



The quality of classroom instruction of religious and moral education teachers: Do their academic qualifications, professional qualifications and teaching experiences make a difference?

Eric Mensah¹
Bismark Sagoe²
Gladys Coleman³
Ebenezer Kyei Baffour⁴
Joyce Muminu⁵

¹eric.mensah5@ucc.edu.gh
²bismark.sagoe@stu.ucc.edu.gh
³nanaahenma18@gmail.com
⁴baffourebenezer100@gmail.com
⁵joycemumin67@gmail.com

¹<https://orcid.org/0000-0003-2362-8493>

²<https://orcid.org/0009-0007-6732-6549>

³<https://orcid.org/0009-0009-8910-5442>

⁴<https://orcid.org/0009-0002-9440-0162>

⁵<https://orcid.org/0009-0005-8932-9797>

^{1,2,3,4,5}University of Cape Coast, Ghana

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ABSTRACT

Effective teaching is considered a key contributor to successful students' outcomes. A cardinal determinant of effective teaching is the quality of the classroom instruction (QCI) of teachers. Literature hints that QCI is influenced by teachers' academic qualifications (AQ), professional qualifications (PQ), and their years of teaching experience (TE). Using the self-determination theory, this study sought to examine the influence of Religious and Moral Education (RME) teachers' AQ, PQ, and TE on their QCI within the Ghanaian context. The descriptive cross-sectional design was employed. Through the census method, all 170 RME teachers at Elmina were involved. A structured observational checklist was adopted for the study (reliability coefficient of .84). Descriptive (frequency, percentages, mean, and standard deviation) and inferential statistical tools (factorial ANOVA, ANOVA) were used to analyse data. The results indicated that the RME teachers have a moderate level of QCI. It was discovered that RME teachers' AQ, PQ, and TE combined brought about differences in their QCI. It was recommended that teacher education institutions in Ghana should ensure that pre-service training programmes emphasise both subject-specific pedagogy and reflective practice. Ghana Education Service (GES) should strengthen teacher deployment policies to ensure proper alignment between teachers' specialization and the subjects they teach. It is also recommended that regular in-service training and short courses in RME pedagogy be provided for teachers who were not originally trained in the subject. Stakeholders are therefore called on to institutionalise structured programmes focusing on innovative RME pedagogy, classroom interaction, and student engagement strategies.

Keywords: Academic Qualification, Moral Education, Professional Qualification, Religious, Teaching Experience, Teachers, Quality Classroom Instruction

I. INTRODUCTION

The concept of teaching has attracted considerable attention and scholarly interest. This interest has resulted in a wide range of definitions that are both simple (Hirst, 1974; Frimpong, 1990; Nilsen & Albertalli, 2002) and complex (Freire, 2000; Darling-Hammond et al., 2017; Merriam et al., 2007). Teaching is often characterized as both an art and a science (Rajagopalan, 2019). Schlechty (2004) defines teaching as an art of inducing students to behave in ways that are presumed to promote learning. Teaching is not just about content delivery but also engaging learners with the broader context in which learning occurs, making learners socially and culturally relevant (Casham et al., 2024). This implies that teaching requires more than merely the body of knowledge being conveyed; it demands various factors to ensure effective instruction. Effective teaching is a multifaceted and complex concept that has been defined as the



behaviours and classroom processes that contribute to better student performance (Ko et al., 2013) and also as that which encompasses not only academic outcomes but also other educational goals (Anderson, 1991). Anderson (1991) posits that effective teachers are those who achieve the goals they set for themselves or have set for them by others. The concept of educational effectiveness provides a framework for examining effectiveness at various levels, including individual teachers, schools, and educational systems (Anderson, 1991). Campbell and Malkus (2010) define teacher effectiveness as a process, thus, teacher effectiveness is the impact that classroom factors, such as teaching methods, teacher expectations, classroom organisation and use of classroom resources, have on students' performance. Shulman's (1986) requirements for teaching serve as the key elements that constitute most of the frameworks used in the field of education to describe effective teaching in schools.

Every subject taught in schools should be effectively taught, especially in Religious and Moral Education (RME) (Mensah & Ampem, 2023). RME holds profound importance as it plays an instrumental role in shaping the ethical, moral and religious dimensions of students. RME goes beyond imparting knowledge; it seeks to foster values, empathy, and critical thinking skills that are essential for navigating complex ethical dilemmas in society. RME encompasses the three dominant religions in Ghana: Christianity, Islam, and African Traditional Religion. The teaching of RME requires that the teacher has a fair knowledge and appreciates all the three religions, putting aside his/her personal religious affiliation. Nonetheless, Owusu and Mensah (2022) posit that there are challenges inherent in the effectiveness of teaching RME rooted in three (3) factors. These three factors are: the teacher who imparts knowledge, the student who is the recipient and the method used in teaching. Teachers bear the responsibility for the essential roles that schools play in society (Campbell & Malkus, 2010). The quality and effectiveness of teaching RME are not solely contingent upon the curriculum and resources; rather, they are significantly influenced by the teachers who deliver the instruction. For RME teachers to exert a significant influence on student learning, they must ensure their classroom instruction is of high quality. Thus, the concept of Quality Classroom Instruction (QCI) is of importance in this context.

