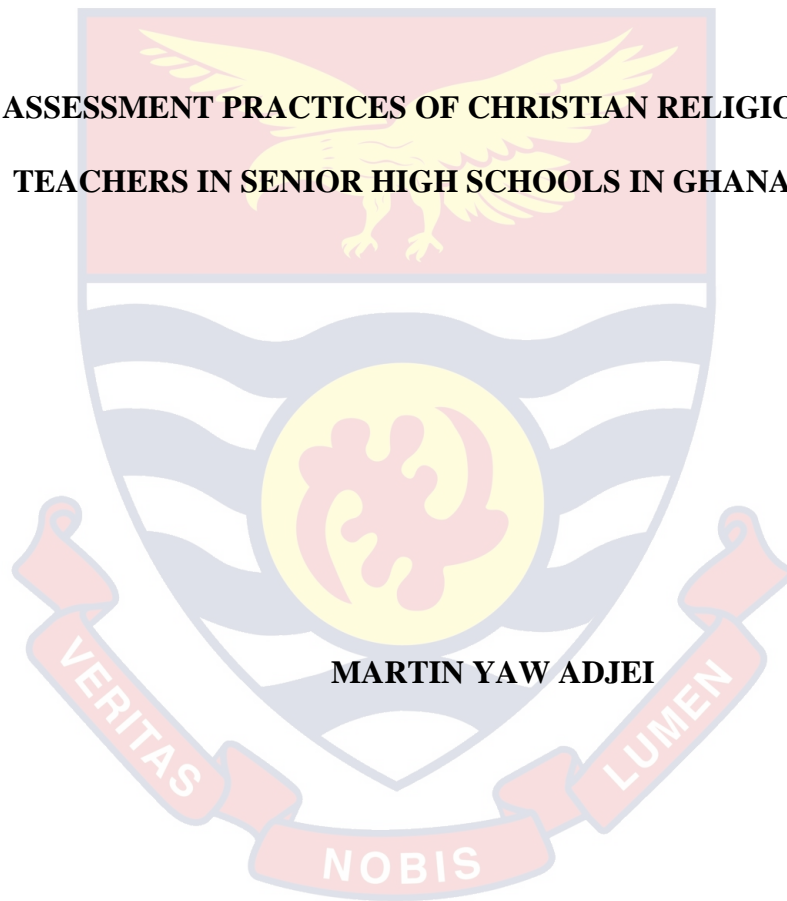


UNIVERSITY OF CAPE COAST

**ASSESSMENT PRACTICES OF CHRISTIAN RELIGIOUS STUDIES  
TEACHERS IN SENIOR HIGH SCHOOLS IN GHANA: A SURVEY**



**MARTIN YAW ADJEI**

**2021**

UNIVERSITY OF CAPE COAST

ASSESSMENT PRACTICES OF CHRISTIAN RELIGIOUS STUDIES  
TEACHERS IN SENIOR HIGH SCHOOLS IN GHANA: A SURVEY

BY

MARTIN YAW ADJEI

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

JULY 2021

## DECLARATION

### Candidate's Declaration

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

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

Name: Martin Yaw Adjei

### Supervisor's Declaration

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

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

Name: Rev. Prof. Seth Asare Danso

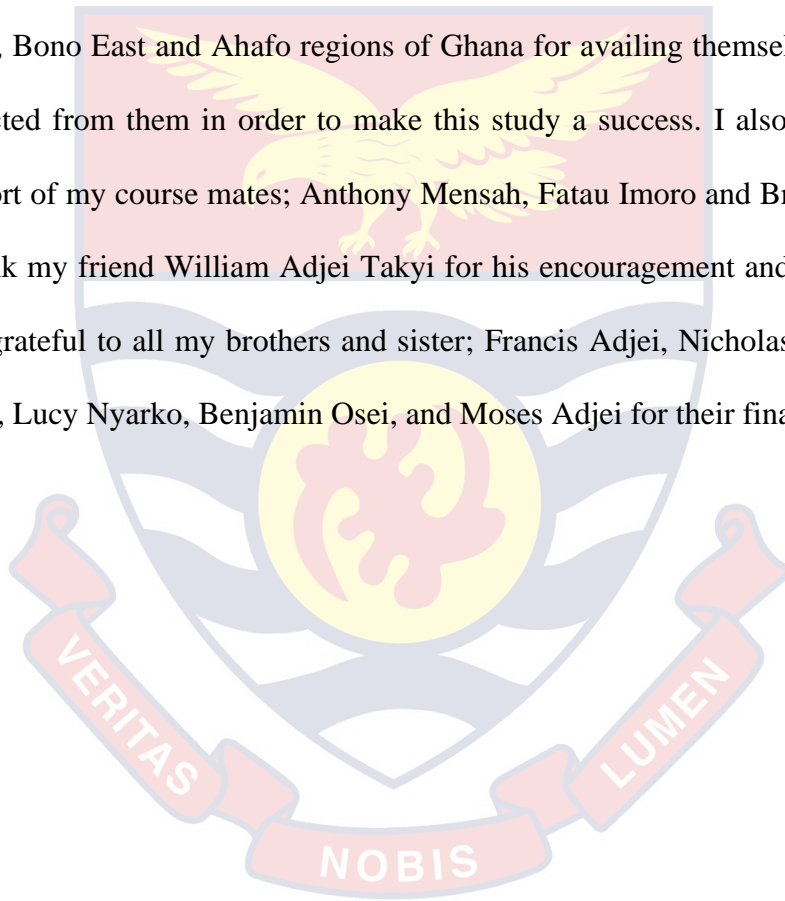
## ABSTRACT

The study sought to examine assessment practices of Christian Religious Studies (CRS) teachers in Senior High Schools in the Bono, Bono East and Ahafo regions of Ghana. The cross-sectional descriptive survey research design was adopted for the study. Using the census method, 96 CRS teachers in the Senior High Schools in the Bono, Bono East and Ahafo regions of Ghana were selected to participate in the study. The questionnaire was used to gather the requisite data for the study. The data was analysed using frequencies, percentages, means and standard deviations. The study among other things found out that the CRS teachers were knowledgeable in assessment practices. The teachers used assessment strategies such as: storytelling, presentations, group assignment, individual assessment, homework, peer assessment, questioning, class exercises, and quizzes/ class tests very often. Also, to a high extent, the CRS teachers practised assessment for learning (AfL), assessment as learning (AaL), and assessment of Learning (AoL). Again, teachers encountered a number of challenges in assessing their students. Some of the challenges were the difficulty for teachers to follow the assessment practices, lack of funds, and large class sizes. The study recommended that, Ministry of Education (MoE) and the Ghana Education Service (GES) should ensure that CRS as a subject is taught by professional teachers with education background, and should organize in-service training for teachers concerning the practice of assessment as learning (AaL). Again, headteachers should solicit for financial assistance from PTA and old school unions, and teachers should write test items at least two weeks before time for test administration.

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## DEDICATION

To my parents,  
Augustine Edward Adjei  
Juliana Yaa Yeboaa



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## CHAPTER ONE

### INTRODUCTION

#### Background to the Study

Assessment can be seen as an umbrella term which includes the use of various strategies and methods to determine the extent to which students are achieving the predetermined learning objectives and outcomes of a lesson (Mussawy, 2009). There are different types of assessment which can be used to test students' knowledge and see their current levels in specific subjects. Two major types of assessment widely used are traditional types of assessment and performance-based assessment (Birenaum, & Feldman, 2012).

Birenaum, and Feldman (2012) argue that traditional types of assessment tools are generally knowledge-based and include conventional types of tests such as multiple-choice questions, short answer essays or constructed responses and standardized tests whereas in performance based assessments, students are required to perform a task rather than select from options provided and students are assessed according to their performance outcomes and the extent to which those outcomes are in relation to the rubrics or feedback tools. Achievement assessment tests require students to exhibit the extent of their learning through a demonstration of mastery (Poikela, 2004).

