during the observation sections that teachers did not make use of audio-visuals (TV and motion pictures) and audio materials (example radio and tape recorders) in the Ga-South Municipality. This will help sharpen RME teachers' technological knowledge and skills in order to stand in a better position to use the technology. Again, the Ministry of Education, Ghana Education Service and Curriculum Research and Development Division should require teachers to go on contract in order to weed out those who merely went into teaching to

secure a job from those who are committed to use the training they have been given for the good of the pupils.

2. Also, since it was realized that teachers pedagogical knowledge was significant when it comes to pupils' academic performance, teachers need to be abreast with the contemporary pedagogies and approaches to the teaching of RME. Although it turned out that, most of the RME teachers had good pedagogical knowledge, it appears that this was a façade as during the observation sections, teachers did not make use of contemporary pedagogies like the Concept Cracking pedagogy but made use of the Existential Approach and Life Themes Approach, although they did not know what they were called. The Ministry of Education, Ghana Education Service and Curriculum Research and Development Division should organise in-service training for teachers to be abreast with some of these contemporary pedagogies for the teaching of RME in Basic Schools and also make modules available for use at the Colleges of Education to train our upcoming teachers at the Basic Schools.
3. Again, since it was realized that, teachers' content knowledge although was significant, had an weak positive relationship with pupils' academic performance, it is being recommended that, Head Teacher supervision, and that of Circuit Supervisors should be regular and intense in our schools. Circuit supervisors should visit remote schools to observe for themselves if teachers are always at post and should not sit in their offices and ask teachers to bring their lesson notes for marking because of lack of means of transport.

Head teachers should also ensure that teachers are motivated enough to teach since other factors other than content knowledge may be responsible for pupils' poor academic performance. Again, the Ministry of Education, Ghana Education Service and Curriculum Research and Development Division should make logistics available to enable circuit supervisors who do not have means of transport to be able to visit schools regularly. There is also the need to put in place appropriate motivation techniques to ensure that pupils develop interest in the subject. This can be done by inviting resource persons to have a talk with the pupils concerning the need and relevance of studying RME to the pupils, community and the nation at large, as well as some job opportunities associated with studying the subject which is not restricted to becoming a Reverend Minister or pastors alone.

Areas for Further Research

This study assessed teacher quality as a determinant of pupils' academic performance in RME in the Ga-South Municipality. The study could be replicated in other regions in the country to find out what persists there. The major fallout from the findings of the study was that, technology or instructional resources had no significant relationship with pupils' academic performance in RME. If this is so then it means that other factors in the literature such as teacher commitment, socio-economic background, teacher certification, dedication etc. or overlaps of the TPCK model such as pedagogical content knowledge (PCK), technological content knowledge (TCK), technological pedagogical knowledge (TPK) as well as technological pedagogical content knowledge (TPCK) may

better predict or correlate with pupils' academic performance. It is suggested that a thorough investigation should be conducted to look into the use of instructional resources as well as some of these other factors in the teaching of RME in the country.

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APPENDICES

APPENDIX A

UNIVERSITY OF CAPE COAST

DEPARTMENT OF ARTS AND SOCIAL SCIENCES EDUCATION

This questionnaire assesses teacher quality as a determinant of student performance in Basic Schools in the Ga- South Municipality. This questionnaire is purely for academic work. I therefore ask for your maximum co-operation and assure you that information provided here will be treated with outmost confidentiality.

QUESTIONNAIRE FOR TEACHERS

Please respond to each of the following items by ticking (✓) the appropriate response box.

SECTION A

1. Gender:

a. Male []

b. Female []

2. Religious Affiliation

a. Christianity []

b. Islam []

c. African Traditional Religion []

d. Others (please specify).....

3. For how long have you been teaching RME?
- a. less than a year []
 - b. 1 - 5 years []
 - c. 6 -10 years []
 - d. 11 – 15 years []
 - e. 16 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

Please tick (√) the appropriate box to indicate your opinion on these statements
 key: Agree (A); Strongly Agree (SA); Uncertain (U); Disagree (D); Strongly Disagree (SD)

Technological Knowledge

STATEMENT	SA	A	U	D	SD
6. I can learn technology easily.					
7. I keep up with important new technologies.					
8. I know about a lot of different technologies.					
9. I use audio-visuals (example TV and motion pictures) in teaching.					
10. I use visual resources (examples chalkboards, felt board, bulletin, boards and flash cards).					
11. I use community resources (example resource persons and places of interest) in teaching.					
12. I use audio materials (example radio and tape recorders) in teaching.					
13. Instructional resources are not available.					
14. Instructional resources are very expensive.					
15. Use of instructional resources is time consuming.					
16. I am incompetent in using instructional resources.					
17. I use instructional resources for lessons.					
18. Instructional resources help me to relate religious lessons to real life experiences of pupils.					