QCI, also referred to as instructional quality, refers to the effective and impactful delivery of instruction in educational settings. It involves a combination of pedagogical skills, content knowledge, classroom management, and the ability to create a positive and inclusive learning environment (Nilsen et al, 2016). QCI is well explained by the Self-Determination Theory (SDT). This theory posits that human beings are inherently active and possess an innate tendency toward growth, mastery, and the integration of new experiences through a process known as organismic integration (Ryan & Deci, 2019). Schlesinger and Jentsch (2016) and Kunter et al (2013) point to challenges in measuring teacher and instructional quality. However, the establishment of the International Large-Scale Assessments (ILSA) and advancement in quantitative methods offer researchers new avenues to study the relationships between teachers, their instruction, and learning outcomes (Chapman et al., 2012). Gustafsson and Nilsen (2016) developed a framework from the dynamic model of educational effectiveness. Goe (2007) also used a framework to define teacher quality. Within this framework, teacher quality includes both the qualifications and characteristics of teachers, which are categorised as "inputs" that influence both the teachers' instruction, categorised as "process", as well as student outcomes. Furthermore, Gustafsson and Nilsen (2016) operationalized instructional quality based on a model comprising three "global dimensions of classroom process quality" (Klieme et al., 2009; Baumert et al., 2010). These dimensions include cognitive activation, supportive climate, and classroom management.

Kyriakides et al. (2014) proposed both generic and subject-specific aspects of instructional quality that may enhance student psychomotor learning. They achieved this by integrating generic elements from the Dynamic Model of Educational Effectiveness (DMEE) (Kyriakides et al, 2014) with subject-specific teaching practices derived from a modified version of the Task Structure System (TSS). Subject-specific frameworks are developed to analyse instructional quality within one specific subject and are directed by the subject demands of a particular discipline, uniquely designed for the teaching of such a discipline. This study operationally defines QCI as traits that teachers demonstrate during their instructional periods to create a conducive environment for learning, achieve objectives, and improve students' outcomes. The study focuses on traits (Modelling, Checking for Student Understanding, Response Time, Student Engagement, High Rate of Success, Encouraging Effort, Transitions, and Good Pacing) adapted from Gersten et al. (2005) for measuring QCI. The quality of a teacher's classroom instruction is influenced by some characteristics of the teacher.

According to Coenen et al. (2018), teacher characteristics are typically categorized into two dimensions: acquired characteristics and sociodemographic characteristics. This study focuses on acquired teacher characteristics, specifically the academic qualifications, professional qualifications, and teaching experience of RME teachers. Academic qualification (AQ) relates to the acquisition of relevant knowledge, skills, competence, and creativity needed for quality productive engagement in the teaching profession. The educational underpinning of educators, as reflected in their academic qualifications, stands out as a robust predictor of instructional excellence. Educators armed with advanced degrees and specialized expertise possess a profound comprehension of their subject matter, enabling them to navigate intricate concepts and captivate students with lucidity and sagacity. Teachers' AQ play a crucial role



in shaping the quality of classroom instruction. According to Schultz (as cited in Zhang et al., 2020), human capital, which includes AQ, is essential for achieving high productivity and gaining a competitive edge. For instance, Ruhela and Singh (as cited in Khurshid, 2008) argue that higher academic qualifications among teachers contribute significantly to the overall success of educational institutions. This suggests that RME teachers' academic qualification may influence their QCI.

Professional qualification (PQ) refers to the kind of professional education the teacher has received. PQ of teachers encompasses the certifications, credentials, and training that demonstrate their expertise in education and teaching. The extent and quality of the professional preparation a teacher receives will influence both the quality and the style of the teacher's instruction (Obun et al., 2023). The commitment of educators to refining their instructional practices is often indicated by their engagement in professional development and pursuit of qualifications (Day, 2017). Notably, the pursuit of professional growth significantly forecasts instructional quality, nurturing a dynamic and adaptable teaching environment that effectively addresses the evolving needs of students (Padillo et al., 2021). PQ also significantly affects the quality of classroom instruction. Sial (2005) argues that while academic credentials are important, professional education training is critical in enhancing teachers' effectiveness. Siaw-Marfo's (2011) study revealed that teachers with extensive professional training exhibit a higher level of self-efficacy in their instructional practices. This further means that teachers with extensive professional training are more confident in their ability to motivate students, manage classroom dynamics, and employ innovative teaching strategies that cater for individual student needs.

Teacher experience (TE) refers to the total number of years a teacher has spent in classroom teaching, rather than the years elapsed since graduation. Experienced teachers possess a wealth of background knowledge to draw from, allowing them to contribute valuable insights and ideas to the teaching and learning process (Kosgei et al, 2013). On the other hand, some experts think that, over time, most teachers develop instructional routines, learn what to expect from students, and settle into teaching patterns with confidence and a sense of having arrived (Feiman-Nemser, 2001). This metric is often used to gauge a teacher's level of expertise, familiarity with the educational environment, and potential impact on student learning. This wealth of experience cultivates an acute intuition for gauging student comprehension and engagement levels, leading to the creation of targeted and impactful lessons. The predictive potency of years spent in the teaching profession lies in the refined classroom management and pedagogical expertise that seasoned educators infuse into their instructional practices (Tantawy, 2020). This means that the teaching experiences of RME teachers can influence their QCI.