Uguanyi (1999) (cited in Oche, 2014) defines assessment as a process of measuring behaviours and using the results obtained in taking relevant decisions about a programme. In educational assessment, information is gathered to determine whether teaching and learning are effective. It is a comprehensive exercise that is carried out both in the course of learning (formative) and at the

terminal end of learning (summative). Learners' progression is determined by the outcome of the assessment of the teacher. The teacher determines whether the learner has acquired the intended values, skills, attitudes and knowledge. Decisions relating to the learner, teacher competence and effectiveness of a particular methodology are made through a comprehensive assessment exercise.

Assessment is a means to an end but not an end in itself. It is in this vain that measurement experts describe educational assessment as a process but not a product, cyclical but not linear (Gyimah, 2018). The process does not end with the results or grades. However, the results are interpreted and reported to the learners, parents, school authorities, etc.

Saskatchewan Education (1991), Alberta Learning (2003) and British Columbia Ministry of Education (2004), emphasise the importance of assessment and recommend that it should be an integral part of the teaching and learning process. They add that assessment information must be available to parents and students and should be used to plan further instruction and set learning goals.

Black and William (1998) affirm the fact that well-planned and carried out classroom assessment facilitate learning. The study concluded (after reviewing various research linking assessment and learning) that, the intentional use of assessment in the classroom to promote learning improved student achievement. In this case, teachers must always be aware of the knowledge, skills and believes of learners before teaching so that they can use the information to guide instructions appropriately.

Assessment can be formal or informal. Gyimah (2018) describes formal assessment as “tests that involve standardised administration and have norms and

formal interpretive procedures” (p. 77). In formal assessment practices, students performance are compared to their peers. Formal assessment are standardised and ensure high validity and reliability. It may include class tests, end of term test, end of year examination. Informal assessment refers to those assessment techniques that can “easily be incorporated into classroom routines and learning activities. Informal assessment practices include projects, class presentation, experiments, portfolios, observation, checklists, class contribution. To be able to use formal and informal assessment strategies, teachers must be knowledgeable and skilful in educational assessment.

It is absolutely impossible for anybody to study in an entire educational system without being exposed to a wide range of educational and psychological assessment procedures. This is because constantly in an educational system, decisions have to be made about students, curricula and programmes, and educational policies. According to Nitko (1996), decisions about students include managing classroom instruction, placing students into different types of programmes, assigning them to appropriate categories, guiding and counselling them, selecting them for educational opportunities and credentialing and certifying their competence. Decisions about curricula and programmes include decisions about their effectiveness and about ways to improve them. It is worth knowing, however, that educational assessments, of which in the Ghanaian educational system, tests predominate, provide some of the needed information for these types of decisions.

According to the standard for Educational and Psychological testing, National Council on Measurement in Education (NCME, 2014) “a test is a device



or procedure in which a sample of an examinees behaviour in a specified domain is obtained and subsequently evaluated and scored using a standardized process” (p. 2). However, it must be noted that the psychological attributes of an individual cannot be measured directly as can height or weight. The existence of such psychological construct can never be absolutely confirmed. The degree to which any attribute characterises an individual can only be inferred from observation of his or her behaviour. It becomes more prudent if one can quantitatively relate the subjective judgments of individuals about the estimated amount of construct or trait that exist in a person by establishing standards for such measurement.

In England, a review of research findings on a number of published studies by Crooks (1998) and Black (1993) suggest the existence of weak assessment practices. The findings suggest that classroom assessment practices encouraged rote learning. They explained that, items were centred on low level of cognitive processing. Also teachers were in haste when assessing learning such that they do not review constructed test items. Thirdly, teachers over-emphasised the grading function while the learning function was under emphasised. Fourth, there was a tendency on the part of teachers to use normative rather than a criterion approach which emphasised competition between students rather than personal improvement of each student. The evidence is that with such practices, the effect of feedback is to teach the weaker students that they lack ability, so that they are de-motivated and lose confidence in their own capacity to learn.

In the Ghanaian educational system, standardised achievement, aptitude, and intelligence tests that are found in the developed countries such as the United States of America (USA), Canada and Great Britain are to a large extent non-



existent. The tests that are conducted by the West African Examinations Council (WAEC) at the terminal points of the educational system cannot be said to be standardised since they do not meet all the standard characteristics of standardised achievement tests. Examples of the WAEC conducted tests are the Basic Education Certificate Examination (BECE) and the West African Senior School Certificate Examination (WASSCE). According to Linn and Gronlund (1995), the characteristics of a carefully constructed standardised achievement test include the following: The test items are of a high technical quality. They have been developed by educational and test specialists, tried out experimentally (pretested) and selected on the basis of difficulty, discriminating power and relationship to a clearly defined and rigid set of specifications; Directions for administering and scoring are so precisely stated that the procedures are standard for different users of the test; Norms based on national samples of students in the grades where the test is intended for use are provided as aids in interpreting the scores; as well as Equivalent and comparable forms of the tests are usually provided as well as information concerning the degree to which the tests are comparable.

Test is an essential tool that helps to quantify such constructs which helps one to make a value judgment about the degree to which such constructs might probably exist in an individual. A large number of assessment techniques may be used to collect information about students. These include formal and informal observation of students, paper-and-pencil test, a student's performance on homework, laboratory work, projects and during oral questioning and analysis of students' records.

It is quite clear that Christian Religious Studies (CRS) teachers in the educational setting would want to estimate the degree to which their students are characterized by the knowledge they have imparted to them within a given period. All the domain of such construct might not be known by a single test. Nevertheless, a well-constructed test could sample to a large extent a reasonable amount of the construct on which value judgment could be made from. Educators especially Christian Religious Studies (CRS) teachers must also be aware that a test itself is subject to errors which adversely could affect its use in making decision about students.

According to Daniel (2008), “a test score is just one indicator of what a student has learned an exceptionally useful one in many ways, nonetheless one that is unavoidably incomplete and somewhat error prone” (p. 10). Tom and Gary (2013) further asserted that, test are only tools, and tools can be appropriately used, unintentionally misused, and intentionally abused, tests, like other tools, can be well designed or poorly designed and both poorly designed tools and well-designed tools in the hands of ill-trained or inexperienced users can be dangerous.

They went further to state that test misuse and abuse can occur when users of test results are unaware of the factors that can influence the usefulness of the test scores. Among the major factors are the technical adequacy of a test and its validity and reliability. The technical inadequacies might emerge from factors such as, test appropriateness for the purpose of testing, the content validity evidence, the appropriateness of the reading level, language proficiency and cultural characteristics of students and teachers and students’ factors that may have affected administration procedure and scoring of the test, among others. It

must also be noted that even when a test is technically adequate, misuse and abuse can occur because technical adequacy does not ensure that test scores are accurate or meaningful.

When students' achievement levels are not properly measured and interpreted, the teachers and school administrators will not be able to provide the right educational opportunities and support each individual student needs. Testing provides feedback on which educational decisions are made. These decisions may be the ones that require information about the success of learning programmes or about students who have reached particular levels of skill and knowledge (Izard, 2005). Accurate and valid information about student achievement is widely understood to be essential for effective instruction, as it enables teachers to give appropriate feedback and adapt their instruction to match student needs. However, there is much less agreement about the relative merit of different measurement methods used to obtain this information. Previous research has often found substantial positive correlations between teacher judgments of student achievement and the scores the students obtain on standardized tests. However, the strength of this association has been asserted to be varying considerably across subjects, grades, and teachers (Hoge & Coladarci, 2013).

Tests are indispensable tools in every educational system. Tests and teaching are interwoven. Quagrain (2014) has stated that-tests provide needed information for evaluation. Without evaluation there cannot be feedback and knowledge of results. Without knowledge of results there cannot be any systematic improvement in learning.