SECTION- C

Please tick (✓) the appropriate box to indicate your opinion on these statements
 key: Agree (A); Strongly Agree (SA); Uncertain (U); Disagree (D); Strongly Disagree (SD)

Pedagogical Knowledge

STATEMENT	SA	A	U	D	SD
19. I teach RME with real, concrete and present situation of learners as basis.					
20. Religious concepts only come alive when they are related to life experiences.					
21. RME should help pupils to build conceptual bridges between existential experiences and the central concepts of religion.					
22. Assessment procedures that give pupils opportunity to relate religious stories to life are adopted during RME lessons.					
23. I am conversant with the concept cracking approach to the teaching of RME.					
24. Values should be caught by learners and not taught to them.					
25. Pupils who are able to relate religious stories to real life experiences are given rewards to serve					

as motivation.					
26. The teacher- learner interaction is very minimal because I mostly use the lecture method in teaching.					
27. Any concept could be taught to any child provided it could be appropriately interpreted.					
28. Concrete, real and present situation of learners are considered in asking questions in class.					
29. Pupils' experiences are considered in grouping them in the classroom during RME lessons.					
30. Pupils' real life experiences form the basis of discussions in the classroom.					
31. I relate RME topics to the life of pupils to a limited extent.					
32. I do not relate RME topics to real life experiences of learners during teaching.					
33. Through the use of role- play, students are offered the opportunity to relate RME lessons to their own life.					
34. Religion is a private affair so the approach to teaching it should help learners to make their own free choice.					
35. I am conversant with the existential approach to					

teaching RME.					
36. I am conversant with the value clarification approach to teaching RME.					

SECTION- D

Please tick the appropriate box to indicate your opinion on these statements. Key: Agree (A); Strongly Agree (SA); Uncertain (U); Disagree (D); Strongly Disagree (SD)

Content Knowledge

STATEMENT	SA	A	U	D	SD
37. I have sufficient knowledge about RME.					
38. The content of RME should be selected based on the concepts, taking into consideration its appropriateness for the level of learners.					
39. I have various ways and strategies of developing my understanding of RME.					
40. I believe that the content of moral education should be based on a particular religion.					
41. I believe that the approach to the teaching of religious and moral education should be liberal and open ended.					
42. The content of RME should be related to the life experiences of pupils.					

43. Topics in RME should cover more than one religion.					
44. RME lessons should start from the known to the unknown.					
45. The subject matter of RME should focus on the needs and interests of the pupils.					
46. The teaching of RME should aim at improving pupils moral standards.					

APPENDIX B

UNIVERSITY OF CAPE COAST

DEPARTMENT OF ARTS AND SOCIAL SCIENCES EDUCATION

OBSERVATION GUIDE FOR ASSESSING HOW RME TEACHERS USE
INSTRUCTIONAL RESOURCES APPROPRIATELY IN THE BASIC
SCHOOL LEVEL

SECTION A

Teachers' Technological Knowledge for teaching RME

	Very much	Much	Somehow	Not at all
1. Teacher uses audio-visual materials				
2. Use of visual resources				
3. Use of audio resources				
4. Use of community resources				
5. With the aid of instructional resources the teacher is able to relate the lesson to real life situation.				
6. The lesson is practical and concrete with the use of instructional resources.				

SECTION B

Teachers' Pedagogical Knowledge for teaching RME

	Very much	Much	Somehow	Not at all
7. Teacher helps pupils to build conceptual bridges between existential experiences and the central concepts of religion.				
8. Teacher relates religious concepts to life experiences of pupils.				
9. Teacher guides pupils to come out with their own values.				
10. Teacher makes use of the Concept Cracking Approach to teaching RME.				