1.1 Statement of the Problem

In the teaching of RME, there is the demand for RME teachers to possess professional and academic qualifications coupled with teaching experience to navigate the complexities of religious, moral, and ethical issues. However, evidence from previous studies show that a significant number of RME teachers in Ghana do not possess the requisite qualifications (Owusu & Mensah, 2022; Mensah & Owusu, 2022; Mensah & Ampem, 2023). Owusu and Mensah (2023) and Mensah and Ampem (2023) postulated that, as a result of unemployment and lack of qualified teachers in Ghana, school administrators are forced to assign teachers who did not specialise in RME to teach the subject. Such teachers lack essential academic qualifications and the necessary professional training, which negatively impacts the quality of their classroom instruction. For instance, some teachers who specialized in mathematics education may be found teaching RME simply because they are class teachers. The absence of these qualifications for teachers who teach RME often leads to less students' engagement in lessons, minimal checking of students' understanding, poor response time, low rate of success, less encouraging efforts, poor pacing, which leads to lower academic performance, negative impact on student motivation, inadequate classroom management, and compromised curriculum delivery. The effects are very detrimental to the whole educational process and must be addressed urgently. A study conducted in Pakistan, found that there was no observable difference in quality between trained and untrained primary teachers. Additionally, given the very low salaries paid to teachers, there was generally little motivation among unqualified teachers to enhance their academic or professional qualifications (Kulshrestha & Pandey, 2013). To solve this problem, it is important to find out the level of RME teachers' qualifications and how it affects the quality of classroom instruction.

Previous studies have been conducted on this phenomenon. However, a review of the literature reveals a significant knowledge gap. Previous studies have not explored how the AQ, PQ, and TE of Ghanaian RME teachers influence their QCI. Previous research typically examined these teacher characteristics in isolation, with only Mensah and Ansah (2023) investigating their combined effect on CRS teachers' content knowledge in Ghana. Most studies have focused on these variables in Europe, Asia, America, or other African nations, while the few conducted in Ghana have primarily examined teachers in other subject areas. This situation underscores a substantial knowledge gap, as no research has examined the influence of AQ, PQ, and TE on the QCI of RME teachers in Ghana. In addition to this knowledge gap, the study addresses geographical and population gaps. There is a lack of research in Ghana on the



impact of RME teachers' AQ, PQ, and TE on QCI, as existing studies have concentrated on other subject areas and populations. Moreover, the empirical literature presents contradictory findings regarding the influence of AQ, PQ, and TE on teachers' QCI. While the majority of studies (Engida et al., 2024; Ntarmah & Yaro, 2024; Adhikari et al., 2024; Mabirizi & Ojok, 2024; Oteng et al., 2023; Inusah, 2020; Umar-ud-Din et al., 2010; Voss et al., 2022; Zhou et al., 2023; Kiani, 2023; Fitchett & Heafner, 2018; Ali & Khan, 2018; Ngabonziza & Oniye, 2024; Kini & Podolsky, 2016; Kosgei et al., 2013; Usifo, 2023; Yang & Gong, 2025; Bolanle Bello, 2022; Graham et al., 2020; Mageka & Ogochi, 2020; Ulfa et al., 2022; Stronge, 2018) have established a positive influence of teacher AQ, PQ, and TE on quality of classroom teaching and students' achievement, a few others (Mensah & Attachie, 2024; Nilsen et al, 2025; Lydia & Migosi, 2015; Mensah & Ansah, 2023; Zhang, 2008) have provided contrasting findings. These knowledge and context gaps further emphasize the need to examine the influence of RME teachers' AQ, PQ, and TE on their QCI within the Ghanaian context. This study aims to provide insights into how teacher AQ, PQ, and TE affect the QCI. The outcome will provide empirical evidence on how teachers' characteristics influence QCI. Heads of schools and the Ghana Education Service will make evidence-based decisions with regard to posting and assignment of subjects to teachers in schools.

1.2 Research Objectives

- i. Establishing differences in RME teachers' Quality Classroom Instruction based on their academic qualification
- ii. Establishing differences in RME teachers' Quality Classroom Instruction based on their professional qualification
- iii. Establishing differences in RME teachers' Quality Classroom Instruction based on their teaching experience

II. LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 Self-Determination Theory

Self-determination theory assumes that human beings are inherently active, with liberally evolved tendencies toward assimilation, seeking and mastering challenges, and the integration of new experiences. The basic psychological process through which this occurs is referred to as organismic integration, which is a manifestation of people's proactive, synthetic nature to become more differentiated and coherent in functioning. Self-determination theory (SDT) is a macro-theory that comprises six mini-theories that have been developed at different times to explain a circumscribed set of motivational phenomena emerging from programmes of research in the laboratory and applied settings. The first of the mini-theories is the cognitive evaluation theory, which was formulated to explain the effects of social contexts on intrinsic motivation. The second, organismic integration theory, explains phenomena concerned with the internalization and integration of extrinsic motivation. The third is the causality orientation theory, a theory of general individual differences in motivational orientations. The fourth, basic psychological needs theory, addresses the issue of psychological well-being and serves to tie together the first three mini-theories. The fifth is the goal content theory, which is concerned with the "what" or content of people's life goals and lifestyles, and the processes through which these develop. Finally, the sixth is the relationships motivation theory, which concerns the processes that promote high-quality close relationships. Although the six mini-theories together do not constitute the whole of SDT, most phenomena elucidated within this theoretical tradition can be located within one of these mini-theories (Ryan & Deci 2019).