In African, especially in the Ghanaian context, Christian Religious Studies is one of the essential subjects in the Senior High School curriculum meant to promote a holistic development of the child. The subject seeks to develop the cognitive and the affective domains of the child with sound moral values cherished by society. Boateng (2006) maintained that, the major challenge that Christian educators face in Ghana is how to deepen the moral convictions of students. He concluded that, it is only when students strongly believe that certain actions are morally wrong, that they will feel compelled to resist the social pressure to do them. One will agree that, no society or nation can develop without consciously well-developed moral values, hence the need for efficient and effective teaching and assessment of Christian Religious Studies (CRS) in all Senior High Schools.

### **Statement of the Problem**

The CRS syllabus issued by Curriculum Research and Development Division (CRDD, 2010), points out that the rationale for studying Christian Religious Studies (CRS) at the Senior High Schools (SHSs) is to help students understand the role the Bible plays in the lives of people, as a source of guidance, direction and counsel on various problems facing the world today.

Christian Religious Studies is based on the Holy Bible and has a framework for handling a good deal of teaching about personal and social values that are essential for individual and societal growth and development. Therefore, the understanding, appropriation, and actualisation of biblical ideals, virtues and concepts in the lives of the students are the prime motives of this programme. At the end of this course, students would be expected to: demonstrate knowledge,

understanding and appreciation of the biblical texts as set in the selected passages, analyse the religious and social background of the specified themes/passages, apply the religious and moral lessons in the set passages/themes in their lives, adopt healthy attitudes, concepts and skills acquired from the Bible for their personal living and impact on society.

Despite the enormous impact of Christian Religious Studies (CRS), the assessment of students in the vital subject should be given needed attention by stakeholders. In my quest of reviewing other studies, I came across studies of Amedahe (2012) and Quagrain (2014), however, in all these studies, it was evident that most Ghanaian teachers had limited skills for constructing assessments, the objective and essay type tests, which are the most frequently used instruments in our schools. Amedahe (2012) stated that “teacher-based tests may be based on a number of factors, notably among them are, training in assessment techniques, class size and a particular school’s policy in assessment standards with implications on validity and reliability of the assessment results” (pp. 112-113).

Gathering evidence from the recent studies (Sasu, 2017; Zakaria, 2019) on Assessment Practices of Senior High School Teachers, the results of all these appear to conclude that most Senior High School Teachers lack the basic skills to assess their students in class. Interestingly enough, it appears that, most of these reviewed studies only concentrated on the core subjects (English, Maths, Science and Social Studies). Studies on assessment practices of teachers in CRS are virtually in extinct and thus necessitate this study to be conducted in order to contribute to literature on the subject and fill the literature gap.

Coupled with the above, the Ghana Education Service (GES), acting under directives from the Ministry of Education (MOE), employs both professional and non-professional personnel to teach. Every professionally trained Senior High School (SHS) teacher (including CRS teachers) is expected to have had at least a semester's course in assessment in education during pre-service training, and as such, is expected to be guided by the basic assessment principles laid down by the syllabus and measurement experts in his/her nature of achievement testing. Non-Professional teachers handling the subjects at the schools are supposed to do the right thing since some have opportunities to undergo in-service training sessions. However, it appears that most CRS teachers undermine the assessment principles in CRS in the SHSs in Bono, Bono East and Ahafo.

Given the extent of prevalence of classroom achievement tests in Ghanaian schools and the variety of uses to which the results from these tests are put, there is the need to research into the achievement assessment practices of CRS teachers. However, from a personal experience as a teacher in the study area, and my interaction with some CRS teachers in the Senior High Schools in the area gave a very worrying situation. This is because, their assessment practices were with a lot of flaws which included double-barrelled questions which were ambiguous, poor construction of test items with poor wording/grammatical errors, poor administration, poor scoring etc. and these raises a lot of questions. Did these teachers receive enough training on assessment practices? or does training in assessment in education contribute to competence in assessment? Could it also be that CRS teachers who received instruction in assessment in education are refusing to put the knowledge they acquired into practice? Based on these



challenges, coupled with the literature gap on assessment practices so far as CRS is concerned, the researcher had the motivation to conduct this study and find out the assessment practices of CRS teachers in Senior High Schools in the Bono, Bono East and Ahafo regions of Ghana.

### **Purpose of the Study**

The purpose of the study was to find out the assessment practices of Christian Religious Studies (CRS) teachers in Senior High Schools in the Bono, Bono East and Ahafo regions of Ghana. Specifically, the study sought to:

1. examine the knowledge of CRS teachers in assessment practices in Senior High Schools in the Bono, Bono East and Ahafo regions of Ghana.
2. find out the assessment strategies CRS teachers use in assessing their students in Senior High Schools in the Bono, Bono East and Ahafo regions of Ghana.
3. explore the extent to which CRS teachers practice assessment for learning (AfL), assessment as learning (AaL), and assessment of learning (AoL) in Senior High Schools in the Bono, Bono East and Ahafo regions of Ghana.
4. investigate how CRS teachers adhere to the principles of test construction, administration and scoring in Senior High Schools in the Bono, Bono East and Ahafo regions of Ghana.
5. investigate the challenges CRS teachers face in the assessment of students in Senior High Schools in the Bono, Bono East and Ahafo regions of Ghana.

## Research Questions

In order to achieve the purpose of the study, the following research questions were posed.

1. What is the knowledge of CRS teachers in assessment in Senior High Schools in the Bono, Bono East and Ahafo regions of Ghana?
2. What assessment strategies do CRS teachers use in assessing their students in Senior High Schools in the Bono, Bono East and Ahafo regions of Ghana?
3. To what extent do CRS teachers practice assessment for learning (AfL), assessment as learning (AaL), and assessment of learning (AoL) in Senior High Schools in the Bono, Bono East and Ahafo regions of Ghana?
4. How do CRS teachers adhere to the principles of test construction, administration and scoring in Senior High Schools in the Bono, Bono East and Ahafo regions of Ghana?
5. What challenges do CRS teachers face in assessment of students in Senior High Schools in the Bono, Bono East and Ahafo regions of Ghana?

## Significance of the Study

The study would be of immense benefits to a lot of stakeholders such as teachers, students, National Council for Curriculum and Assessment (NaCCA), Ministry of Education (MoE), researchers, etc. To teachers, this study will help CRS teachers who received instruction in assessment in education to be up and doing and put their acquired knowledge into practice. Also, the findings of this



study reveal the challenges that CRS teachers face in the assessment of students in Senior High Schools so that such needs can be addressed. Positive suggestions would be offered as a means of addressing these flaws in assessment. To students, when CRS teachers adopt appropriate assessment practices, it would bring to limelight the true reflection of the actual performance of students based on the constructs they are expected to possess.

Again, to National Council for Curriculum and Assessment (NaCCA) and Ministry of Education (MoE), the results of this study would help stakeholders to determine the state of affairs with respect to assessment in the Ghanaian educational system. Also, the results of this study would provide insight for National Council for Curriculum and Assessment (NaCCA) and Ministry of Education (MoE) regarding the appropriate interventions to adopt in order to address the challenges impeding the effective use of assessment practices in Senior High Schools. The findings of this study will also inform educational researchers, policy makers, test experts and examination bodies the value and impact of assessments on students' learning and the need to integrate more assessment practices into the curriculum. Finally, to future researchers, the study would contribute to literature by adding up to the already existing literature on assessment practices in Ghana.