Further comments:

APPENDIX C
STANDARDISED ACHIEVEMENT TEST FOR ASSESSING PUPILS'
ACADEMIC PERFORMANCE

Provide answers to the following questions by circling the Letter with the right option.

1. According to Christian teaching, God created man and woman on the
 - A. 1st day
 - B. 2nd day
 - C. 3rd day
 - D. 5th day
 - E. 6th day

2. Palm Sunday is observed by Christians to remember the
 - A. birth and baptism of Christ
 - B. resurrection and appearance of Christ
 - C. joyful journey of Christ into Jerusalem
 - D. baptism of the Holy Spirit
 - E. last supper and sacrifice of Christ

3. God gave Noah and his people the rainbow to remember
 - A. the floods which destroyed the world
 - B. the disobedience of the idol worshippers
 - C. that God would not destroy the world with water again
 - D. the building of the ark

- E. the usefulness of the heavenly bodies
4. All the religions in Ghana believe in
 - A. Jesus Christ
 - B. the Bible
 - C. the Prophet Muhammed
 - D. the Rain god
 - E. The supreme God
 5. The Muslim prayers observed between Asr and Isha is
 - A. Zuhr
 - B. Juumu'ah
 - C. Idd
 - D. Subhi
 - E. Maghrib
 6. The Islamic practice where wealthy Muslims cater for the needs of the poor and the needy is
 - A. Hajj
 - B. Zakat
 - C. Ihram
 - D. Mahr
 - E. Talaq
 7. Prophet Muhammed's twelfth birthday is important because
 - A. there was Prophesy about his future
 - B. Halimah returned him to his parents

- C. Amina passed away
 - D. His father died
 - E. Abdul Mutalib died
8. Muslim's last respect to the dead is by
- A. offering Janazah
 - B. burial with a coffin
 - C. dressing the corpse in suit
 - D. sacrificing a ram
 - E. keeping the corpse in the mortuary
9. Festivals are celebrated every year in order to
- A. make the people happy
 - B. thank the gods for a successful year
 - C. adore a new year
 - D. punish the wrong doers in the community
 - E. initiate the youth into adulthood
10. The burial of pieces of hair, fingernails and toenails of a corpse at his hometown signifies that
- A. there is life after death
 - B. the spirit has contact with the living
 - C. lesser gods want the spirit
 - D. witches are powerful in one's hometown
 - E. everyone must be buried in his hometown

11. Mourners from cemetery wash their hands before entering funeral house again to
- A. break relations with the dead
 - B. show that they are among the living
 - C. announce their return from the cemetery
 - D. cleanse themselves from any curse
 - E. enable them shake hands with the other mourners
12. Bringing forth children shows that man is
- A. sharing in God's creation
 - B. taking God's position
 - C. trying to be like God
 - D. feeling self-sufficient
 - E. controlling god's creation
13. Among the Asante farming is not done on Thursday because
- A. the soil becomes fertile on this day
 - B. farmers have to rest on this day
 - C. wild animals come out on this day
 - D. it is specially reserved for the ancestors
 - E. it is the day of the earth goddess
14. Which of the following months is also a special occasion on the Islamic Calender?
- A. Rajab
 - B. Ramadan

C. Sha'ban

D. Shawal

E. Safar

15. The act of going round the Ka'ba seven times during the Hajj teaches

A. bravery

B. cleanliness

C. humility

D. endurance

E. honesty

16. It is believed that burying the dead with money helps him to

A. pay his debtors in the spiritual world

B. pay for his fare to cross the river to the other world

C. pay the ancestors for welcoming him

D. take care of his needs

E. remove any curse on the living

17. Hard work is most often crowned with

A. success

B. jealousy

C. hatred

D. failure

E. favour

18. One of the child's responsibilities in the home is to

A. sweep the compound

- B. provide his clothing
- C. pay the school fees
- D. pay the hospital fees
- E. provide his food

19. Which of the following is not the reason for contributing money in the church?

- A. provide school building
- B. building of hospitals
- C. paying the priest
- D. making the elders rich
- E. helping the poor and the needy

20. The traditional saying that “one finger cannot pick a stone” means

- A. it is easier for people to work together
- B. a crab cannot give birth to a bird
- C. patience is good but hard to practice
- D. poor people have no friends
- E. one should take care of the environment