In the educational setting, SDT posits that an internal feeling or perception of volition motivates individuals over their actions. For example, within a school setting, a motivated teacher may perceive a higher level of control over what can be taught within their classroom. According to Vallerand (2001), individual motivation, also termed as self-determination, has been categorized into three main concepts: intrinsic, extrinsic, and amotivation. Intrinsic forms of motivation are engaged in for internal reasons, such as enjoyment, pleasure, or the feeling of satisfaction (Ryan & Deci, 2000). Extrinsic motivations are influenced by external factors, such as earning a prize or feeling pressure to complete a task (Ryan & Deci, 2000). Finally, amotivation can be understood as an absence of drive or desire, exemplified by individuals who fail to engage in certain behaviours regardless of the number of external prompts presented to them (Ryan & Deci, 2000). Vallerand (2001) indicated that the three forms of motivation could be placed on a continuum, with extrinsic motivation placed between intrinsic and amotivation. Research has indicated that being more intrinsically motivated or self-determined within a work environment, such as teaching, is associated with a variety of positive outcomes (Ryan & Deci, 2019). For example, individuals who are intrinsically motivated are more likely to invest greater effort and engage actively in school activities and learning (Black & Deci, 2000; Shen et al, 2009).



Bieg et al, (2011) found that intrinsically motivated teachers provided an instructional setting that positively influenced the motivation of their students. On the other end of the spectrum, individuals with lower levels of self-determination tend to be less involved, derive little enjoyment from activities, and exhibit disengagement in learning tasks (Ntoumanis et al., 2004; Perlman, 2012). An extensive review of the literature identified three major themes regarding motivation and teacher education: the determinants of teacher motivation (Niemic et al., 2006), interventions to modify teaching practices (Perlman, 2012; Perlman & Piletic, 2012; Perlman, 2011; Tessier et al., 2010), and the impact of motivationally-based instructional practices on student outcomes (Black & Deci, 2000). A summary of the aforementioned studies indicated that elements of the school environment, such as the inherent pressures of being a teacher, influence the motivational profiles of educators. Additionally, it is feasible to alter instructional practices to provide more motivationally supportive experiences for students (Perlman, 2012). Specific instructional behaviours, such as the manner in which lesson content is conveyed, can also influence student motivation (Perlman, 2012). All these findings point to teachers' demographics as a driving force (intrinsic motivation) behind self-determination, with these demographics being influenced by extrinsic motivations.

2.2 Empirical Review

2.2.1 Influence of Academic Qualification on Teachers' Quality Classroom Instruction

The quality of teachers' classroom instruction is an aspect of effective teaching. It refers to the effective and impactful delivery in educational settings. It involves a combination of pedagogical skills, content knowledge, classroom management, and the ability to create a positive and inclusive learning environment (Nilsen, 2016). In this study, QCI is used to represent traits that RME teachers demonstrate during their instructional periods that create a conducive atmosphere for learning. These traits include modelling, checking for students' understanding, response time, students' engagement, rate of success, encouraging efforts, transition, and good pacing (Gersten et al, 2005). Academic qualification refers to the acquisition of competence, skills, and knowledge relevant to a particular field. AQ relates to the educational trajectory or the level of education the teacher has acquired and ensures that teachers possess the knowledge and expertise necessary to effectively educate students in their assigned subjects or grade levels. In this study, AQ is used to represent the qualifications that RME teachers have acquired through training in teacher preparation institutions. These in the Ghanaian context include WASSCE, Diploma, Bachelor's degree, and Master's degree. Scholars agree that teachers' AQ play a crucial role in shaping the quality of classroom instruction (Zhang et al., 2020). Previous studies (Engida et al, 2024; Ntarmah & Yaro, 2024; Adhikari et al, 2024; Mabirizi & Ojok, 2024; Oteng et al, 2023; Inusah, 2020; Umar-ud-Din et al, 2010) have indicated a positive influence of teacher AQ on quality of classroom teaching and students' achievement, with higher qualifications significantly enhancing quality of classroom teaching compared to lower qualifications. Only a few studies (Mensah & Attachie, 2024; Nilsen et al, 2025; Lydia & Migosi, 2015; Mensah & Ansah, 2023) have indicated no or minimal significant effects or relationships between the two constructs. There is a need to provide evidence to clear this controversy in the literature. We therefore posit that:

H₀₁: Academic qualifications of RME teachers influence the quality of their classroom instruction

2.2.2 Influence of Professional Qualification on Teachers' Quality Classroom Instruction

Quality of classroom instruction is crucial for educational success. QCI, a vital element for students' success, refers to the effective and impactful delivery in educational settings. It involves a combination of pedagogical skills, content knowledge, classroom management, and the ability to create a positive and inclusive learning environment (Nilsen, 2016). In this study, QCI represents RME teachers' traits related to their instructional periods. These are traits that create a conducive atmosphere for learning. These traits include modelling, checking for students' understanding, response time, students' engagement, rate of success, encouraging efforts, transition, and good pacing (Gersten et al, 2005). Professional qualification refers to the kind of professional education the teacher has received. PQ of teachers encompasses the certifications, credentials, and training that demonstrate their expertise in education and teaching. This means that a teacher may have an AQ but may not be a professional teacher. In this study, PQ is used to represent the training and qualification that RME teachers have acquired to gain professional competence, whether they are professionally trained or not. In the Ghanaian context, these qualifications include Teacher Certificate A, Diploma in Education, Bachelor of Education, and Postgraduate Diploma in Education. Literature has established a relationship between PQ of teachers and the QCI. Sial (2005) argues that while academic credentials are important, professional education training is critical in enhancing teachers' effectiveness. They also serve as a way for individuals to demonstrate their competence, enhance their career prospects, and maintain high standards within their respective professions. They contribute to the overall quality and standards of education (Obun et al, 2023). Studies (Voss et al., 2022; Zhou, et al, 2023; Kiani, 2023; Fitchett & Heafner, 2018; Ali & Khan, 2018; Ngabonziza & Oniye, 2024) have established how crucial professional training is for the attainment of quality classroom teaching and students' achievement. These studies, individually, through their findings, showed that teacher PQs are a determinant of their