### **Delimitation of the Study**

Geographically, the study was conducted in some selected Senior High Schools in the Bono, Bono East and Ahafo regions of Ghana. The study intended to find out the assessment practices of Christian Religious Studies (CRS) teachers in Senior High Schools in the Bono, Bono East and Ahafo regions. Specifically,

the study sought to examine the knowledge of CRS teachers in assessment practices in Senior High Schools; find out the assessment strategies CRS teachers use in assessing their students in Senior High Schools; explore the extent to which CRS teachers practice assessment for learning, assessment as learning, and assessment of learning in Senior High Schools; investigate how CRS teachers adhere to the principles of test construction, administration and scoring in Senior High Schools; as well as investigate the challenges CRS teachers face in the assessment of students in Senior High Schools in the Bono, Bono East and Ahafo regions. The constructivist learning theory and the classical true score theory in assessment provided the theoretical bases for the study. Again, the questionnaire and the observation guide constituted the main instruments for data collection. The justification for using the questionnaire was that, the respondents (CRS teachers) were literates who could read and write and the number of CRS teachers (96 respondents) who were involved in the study was large and hence, it was appropriate to use the questionnaire rather than interviewing them one after the other.

### **Limitations of the Study**

Every study is bound to be faced with imposed restrictions and this study was not an exception. First and foremost, the study adopted the descriptive survey research design which has its own limitations. For example, Amedahe (2002) maintains that in descriptive research, accurate description of activities, objects, processes and persons is objective. However, the design has its own weakness as there is no way to statistically analyse results because there is no manipulation of variables as in experimental designs (Shuttleworth, 2008). Also, this study

adopted the questionnaire and challenges emanated from this source. Some of the items were not answered. With respect to data collection, meeting respondents was a challenge due to the busy and inconsistent work schedules of the researcher. Again, some of the teachers were reluctant to divulge information to the researcher, due to fear of loss of job. But the researcher assured the respondents of their anonymity and confidentiality.

### **Definition of Key Terms**

For the purpose of this study, certain terms used are explained below:

**Achievement tests:** They are generally teacher-made tests

**Assessment:** A process of gathering evidence of what a student can do, and provide feedback on a student's learning to encourage further development.

**Assessment Practice:** A process by which teachers put assessment into meaningful and practical use

**Christian Religious Studies:** refers to a Bible-based subject at the Senior High Schools in Ghana which helps students to know their creator and find meaning in life.

### **Organisation of the Study**

The study was organised into five chapters. Chapter One consisted of an introduction to the study; the background to the study, statement of the problem, the purpose of the study and objectives of the study. In addition, the research questions, significance of the study, delimitation of the study, limitations of the study, definition of terms as pertains to the study as well as organisation of the study, are presented in the Chapter One of the study. Chapter Two dealt with the

review of related literature to the study from documents published and unpublished, including books, journals, newspapers, the internet and other materials that will be relevant to the study.

Chapter Three dealt with the research methods used in the study. Content of this chapter included the research design, study, population, sampling procedure, data collection instruments, data collection procedure as well as the data processing and analysis plan. Chapter Four focused on the results of the study and discussions. Chapter Five dealt with the summary, conclusions drawn from the study, recommendations and suggestions for further research studies.

### **Chapter Summary**

This chapter presents the introductory part of the entire thesis. Issues relating to assessment, assessment practices, and the importance of assessment have been discussed. The chapter also presents subsections like the statement of the problem, purpose of the study, research questions, significance of the study, delimitations of the study, limitations of the study, definition of key terms as well as organisation of the study.

## CHAPTER TWO

### REVIEW OF RELATED LITERATURE

#### Introduction

This chapter considered the theoretical and conceptual components of research related to the study. Works were reviewed from secondary sources such as the internet, journals and other related research works. Theoretically, the constructivist learning theory and the classical true score theory in assessment constituted the theoretical bases for the study. Also, the conceptual review constituted the philosophical foundations of assessment; concept of Christian Religious Studies; the need for Christian Religious Studies; concept of assessment; the concept of classroom assessment practices; construction of classroom achievement tests; validity of test items; criterion-related validity in assessing students in CRS; assessment techniques used in the schools in assessing students in CRS; assessment as learning; as well as challenges of assessment practices. The chapter concludes with a conceptual framework for the study and a chapter summary.

#### Theoretical Review

#### Constructivist Learning Theory

Constructivist learning theory says that all knowledge is constructed from a base of prior knowledge (Davis, 2014). According to Vigosky (cited in Davis 2014), children are not blank slate and knowledge cannot be imparted without the child making sense of it according to their current conceptions; therefore, children learn best when they are allowed to construct a personal understanding based on experiencing things and reflecting on those experiences. Davis (2014) again states

that learners are the makers of meaning and knowledge and constructivist teaching fosters critical thinking, and creates motivated and independent learners. This theoretical framework holds that learning always builds upon knowledge that a student already has; this prior knowledge is called a schema (Davis, 2014). He then explains that because all learning is filtered through pre-existing schemata, constructivists suggest that learning is more effective when a student is actively engaged in the learning process rather than attempting to receive knowledge passively.

James and Pedder (2006) also state that the focus of constructivists is on how people construct meaning and make sense of the world through organizing structures, concepts and principles in schema (mental models). According to James and Pedder (2006), prior knowledge is regarded as a powerful determinant of a pupil's capacity to learn new material. He then indicates that cognitive constructivists emphasize 'understanding,' thus problem solving is seen as the context for knowledge construction. Davis (2014) again argues that processing strategies, such as deductive reasoning from principles and inductive reasoning from evidence, are important and as a result, differences between experts and novices are marked by the way in which experts organize knowledge structures and their competence in processing strategies.

Torrance and Pryor (2001) point out that the interaction between teacher-pupil goes further than just finding out whether the pupil has reached the target behaviour, as in behaviourism. Teacher-pupil interaction in a test situation goes beyond the communication of test results, the judgments of progress and the provision of additional instruction, to include a role for the teacher in assisting the



pupil to comprehend and engage with new ideas and problems (Torrance & Pryor 2001). To them, the process of assessment itself is seen as having an impact on the pupil, as well as the product or the result.

Harlen (2006) stated that the constructivists' view of learning focuses attention on the processes of learning and the role of learners. Teachers engage students in self-assessment and use their own assessment to try to identify their current understanding and levels of skills.

### **Constructivists' Assessment**

Traditionally, assessment in the classrooms is based on testing thus it is important for the student to produce the correct answers (Davis, 2014). However, he further posits that in constructivist teaching, the process of gaining knowledge is viewed as being just as important as the product. Thus, assessment is based not only on tests, but also on observation of the student, the student's work, and the student's points of view (Davis, 2014). According to Davis (2014), some constructivists' assessment strategies include:

1. Oral discussions. The teacher presents students with a "focus" question and allows an open discussion on the topic.
2. What we know, what we want to know, what we have learned, How we know it (KWL-H) Chart. This technique can be used throughout the course of study for a particular topic, but is also a good assessment technique as it shows the teacher the progress of the student throughout the course of study.
3. Mind Mapping. In this activity, students list and categorize the concepts and ideas relating to a topic.

## Examples of Constructivist Activities

The constructivist classroom, students work primarily in groups and learning and knowledge are interactive and dynamic (Harlen, 2006). Davis (2014) states that with the constructivist classroom, there is a great focus and emphasis on social and communication skills, as well as collaboration and exchange of ideas which is contrary to the traditional classroom in which students work primarily alone, learning is achieved through repetition. He further argues that the subjects are strictly adhered to and are guided by a textbook. According to Duffy, Jonassen and Lowyck (2016), some activities encouraged in constructivist classrooms are:

1. Experimentation: Students individually perform an experiment and then come together as a class to discuss the results.
  2. Research projects: Students research a topic and can present their findings to the class.
  3. Field trips. This allows students to put the concepts and ideas discussed in class in a real-world context. Field trips would often be followed by class discussions.
  4. Films. These provide visual context and thus bring another sense into the learning experience.
  5. Class discussions. This technique is used in all of the methods described above.
- It is one of the most important distinctions of constructivist teaching methods.



## Conceptual Review

### Philosophical Foundations of Assessment

Philosophically and scientifically, the act of intellectual assessment is a quest for truth and reality (Flanagan, Genshaft & Harrison, 2015). According to Messick (cited in Flanagan et al., 2015), the act of intellectual assessment is a means by which the examiner's hypotheses are identified and then tested within the context of the scientific method. In substantiating the assertion above, Flanagan et al. (2015) stated that, in the spirit of a true Cartesian philosophy, if the method of inquiry can be made correct, truth will reveal itself; in this case the true pattern of an individual's underlying skills and abilities (p. 8). They continued that intellectual assessment represents a key factor in both the applied and theoretical sides of psychology's quest for understanding human intellectual functioning.

On the issue of whether test results represent the reality of an individual's underlying abilities, the work and influence of such prominent classical philosophers as Socrates, Plato and Aristotle are most profound. For instance, for Plato, authentic knowledge is only made possible through a systematic, coherent account of reality in which each conclusion is rationally justified and that what is particular, observable and concrete must be understood in terms of higher-level principles that are comprehensive, theoretical and abstract (Ittenbach & Lawhead, cited in Flanagan et al., 2015, p.19). It is worthy to note that at the most Senior High School level, it is this quest for discovering the fundamentals of truth and reality that marked the starting point of all scientific thought.

## Concept of Christian Religious Studies

It was George Albert Coe who gave a concrete definition of Christian religious education. Coe (2009) had a high opinion of the worth of the students. He believed that the students could discover truth only by entering into the process of discovering it through questioning all traditional ideas and rediscover them not as abstract ideas but as answers to concrete questions. He therefore defined Christian religious education as the systematic, critical examination and reconstruction of relations between persons, guided by Jesus' assumption that persons are of infinite worth, and by the hypothesis of the existence of God, the Great valuer of persons.

Since today the definitions of education, religion and Christianity reflect a whole range of educational philosophies that describe the goals and techniques used, Christian religious education could be defined as the systematic instruction of students in the Christian beliefs using the appropriate educational tools and techniques. Since Christian religious education forms part of the curriculum at the lower secondary school level, the student should be helped to appreciate the across-curricular links in all the eight Learning Areas.

For instance, there is a relationship between Christian religious education and Life education learning area. Religious education emphasises the development of values which enable the student to make the right decisions in life; this links to Life education where the student is expected to acquire similar values. Christian religious education as a discipline therefore resists narrow specialisation and this means that a teacher of Christian religious education has to be knowledgeable in many Learning Areas such as Creative Arts, Languages, Life

Education, Science, Social Studies, Technology and Enter-prise. Since Christian religious education is an interdisciplinary subject, it demands more of the teachers who handle it than is required of those involved in the teaching of either religion or education alone

Religion has been, and still is, a part of people's lives and plays a major role in shaping the history of different societies in the world. Ellwood (2016) asserts that religion is social and inseparable from the fact that humans live in societies and in a network of interpersonal relationships. Without society there is no religion. Mbiti (2012) adds that to be human is to be religious in a religious universe. It is this understanding that is behind religious rites, beliefs, practices and values. These rites, beliefs, practices and values have shaped people's behaviour and attitudes and have provided them with identity and meaning in life. They also become the foundations which give people a view of the world.

In order to preserve religious beliefs, rites, practices and values each society uses education as a means or vehicle through which religious knowledge is communicated to people. Matsaung (1999) asserts that many religions have an in-built belief that engages in the process of education for the local community. In this process, they impart knowledge, skills and attitudes required for nurturing their adherents. Tulasiewicz (as cited in Matsaung, 1999) adds that education comes into the picture when religion teaches its followers moral principles and rituals that lead them to observe its doctrines. This culminates in life skills which require the practical application of education and training in religion. Thus, religious education becomes a component of the educational curriculum to perpetuate societies' religious beliefs, practices, and values to their adherents.

Braswell (1994) says that most religions have their sacred scriptures at the centre of their educational programme. These must be preserved, interpreted, taught and handed down to future generations through religious education. Carmody (2004) adds that scriptures are important because they contain commandments, guidelines and rules for members of a particular religion. They are also important because members use them for reference purposes whenever they are discussing religious matters.

However, the way these scriptures are interpreted and passed down to their adherents may differ from one religious group to the other. In this case, Muslims are taught that Allah is the author of the Qur'an; Christians see God as the author of their Scriptures. These interpretations and teachings may give rise to prejudices and different perceptions among religious groups in different parts of the world. The aim of religious education in each religion is to produce an adherent who is obedient, loyal and of good character. This can be demonstrated in African traditional religions where each member is supposed to show loyalty to religious teachings by performing all the necessary rites and following all the taboos which, if contravened, could make one liable to a curse or death (Thorpe, 1997). In Islam, loyalty is shown by submission to Allah and by defending their faith. In Christianity, it is submission to the Lordship of Jesus Christ and obeying God's commandments.

All these show how religions can induce their members to loyalty (Matsaung, 1999). Out of this loyalty, members adhere to religious observances and keep rules made by their religious leaders. Christianity has the words of Jesus Christ and the Prophets; Islam has the words of Allah through Muhammad as

expressed in the Qur'an; Hinduism follows the words of Priests and Sages as expressed in sacred books of Veda, Upanishad and Bhagvad Gita, while African traditional religions follow the experiences and counsel of elderly people which give direction to the adherents (Braswell, 1994). Spiritual and moral education is shared in the content provided. Henze (2004) says that in every religion spirituality is described as that dimension of an individual's being, which is related to the physical and the psychological dimensions that give people's lives meaning and call them to relationship with the Supreme Being and spiritual world. A religious spirituality encourages people to abide by moral codes, authority structures and forms of worship.

Dillon-Mahone (as cited in Carmody, 2004) asserts that the expression of people's spirituality differs from one religious group to another. For example, whereas the traditional Western philosophical approach to moral conscience is more individualistic, in the African tradition moral conscience is rooted in the community, though it is not the community that is the ultimate arbiter of morality; it is the Supreme Being who stands behind the social unit and is a "guardian of continuity and order". Braswell (1994) adds that religious practices, spirituality and morality, are at the heart of religious teaching because they measure the commitment of adherents.

Matsaung (1999) suggests that no society on earth can exist without morals which build relationships between people and communities. Religion educates people concerning what is good or evil, right or wrong, just or unjust. In educating society in this way, religion possesses great educational value. Carmody (2004) adds that each religion provides ethical, moral and spiritual

values to its followers through religious education. It gives meaning and direction to people in how to relate to the Creator and also how to relate to their environment and fellow humans.

The methods used by different religions to educate their adherents are mainly in the form of instruction or indoctrination (Henze, 1994). Instruction in religious beliefs may be given in the form of taught confessions or in form of vows which cannot be questioned (Braswell, 1994). The confessions and vows can make the adherents of religious groups become inward looking and protective of their religion (Henze, 1994). As mentioned earlier, Muslims may defend Islam through Jihads; Christians may become martyrs for Christ. They may do this if their religions are threatened by outside forces or are shown disrespect. Any threat to their religion is seen as a threat to their whole existence (Matsaung, 1999).

### **The Need for Christian Religious Studies**

In Ghana no one wishes to return to the days of pre-independence when Christianity enjoyed a privileged status in formal education in general and Christian religious education in particular. In the present situation, such approach cannot be justified, even when the majority of the population adheres to the Christian faith. The majority of Ghanaian religious educationists therefore endorse an approach that gives due respect to the major religions that a student of Christian religious education encounters every day in his or her community and at school. At the same time, it must be acknowledged that there are diverse views within the Christian traditions on Christian religious education.

Although Christian traditions in Ghana have maintained diverse views on Christian religious education, a consensus has been reached on a number of



reasons as to why it should be taught in Senior High schools. Some of these reasons are:

**i. Morality.** The core values such as equality, respect for human dignity that are contained in the Constitution of Ghana are all a manifestation of the moral principles that have shaped Ghana as a nation. Unless the education system promotes understanding of the core moral values, the values that are contained in the Constitution of Ghana will result in the kind of moral bankruptcy that is associated with the abuse of human dignity. Christian religious education should offer a framework for understanding the context of moral living and develop students' abilities to improve on their moral lives.