QCI. Only a few studies (Mensah & Attachie, 2024; Nilsen et al, 2025; Lydia & Migosi, 2015; Mensah & Ansah, 2023) have shown that teachers' PQs do not influence their QCI. Due to the above review, we hypothesize that:

Ho₂: Professional qualifications of RME teachers influence the quality of their classroom instruction

2.2.3 Influence of Teaching Experience on Teachers' Quality Classroom Instruction

The quality of classroom instruction has been established as a critical element in ensuring effective teaching. QCI has been conceptualised based on the model of three global dimensions of classroom process quality (Gustafsson & Nilsen, 2016). These are: cognitive activation, supportive climate, and classroom management. Cognitive activation refers to teachers' ability to challenge students cognitively, and comprises instructional activities in which students have to evaluate, integrate, and apply knowledge in the context of problem solving (Klieme et al., 2009; Baumerte et al., 2010). In this study, QCI represents RME teachers' traits related to their instructional periods. These are traits that create a conducive atmosphere for learning. These traits include modelling, checking for students' understanding, response time, students' engagement, rate of success, encouraging efforts, transition, and good pacing (Gersten et al, 2005). Teaching experience refers to the actual number of years a teacher has spent in classroom teaching, rather than the number of years since graduation. For example, if a teacher has been teaching in a school for five years, their "teaching experience" would be five years. It is expected that the more years RME teachers teach, the more their classroom instruction (QCI) becomes refined. This follows that the two constructs have a relationship. Previous studies (Podolsky & Kini, 2016; Engida et al., 2024; Kosgei et al, 2013; Usifo, 2023; Yang & Gong, 2025; Bolanle Bello, 2022; Graham et al, 2020; Mageka & Ogochi, 2020; Stronge, 2018) conducted in Europe, America, Asia, and Africa have established the fact that teachers' teaching experience influences the quality of their classroom instruction. This means that experience and teacher quality are related, with more seasoned educators typically demonstrating higher observed instructional quality in the presence of academic and professional support. Meanwhile, other scholars (Mensah & Ansah, 2023; Zhang, 2008) found the opposite. In their respective studies, it was established that teaching experience (years of teaching) does not influence the QCI of teachers. These previous findings are contradictory, even though most of them indicate a significant relationship between the two constructs. This creates an evidence gap to be filled, and so the study posits that:

Ho₃: Teaching experience of RME teachers influence the quality of their classroom instruction

III. METHODOLOGY

3.1 Procedures

The cross-sectional survey design nested in the positivist paradigm to research was used to conduct this study. The design allows the collection of quantitative data from a large sample to understand their views, opinions, and characteristics. It also allows the establishment of effects and influences among variables (Creswell, 2021). The study sought to establish the influence of RME teachers' academic qualifications, professional qualifications, and teaching experiences on the quality of their classroom instruction. Due to this, RME teachers in basic schools in the Komenda Edina Eguafo Abirem Municipality constituted the population for the study. Using the census method, all 170 RME teachers were involved in the study. The census technique guarantees a full and accurate representation of the whole population (Leavy, 2017). Additionally, the census approach does not need sampling and lowers the possibility of sampling error because it includes every member of the population. This helps the researchers to make valid conclusions about the entire population. Table 1 gives details of the demographics of the RME teachers.

Table 1

Demographic Characteristics of Teachers (n= 170)

Variable	Subscale	No	%
Educational Qualification	Diploma	75	44.1
	Bachelor's Degree	54	31.8
	Master's Degree	7	4.1
	WASSCE	34	20
Professional Qualification	Teaching certificate A	87	51.2
	Diploma in Education	50	29.4
	B.Ed.	33	19.4
Years of Teaching	1-5 years	96	56.5
	6-10 years	43	25.3
	11-15 years	19	11.2
	16-20 years	6	3.5
	More than 20 years	6	3.5

3.2 Measures

A structured observational checklist was adopted for the study. Creswell (2021) noted that an observation guide offers a consistent stimulus to large numbers of people simultaneously and facilitates the easy accumulation of data for the investigation. The instrument had two major sections. Section A solicited information on the demographic characteristics of the respondents. These included academic qualification, professional qualification, and teaching experience. Section B had eight adopted items measuring quality classroom instruction, developed by Gersten et al. (2005). The instrument was a 3-point-level scale indicating whether the teachers' QCI were either low, moderate, or high. The level was considered low if the teachers were observed to get low and vice versa.

3.3 Validity and Reliability

The instrument was subjected to content and face validity assessments conducted by experts and the researchers themselves. To ensure internal consistency, a pilot study was carried out with 75 teachers in the Cape Coast Metropolis, yielding a Cronbach's alpha value of .84 from the pilot-tested instrument. According to Schrepp (2020), a Cronbach Alpha value greater than 0.70 is excellent.

3.4 Quantitative Treatment of Data

The data collected were analysed quantitatively. The data were sorted, organized, and cleaned. This was not to alter responses to fit the researchers' needs, but to address any missing data and ensure accuracy. Analysis was conducted using descriptive and inferential statistical tools, with computations performed in Statistical Product and Service Solutions (SPSS version 27) to facilitate data input and visualization. Descriptive statistical measures, such as frequencies and percentages, were used to analyse demographic characteristics, while means and standard deviations were used to answer research question one. Additionally, a 3 Factorial ANOVA was employed to explore the influence of teachers' AQ, PQ, and TE on their QCI.

3.5 Ethical Consideration

Ensuring ethical considerations within any research endeavour is of paramount importance, and this particular study was no exception. An ethical clearance was sought from the Institutional Review Board at the University of Cape Coast. Possible avenues that could breed ethical tensions were taken care of by ensuring that the principles of anonymity, confidentiality, non-maleficence, and beneficence were not breached. Further, a letter of introduction was requested from the Department of Arts Education, University of Cape Coast, to get official permission from the school administration to interact with the teachers. Written informed consent was obtained from all participating teachers. The researchers emphasised voluntary participation and the right to withdraw. Teachers participated in the study voluntarily.

IV. FINDINGS & DISCUSSIONS

4.1 Descriptive Results

The teachers were observed on eight items on a 3-point Likert scale (level) to measure the level of R.M.E teachers' quality classroom instruction. The Observation was based on the scales: 1= low; 2 = moderate; 3 = high. The mean scores and overall mean were interpreted as 1-1.6 (low), 1.7 -2.3 (moderate), and 2.4-3.0 (High). Results are shown in Table 2.

Table 2
Level of R.M.E Teachers Quality Classroom Instruction (n= 170)

Statement	Low		moderate		High		M	SD
	No	%	No	%	No	%		
Modelling	14	8.2	63	37.1	93	54.7	2.46	.64
Checking for student understanding	9	5.3	75	44.1	86	50.6	2.45	.60
Response time	10	5.9	94	55.3	66	38.8	2.33	.58
Student engagement	18	10.6	54	31.8	98	57.0	2.47	.68
High rate of success	26	15.3	86	50.6	58	34.1	2.19	.67
Encouraging efforts	22	12.9	71	41.8	77	45.3	2.32	.69
Transitions	16	9.4	97	57.1	57	33.5	2.24	.61
Good pacing	12	7.1	79	46.5	79	46.5	2.39	.62
Average							2.4	.6

Results in Table 3 show that RME teachers had an average mean of 2.4 on QCI. More than half (98, 57.0%) of them were seen to moderately ensure students engagement ($M = 2.47$, $SD = .68$). Most (93, 54.7%) of them moderately practised modelling ($M = 2.46$, $SD = .64$). Half (86, 50.6%) of them moderately checked for student understanding ($M = 2.45$, $SD = .60$). Majority (158, 93%) were either found to moderately or highly practice good pacing ($M = 2.39$, $SD = .62$). Again, over half (94, 55.3%) of them moderately have a good response time ($M = 2.33$, $SD = .58$). Almost (148, 87.1%) all of them were moderately seen to be encouraging efforts ($M = 2.32$, $SD = .69$). Moreover, 97 (57.1%) were found to possess moderate transitions ($M = 2.24$, $SD = .61$). Finally, half (86, 50.6%) of them were seen to have a moderate rate of success ($M = 2.19$, $SD = .67$).

4.2 Hypotheses Testing Results

The analysis sought to investigate the composite influence of AQ, PQ and TE on RME teachers' QCI. To achieve this, a 3 Factorial ANOVA was used to analyse the data. The assumption of homogeneity of variances was tested and was not violated ($\text{sig} = .074$). The result is detailed in Table 3.

Table 3

Test of Between-Subjects Effects of RME Teachers' Demographic Characteristics on Teachers' Quality Classroom Instruction

Source	df	F	Sig.	Partial Eta Squared
Corrected Model	31	2.095	.002	.378
Intercept	1	2209.212	.000	.944
Academic Qualification	3	1.646	.182	.056
Professional Qualification	2	4.468	.013	.089
Teaching experience	4	0.853	.494	.051
Academic Qualification * Professional Qualification	6	1.641	.140	.093
Academic Qualification * Teaching experience	6	2.021	.067	.029
Professional Qualification * Teaching experience	7	1.297	.256	.087

Source: Field Data (2024); *Sig < .074

The results of the General Linear Model (GLM) corrected model showed a statistically significant effect of RME teachers' demographic characteristics (AQ, PQ, and TE) on their QCI, $F(31, 3) = 2.095$, $p = .002$, partial $\eta^2 = .378$. There was no statistically significant interaction between AQ and PQ, $F(6, 3) = 1.641$, $p = .140$, partial $\eta^2 = .093$, AQ and TE, $F(6, 3) = 2.021$, $p = .067$, partial $\eta^2 = .029$, PQ and TE, $F(7, 3) = 1.297$, $p = .256$, partial $\eta^2 = .087$.

4.2.1 There is no Statistically Significant Difference in RME Teachers' Quality Classroom Instruction Based on their Academic Qualifications

The results in Table 3 indicate that there was no statistically significant effect of AQ $F(3, 3) = 1.646$, $p = .182$, partial $\eta^2 = .056$ on RME teachers' QCI. This means that RME teachers' AQs do not bring differences in their QCI. Therefore, irrespective of the educational qualification of the teachers, they have the same level of QCI. A further analysis of variance in RME teachers' QCI showed the respective mean scores of the AQ categories. The results revealed that those who possess WASSCE had a mean of 2.19, Diploma had a mean of 2.23, Bachelors' degree had a mean of 2.42, Master's degree had a mean of 2.55 (See Table 4).