**ii. Continuous deepening of values.** The Constitution of Ghana articulates and mentions a number of basic human rights which have to evolve as Ghana develops into a modern and democratic nation. Future generations must be prepared to interpret and apply these basic human rights in new situations in a godly manner. Since Christianity teaches transcendent values, the students of Christian religious education will be helped to meet those challenges.

**iii. Integrated and holistic approach to education.** An integrated and holistic approach to education requires that students be developed emotionally, intellectually, physically, psychologically, culturally and spiritually. Alongside emotional and intellectual development, the nation has also to invest in the spiritual growth and development of her citizens.

**iv. Responsible citizenship.** In their study, the students of religious education will cover Conflict Resolution, Peace and Justice. This Strand will therefore equip the students with the knowledge, values and skills needed to

choose alternatives to self-destructive and violent behaviour when confronted with interpersonal and inter-group conflict. The expectation is that when he/she learns constructive and just ways to address issues which may lead to violence, the incidence and intensity of that conflict will disappear. A good education system is that whose products recognise their responsibilities in the nation. Christian religious education does exactly that.

**v. Transformation.** Christian religious education by nature has both a conserving and transforming impact. It puts the students in touch with the traditional African values of the past generations while giving the individual students a vision of a better way of life that leads to a transformed society.

**vi. Cultivate a culture of tolerance.** While all students in Ghana should know and understand Christianity as one of the key factors that have shaped Ghana's vibrant cultural heritage they should be sensitive to the beliefs of other people so as to cultivate a culture of religious tolerance. Knowing about religions other than one's own discourages the attitude of rigid fundamentalism that often provokes conflict. Christian religious education encourages students to value and respect other people and their religious views.

**vii. Religion as a centre of the students' emotional life.** Christian religious education helps the students to understand their own religion and its values. This is why Christian religious education as the centre of the students' emotional life should be taught in a responsible way by a qualified teacher of Christian religious education.



## **Concept of Assessment**

Assessment, according to Sinclair (1992), is the consideration and judgement of someone. Gearhart and Gearhart (1990) define it as a process involving the systematic collection and interpretation of wider variety of information on which to base instructional intervention and placement decision. In other words, they consider assessment as a process of evaluating the strength and deficits with necessary of classifying or labelling to provide a base for efficiency. Assessment must be done using methods or tests that are racially or culturally discriminatory. Test must be reliable and valid for the purpose for which they are used. Three techniques of assessment are identified by Awotua – Efebo (2012) as observation, question and discussion. Edikpa (2008) sees assessment as the process of measuring the level of performance of an individual in particular areas or field or endeavour. Hence, assessment in this study will serve as a tool for measuring the level of student's performance in Christian Religious Education.

## **The Concept of Classroom Assessment Practices**

One fundamental aspect of the educational process is to obtain information through some devices to evaluate a student's over-all progress towards some predetermined goals or objectives. At any point in teaching and learning process, a conscientious attempt must be made to provide both quantitative and qualitative judgement on the learner's progress. This required information on the student's progress towards the pre-determined goals, especially in Religious education. This can only be obtained through assessment.

Assessment is thus an integral part of the educational process. Its aims include fostering learning, improving, teaching, and providing information about what has been done or achieved. It provides important feedback for student and teachers, and information on the education system or the society at large. It gives opportunities for evaluation of curricula and for students and for the certification of achievement. It is through proper assessment that valid certification of the students can be achieved. Certification through assessment brings about in the students positive effect in practical way for time and effort given to the study of a syllabus. Assessment of students at Senior High school level provides also information on decision that may be taken with regard to pathways at tertiary level. Indispensable role of assessment is also seen in providing feedback for students on the quality of their learning and understanding. These roles made assessment a relevant topic for study.

Classroom achievement tests are generally teacher-made tests (McDaniel, 2014). These tests are constructed by teachers to test the amount of learning done by students or their attainment at the end of a course unit, term or at the end of an academic year (Amedahe, 2012). According to Mehrens and Lehmann (2014), teacher-made tests usually measure attainment in a single subject in a specific class or form or grade. The predominance of teacher-made tests in every educational set up is given credence by the conclusions of studies by Herman and Dorr-Bremme and Stiggins and Bridgeford (as cited in Mehrens & Lehmann, 2014) that, in the face of the ever-increasing use of portfolios and performance tests to assess student progress, teacher-made tests are mostly the major basis for evaluating student progress in school.

The main purpose of teacher-made tests has been delineated by measurement experts (Ebel & Frisbie, 2014; Etsey, 2004; Mehrens & Lehmann, 2014). All these authorities have agreed with the fact that the main purpose of a teacher-made test is to obtain valid, reliable, and useful information concerning students' achievement and thus contribute to the evaluation of educational progress and attainments for the total improvement of classroom teaching and learning.

Teacher-made tests can be classified in a variety of ways. According to Mehrens and Lehmann (2014), one type of classification is based on the type of item format used - essay-type versus objective-type. Another classification is based on the stimulus material used to present the tests to students—verbal versus non-verbal, while other classifications may be based on the purposes of the tests and the use of the test results criterion-referenced versus norm-referenced, achievement versus performance, and formative versus summative. The teacher-made test classification that is most popular with testing experts is the classification based on the type of item format used, which classifies tests into objective-type tests and the essay-type tests (Etsey, 2004; Gronlund, 2012; Nunnally, 2015; Tamakloe, Atta & Amedahe, 2013). The aforementioned testing experts have contended that essay-type tests can either be the extended or the restricted response types while objective-type tests can take the form of the short-answer, true-false, matching or multiple-choice.

Testing in educational institutions is designed to assess either curriculum based (classroom instructional) achievement or a variety of student traits other than curriculum-based achievement. Tests such as career interest, attitudes, and

personality tests assess a variety of students' traits other than curriculum-based achievement (Nitko, 2001). Stainback and Stainback (2013) argued that depending on how it is interpreted, assessing almost any student performance deriving or related to the classroom curriculum, including achievement testing could be an example of curriculum-based assessment (CBA). It must be emphasized that achievement testing is concerned with assessing students based on the domain of content areas they have studied, which are drawn from the school curriculum.

Etsey (2012) stated that achievement test “measures the extent of present knowledge and skills. In achievement testing, test takers are given the opportunity to demonstrate their acquired knowledge and skills in specific learning situations” (p. 41). An extensive review of the literature posits two main types of achievement tests. These are teacher-made tests and external tests (Nitko, 2001). Assessment made by teachers of students’ attainment, knowledge and understanding is called variously as teacher-made tests. Teachers construct these tests to assess the amount of learning done by students (Amedahe, 2012).

External tests or “extra-classroom assessments” (Nitko, 2001, p. 43), on the other hand, include assessment instruments that are developed and/or graded by people who are not associated with the schools providing the students’ learning (Lissitz & Schafer, 2002). Commercial test publishers, departments of education, and local school jurisdictions, usually develop external test (Reeves, 2003). According to the National Association of School Psychologists (NASP, 2002), external tests are usually mandated by core components of standard based reform, which includes (1) content and performance standards set for all students,

(2) development of tools to measure the progress of all students toward the standards, and (3) accountability systems that require continuous improvement of student achievement. External test can take the form of textbook accompaniments, survey tests and mandated tests (Munson & Parton, 2013; Nitko, 2001; Zucker, 2004).