Table 4

Descriptive Statistics

Academic Qualifications	N	Mean	SD
WASSCE	34	2.19	0.30
Diploma	75	2.23	0.31
Bachelor's	54	2.41	0.26
Masters	7	2.55	0.27

Interestingly, when one-way ANOVA was used for further analysis of variance, the results showed that the effect of AQ of RME teachers' QCI was significant, $F(3, 164) = 6.891$, $p < 0.05$ (See Table 5).

Table 5*ANOVA for Academic Qualifications and Quality Classroom Instruction*

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.850	3	.617	6.891	.000
Within Groups	14.853	166	.089		
Total	16.703	169			

Post hoc analyses using the Bonferroni post hoc criterion for significance indicated that QCI levels of RME teachers were significantly lower for those with WASSCE ($M=2.19$, $SD=0.30$) than those with a Bachelor's degree ($M=2.41$, $SD=0.26$) and those with Master's degree ($M=2.55$, $SD=0.27$). Again, the post hoc analyses using the Bonferroni post hoc criterion for significance indicated that QCI levels of RME teachers were significantly lower for those with a Diploma ($M=2.23$, $SD=0.31$) and those with a Bachelor's degree ($M=2.41$, $SD=0.26$).

4.2.2 There is no Statistically Significant Difference in RME Teachers' Quality Classroom Instruction Based on their Professional Qualifications

The results in Table 3 indicate that there was a statistically significant effect of PQ, $F(2, 3) = 4.468$, $p=.013$, partial $\eta^2 = .089$ on RME teachers' QCI. This means that RME teachers' PQs bring about differences in their QCI. Therefore, teacher training qualifications of the RME teachers influences their level of QCI. A further analysis of variance in RME teachers' QCI showed the respective mean scores of the PQ categories. The results revealed that those who possess Teacher Certificate A had a mean of 2.21, Diploma in Education had a mean of 2.46, and Bachelor of Education had a mean of 2.27 (See Table 6).

Table 6*Descriptive Statistics*

Professional Qualifications	N	Mean	SD
Teacher Certificate A	87	2.21	0.30
Diploma in Education	50	2.46	0.27
Bachelor of Education	33	2.27	0.31

Results of one-way ANOVA used for further analysis of variance showed that the effect of PQ of RME teachers on their QCI was significant, $F(2, 167) = 11.360$, $p<0.05$ (See Table 7).

Table 7*ANOVA for Professional Qualifications and Quality Classroom Instruction*

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.000	2	1.000	11.360	.000
Within Groups	14.703	167	.088		
Total	16.703	169			

Post hoc analyses using the Bonferroni post hoc criterion for significance indicated that QCI levels of RME teachers were significantly lower for those with Teacher certificate A ($M=2.21$, $SD=0.30$) than those with Diploma in Education ($M=2.46$, $SD=0.27$). Again, the post hoc analyses using the Bonferroni post hoc criterion for significance indicated that QCI levels of RME teachers were significantly lower for those with a Bachelor of Education ($M=2.27$, $SD=0.31$) than those with a Diploma in Education ($M=2.46$, $SD=0.27$).

4.2.3 There is no Statistically Significant Difference in RME Teachers' Quality Classroom Instruction Based on their Teaching Experience

The results in Table 3 indicate that there was no statistically significant effect of TE, $F(4, 3) = 0.853$, $p=.494$, partial $\eta^2 = .051$ on RME teachers' QCI. This means that RME teachers' TE does not bring about differences in their QCI. Therefore, irrespective of the number of years RME teachers have taught, they have the same level of QCI.

Table 8
Descriptive Statistics

Teaching Experience in years	N	Mean	SD
1-5 years	96	2.23	0.32
6-10 years	43	2.37	0.31
11-15 years	19	2.41	0.24
16-20 years	6	2.29	0.31
More than 20 years	6	2.43	0.33

A further analysis of variance in RME teachers' QCI showed the respective mean scores of the TE categories. The results revealed that those who had been teaching RME for 1-5 years had a mean of 2.23, 6-10 years had a mean of 2.37, 11-15 years had a mean of 2.41, 16-20 years had a mean of 2.29, and more than 20 years had a mean of 2.43 (See Table 8)

Table 9
ANOVA for Teaching Experience and Quality Classroom Instruction

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.909	4	.227	2.374	.054
Within Groups	15.794	165	.096		
Total	16.703	169			

Results of one-way ANOVA used for further analysis of variance showed that the effect of TE of RME teachers on their QCI was not significant, $F(4, 165) = 2.374$, $p > 0.05$ (See Table 9). Due to the non-significant effect, there was no need to run post hoc analyses of the variance in QCI between the TE groups.

4.3 Discussion

This study examined the influence of RME teachers' academic qualifications, professional qualifications, and teaching experience on the quality of their classroom instruction in basic schools within the KEEA Municipality. In this section, the enviable insights the study revealed are discussed. First, the study revealed that the overall level of QCI among RME teachers was moderate. From the data gathered, it was inferred that while teachers exhibit essential instructional traits such as modelling, checking for understanding, and maintaining good pacing, there remains room for improvement in areas like encouraging student efforts and ensuring high rates of success. Consequently, the moderate QCI implies that many teachers may possess the motivation to teach effectively; however, limited pedagogical preparation and constrained professional growth may hinder optimal classroom performance. From the perspective of SDT, this could reflect the teachers' partial internalisation of intrinsic motivation for teaching—where external pressures, such as curriculum constraints or inadequate resources, may impede the full exercise of autonomy and competence (Ryan & Deci, 2019).