### **Construction of Classroom Achievement Tests**

The basic principles for the construction of teacher-made tests have been developed over the years by a number of educational measurement experts (Amedahe, 2012). While some of the test construction principles are general and apply to any type of test, others are specific and apply solely to the particular type of test under construction. From available literature, the test construction principles that the researcher judged as most comprehensive and practicable in the classroom testing situation were those postulated by Tamakloe, Atta and Amedahe (2013) and Etsey (2004). These are in eight steps. The steps are:

- a) define the purpose of the test,
- b) determine the item format to use,
- c) determine what is to be tested,
- d) write the individual items,
- e) review the items,
- f) prepare the scoring key,
- g) write directions, and
- h) evaluate the test.

According to Gronlund (2013), “the key to effective achievement testing is careful planning” (p. 15). It is during the planning stage that the purpose of the

test must be determined. As already pointed out in the literature, tests can be used for a number of purposes. It is worthy of note, however, that each type of test use typically requires some modification of the test design and thereby determines the type of item format to be used.

The second step of the planning stage is the determination of the item format to use. As stated earlier in the literature, the most common item formats in classroom achievement testing are the essay- and the objective-types. According to Etsey (2004), it is sometimes necessary to use more than one item format in a single test. This is because depending on the purpose of the test, one item format cannot be used exclusively to measure all learning outcomes. According to Mehrens and Lehmann (2014), the choice of an appropriate item format depends on factors such as the purpose of the test, the time available to prepare and score the test, the number of students to be tested, the skills to be tested, the difficulty level desired, the physical facilities available for reproducing the test, the age of the students and the teacher's skill in writing the different types of items.

The final step of the planning stage is the determination of what is to be tested or measured. According to Etsey (2004), the teacher at this point should determine the chapters or units of the course content that the test should cover as well as the knowledge, skills or attitudes to be measured. Instructional objectives need to be defined in terms of student behaviours and linked to what has been stressed in class. A test plan made up of a table of specifications should be made. The table of specifications matches the course content with the instructional objectives (Etsey, 2004). With the total number of items on the test in mind, the specification table helps to avoid overlapping in the construction of the test items,



helps to determine the weighting of learning outcomes with respect to content areas, and makes sure that justice is done to all aspects of the course, thereby helping to ensure the content validity of the test.

After the planning stage, actual writing of the individual test items follows. Tamakloe et al. (2013) and Etsey (2004) have pointed out that whichever test item types that are being constructed must follow the basic principles laid down for them. There are, however, general guidelines that according to Mehrens and Lehmann (2014) and Etsey (2004), apply to all types of tests. These include:

1. The table of specifications must be kept before the teacher and continually referred to as the items are written.
2. The test items must be related to and match the instructional objectives.
3. Well-defined items that are not vague and ambiguous must be formulated. Grammar and spelling errors must be checked. Textbook or stereotyped language must be avoided.
4. Excessive verbiage and complex sentences must be avoided.
5. The test items must be based on information that students should know.
6. More items than are actually needed in the test must be prepared in the initial draft. Mehrens and Lehmann (2014) suggested that the initial number of items should be 25% more while Hanna (cited in Amedahe, 2012) has suggested 10% more items than are actually needed in the test.
7. Items of varying levels of difficulty must be used. This, however, depends on the purpose of the test.
8. The items and the scoring keys must be written as early as possible after the material has been taught.



10. The test items must be written in advance (at least two weeks) of the testing date to permit reviews and editing.

After the items have been written, Tamakloe et al. (2013) call the next stage the item preparation stage. At this stage the test items must be reviewed and edited. Etsey (2004) has suggested that the items must be critically examined at least a week after writing them. He has emphasised that where possible, fellow teachers or colleagues in the same subject area should review the test items. Reviewing and editing the items are for the purpose of removing or rewording poorly constructed items, checking difficulty level of items, checking the length of the test, and the discrimination level of the items (items must discriminate between low- and high-achievers). All test items should be checked for technical errors and irrelevant clues.

After reviews and editing, the test items can now be assembled. In assembling test items, the following points must be considered (Etsey, 2004; Mehrens & Lehmann, 2014; Tamakloe et al., 2013). The items should be arranged in sections by item formats. The sections must progress from easier formats (true-false) to more difficult formats (interpretive exercises and essay). Within each section or format, the items must be arranged in order of increasing difficulty. One way of achieving this is to group items in each format according to the instructional objectives being measured and make sure that they progress from simple to complex.

According to Mehrens and Lehmann (2014), such a grouping has the advantage of helping the teacher to ascertain which learning activities appear to be most readily understood by students, those that are least understood and those

that are in-between. According to Hambleton and Traub (as cited in Mehrens & Lehmann, 2014), ordering items in ascending order of difficulty leads to better performance than either a random or hard-to-easy ordering. Lafitte (cited in Mehrens & Lehmann, 2014) on the other hand, has reported inconclusive data. Although, empirical evidence is also inconclusive about the effectiveness of using statistical item difficulty as a means of ordering items, Sax and Cromack (as cited in Mehrens & Lehmann, 2014), Mehrens and Lehmann (2014) and other testing experts have recommended that for lengthy or timed tests, items should progress from the easy to the difficult-if for no other reason than to instill confidence in the examinee, especially at the beginning. It should be noted however, that, the use of statistical item difficulty or item difficulty indexes by the classroom teacher seems impracticable to a large extent (Kubiszyn & Borich, 2016; Tamakloe et al., 2013). This is because statistical item difficulty data are always gathered after test administration or test try-outs and teacher-made test items are usually not pre-tested. Mehrens and Lehmann (2014) however, recommended that subjective judgement must be relied on to determine difficulty level of items. They have stated that -teachers could only categorise their items as difficult, average or easy.

The items must be spaced and numbered consecutively so that they are not crowded and can easily be read. All stems and options must be together on the same page and if possible, diagrams and questions must be kept together. If a diagram is used for a multiple-choice test, the diagram must be placed above the stem. A definite response pattern to the correct answer must be avoided.

In addition to the above, Gronlund (2012) and Etsey (2004) have recommended that for objective-type tests, the options must be written vertically

below the stem rather than across the page. Further, Etsey (2004) has suggested that test items can also be arranged according to the order in which they were taught in class or the order in which the content appeared in the textbook.

After the test items have been assembled, the next task is the preparation of the scoring key, the marking scheme or the scoring rubric (Etsey, 2004). The marking scheme according to Etsey (2004) and Amedahe and Gyimah (2003), must be prepared when the items are still fresh in the teacher's mind and always before the administration of the test. This way, defective items that do not match their expected responses would be recognised and reviewed. For objective-type tests, correct responses to items should be listed. For essay-type tests, points or marks should be assigned to various expected qualities of responses. Mehrens and Lehmann (2014) have pointed out that if the teacher considers it prudent to have differential weighting for different essay questions, then factors such as the time needed to respond, the complexity of the question, and emphasis placed on that content area during the instructional phase must be considered.

Immediately following the preparation of the marking scheme is the writing of clear and concise directions for the entire test and sections of the test. Here, the time limit for the test must be clearly stated. As argued by Nunnally (2015), and Ebel and Frisbie (2014), a good working rule is to try to set a time limit such that about 90 percent of the students will feel that they have enough time to complete the test. Directions according to Etsey (2004), must include penalties for undesirable writings, number of items to respond to, where and how the answer should be written, credits for orderly presentation of material (where necessary), and mode of identification of examinees.

The last stage of the test construction process is the evaluation of the test on the criteria of clarity, validity, practicality, efficiency and fairness. Clarity refers to how simply and clearly the items are written vis-à-vis the ability level of the testees and the material the test is measuring. It also refers to the kinds of knowledge the test is measuring and how adequately the test items relate to the content and course objectives (Amedahe & Gyimah, 2003; Etsey, 2004; Tamakloe et al., 2013).

Validity bothers on how closely the test represents the material presented in the course unit or chapter and how faithfully the test reflects the difficulty level of the material taught in class. The issue of validity here establishes the content validity evidence of the test (Amedahe & Gyimah, 2003; Etsey, 2004; Tamakloe et al., 2013).