Also, the study found that AQ did not have a statistically significant effect on QCI when considered in the general model. However, further one-way ANOVA analysis revealed significant differences. Teachers who possess higher academic qualifications, particularly bachelor's and master's degrees, exhibit superior instructional quality compared to those with only WASSCE or diploma certificates. This finding corroborates those of many scholars (Zhang et al, 2020; Engida et al, 2024; Ntarmah & Yaro, 2024; Adhikari et al, 2024; Mabirizi & Ojok, 2024; Oteng et al, 2023; Inusah, 2020; Umar-ud-Din et al, 2010). Zheng et al. (2020), for instance, mentioned that higher AQ enriches teachers' conceptual understanding and pedagogical clarity. Perhaps the observed subtle distinction suggests that while academic knowledge alone may not guarantee effective instruction, it enhances the depth and sophistication of teaching practices when coupled with reflective application. We make this assertion in light of similar findings reported by Mensah and Attachie (2024). In their study, they found that lecturers with higher degrees demonstrated stronger pedagogical content knowledge. Therefore, it will not be strange to argue that academic qualification contributes indirectly to QCI by equipping teachers with the intellectual resources necessary for effective cognitive activation.

Moreover, PQ emerged as a statistically significant determinant of RME teachers' QCI. Teachers holding a Diploma in Education were observed to perform better than those with a Teacher Certificate A or Bachelor of Education degree. It is worth noting that those with a Teachers Certificate A also performed relatively better than those with a Bachelor of Education degree. The understanding here is that Diploma in Education and even Teacher Certificate A programs are predominantly designed to provide comprehensive pedagogical training across all basic school subjects. Consequently, this equips teachers with broad instructional competence. In contrast, Bachelor of Education programs often prepare teachers for specific subject areas. This is to say that they focus on specialisation



rather than general teaching. As scholars like Owusu and Mensah (2022), Mensah and Owusu (2022), and Mensah and Ampem (2023) observed in their study on the realities of Ghanaian basic schools, many teachers with Bachelor of Education degrees are often assigned to teach subjects outside their area of specialisation. It is therefore possible that a significant proportion of the respondents with Bachelor's degrees in this study were not specifically trained to teach RME, which may account for their comparatively lower instructional quality. The foregoing affirms scholars' assertion that professional training enhances teachers' instructional competence, classroom management, and reflective practice (Day, 2017), and that pedagogical training shapes self-efficacy and instructional coherence (Voss et al, 2022; Zhou et al, 2023). Within the Ghanaian context, where out-of-field teaching remains prevalent (as aforementioned), these findings reinforce the importance of aligning teacher professional preparation with subject specialisation to achieve meaningful instructional outcomes in RME.

Lastly, TE was not found to significantly influence QCI, although teachers with more than ten years of experience showed slightly higher mean scores. This finding resonates with observations from previous studies (Mensah & Ansah, 2023; Zhang, 2008). These studies revealed that there is no substantial relationship between years of teaching and instructional quality. Although studies have shown that experienced teachers possess classroom routines and management skills (Feiman-Nemser, 2001), these seem not to necessarily translate into higher instructional quality. According to Kini and Podolsky (2016), teaching experience improves effectiveness primarily when teachers are exposed to supportive professional learning environments. Thus, it is in the right direction to argue in this current study that mere longevity in teaching, unless backed with continuous pedagogical upgrading, may not yield improvements in instructional quality. Within the framework of SDT, this implies that extrinsic factors such as institutional support and access to training mediate the extent to which experience fosters intrinsic motivation and pedagogical refinement.

V. CONCLUSION & RECOMMENDATIONS

5.1 Conclusion

The findings of this study have several important conclusions and implications for teacher education, policy, and classroom practice in Ghana. For instance, it was discovered that professional qualification has a significant influence on the quality of classroom instruction. These insights suggest that teacher education and professional development in RME must be approached holistically. It can also be concluded that, the perceived mismatch observed between teachers' academic specialisation and their assigned teaching subjects can undermine instructional quality. It appears that many Bachelors of Education graduates teach RME without specific preparation in the subject area, leading to lower QCI scores. Again, the study found that teaching experience alone does not significantly influence instructional quality. This suggests that mere longevity in the profession does not guarantee improvement. We conclude that continuous professional development as a means of translating experience into effective practice is required.

5.2 Recommendations

Based on the findings, conclusions and implications, we recommend that teacher education institutions in Ghana should ensure that pre-service training programmes emphasise both subject-specific pedagogy and reflective practice. In line with SDT, such training should aim to foster teachers' intrinsic motivation by developing their sense of competence, autonomy, and relatedness in instructional contexts. We also recommend that the Ghana Education Service (GES) should strengthen teacher deployment policies to ensure proper alignment between teachers' specialization and the subjects they teach. It is also recommended that regular in-service training and short courses in RME pedagogy should be provided for teachers who were not originally trained in the subject. Also, stakeholders are therefore called on to institutionalise structured programmes focusing on innovative RME pedagogy, classroom interaction, and student engagement strategies

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