On practicality, consideration is given to whether students will have enough time to complete the test. It also bothers on whether there are enough materials (chairs, tables, answer booklets) to present the test and complete it effectively (Amedahe & Gyimah, 2003; Etsey, 2004; Tamakloe et al., 2013). Efficiency bothers on finding out whether the test is the best way to measure the desired knowledge, skill or attitude. Consideration must also be given to the problems that might arise due to material difficulty or shortage and these expected problems well catered for (Amedahe & Gyimah, 2003; Etsey, 2004; Tamakloe et al., 2013).

On the fairness criterion, consideration is given to whether students have been given advance notice of the test, whether students have been adequately prepared for the test, and whether students understand the testing procedures.

Consideration is also given to how the lives of students are affected as a result of the possible uses to which the test scores are put (Amedahe & Gyimah, 2003; Etsey, 2004; Tamakloe et al., 2013). After this comprehensive evaluation of the test, the test can be submitted to be processed for subsequent administration.

### **Validity of Test Items**

Validity is “the degree to which evidence and theory support the interpretations of test scores entailed by the proposed uses” of a test (AERA, APA, & NCME, 2014, p. 11). Validity according to Nitko (2001) is the “soundness of one’s interpretation and uses of students’ assessment results”. This means that for teachers in the senior High Schools to produce valid results of their students, the student’s results must be supported with many evidences. The results must be devoid of errors and therefore, the soundness of the results. The focus here is not necessarily on scores or items, but rather interpretations made from the instrument. That is, the behavioural interpretations that one can deduct from test scores is of paramount concern. “In order to be valid, the inferences made from scores need to be appropriate, meaningful, and useful” (Gregory, 2014, p. 117).

Validity is an integrated evaluative judgment on the degree to which empirical evidence and theoretical rationales support the adequacy and appropriateness of inferences and actions based on test scores and other modes of assessment (Messick, 2013). The validity of classroom assessment depends on, analysing the intended learning and all its embedded elements, having a good match among the assessment approaches, the intended learning, and the decisions that teachers and learners make about learning, ensuring that the assessment adequately covers the targeted learning outcomes including content, thinking

processes, skills and attitudes (Northern Canadian Protocol for Collaboration in Education, 2006). Validity ensures the central question; does assessment measure what it purports to measure (Wragg, 2001)? There are three different types of validity evidence namely, criterion validity, construct validity and content validity.

A measure itself is neither valid nor invalid; rather, the issue of validity concerns the interpretations and uses of a measure's scores. The interpretations and uses of one's assessment results are also valid only when the values implied by them are appropriate. Essentially, the interpretations and uses one make of one's assessment results are also valid when the consequences of these interpretations and uses are consistent with appropriate values. Here, when the values of the assessment are not in accordance with the consequence of the assessment then this principle is violated.

A second important implication of the definition of validity is that validity is a matter of degree, it is not an "all-or-none" issue. That is, the validity of a test interpretation should be conceived in terms of strong versus weak instead of simply valid or invalid. For test users, validity should be a deciding factor in their choice of psychological tests. Although such choices are based on a number of practical, theoretical, and psychometric factors, a test should be selected only if there is strong enough evidence supporting the intended interpretation and use. A third important facet of validity is that the validity of a test's interpretation is based on evidence and theory. For a test user to be confident in an interpretation and use of test scores, there must be empirical evidence supporting the interpretation and use. In addition, contemporary views on validity emphasize the



importance of grounding the interpretation and use of a test in a defensible psychological theory (Wragg, 2001).

### **Validity Evidence**

The Standards for Educational and Psychological testing (AERA/APA/NCME, 2012) outlined three categories of validity evidence; Content validity, Criterion-related validity and Construct validity.

#### **Content Validity**

Content Validity is often defined as the extent to which the sample of items, tasks, or questions on a test is representative of the domain of content (Moss, 2014). Bollen (2012) defined content validity as a qualitative type of validity where the domain of the concept is made clear and the analyst judges whether the measures fully represent the domain. But, Wiliam (2016) argues that “content validity should be concerned not just with test questions, but also with the answers elicited, and the relationship between them” (p. 4).

Here, Wiliam (2016) is advocating for content-related evidence to extend to include the behaviour elicited actually corresponding to the intentions of the assessment task. He explains with an example, a test claiming to assess students' understanding of forces "would be invalidated if it turned out that the reading requirements of the test were so demanding that students with poor reading ability, but a sound understanding of forces, obtained low marks" (p. 4). On the other hand, if a student possesses an understanding of an issue demanded by a test, but fails to show it for reasons of linguistic difficulty then, the results of that test would be invalid.



William takes this idea from Ackerman and Smith (2013). Ackerman et al., points out that a test would be considered *biased* and invalid, if it makes different impact on the people who take it because of interfering factors which prevent the appropriate response from being demonstrated. Content-related evidence is therefore, not only demonstrated by the degree to which samples of assessment tasks are representative of some domain of content. It is important for the behaviour elicited by the test item not to have been influenced by factors that conceal the true ability or potential of the student. This could be an argument in support of school-based teacher assessment as the conditions of assessment can be arranged to provide ecological validity; that means relating the assessments as closely as possible to the learning experiences of the student. As Crooks (2001) point out, "the circumstances under which student performances are obtained can have major implications for the validity of the interpretations from an assessment" (p. 270). Issues such as low motivation, assessment anxiety, and inappropriate assessment conditions can all be threats to the valid of students' assessment results.

Content validity is a general property of a test. Test author who defines the content domain and writes items to represent the domain succeeds to some degree in attaining their goal. In addition to content validity, is the face validity which answers the question: "Does the assessment look as if it will mean what it is, supposed to mean?" (William, 2016, p. 5). In other words, it answers the question, does the assessment appear to be measuring the sort of tasks required of a particular subject domain? In the teacher's context, the crucial face validity question would be whether the assessments appear to measure the kind of things

expected of teaching. Hoste and Bloomfield (2014) put it in another way: does the assessment procedure appear to test the aims of the course adequately? Such questions are important since they have implications for what can be assessed as well as how it should be assessed.

According to Miller, McIntire and Lovler (2011), there are evidence of validity to be demonstrated based on test content during test development. These evidence includes:

1. Defining the test universe which involve the body of knowledge or behaviour that a test presents. They further asserted that, the step involves reviewing other instruments that measure the same construct, interviewing experts who are familiar with the construct. The purpose is to ensure that you clearly understand and can clearly define the construct you will be measuring. According to Groth-Marnat (2013), evidence of validity bases on test content requires that the test cover all the major aspect of the testing universe in the correct proportion.
2. Developing the test specifications/blue print which involves a documented plan containing details about test's content. The specification delineates, the thinking process the test is to measure with their given proportion, the content area with respect to the subject matter the test is to be measured and the number of questions that will be included to assess each content,
3. Establishing an appropriate test format in which the test will be constructed to elicit the construct of interest,

4. Constructing the test questions. Here test developers are to be careful that each question represents the content area and the objective it is intended to measure (pp. 196-197)

Gipps (2014) points out that performance assessment does tend to have good face validity. As Haertel (2014) explains this is because performance measurement calls for examinees to demonstrate their capabilities directly, by creating some product or engaging in some activity that relates to the ultimate task. Similarly, Delandshere (2013) has indicated that new teacher assessment methods, such as portfolios, reflective essays and practical tasks, appear to have more face validity than written tests. William (2016) notes that for assessment to command a good measure of confidence among users such as teachers in the senior high schools in Ghana, it is important that it possesses high face validity.

### **Criterion-Related Validity in Assessing Students in CRS**

Criterion-related validity is the degree of correspondence between a test measure and one or more external referents (criteria), usually measured by their correlation. Criterion-related evidence answers the question, how well the results of an assessment can be used to infer or predict an individual's standing on one or more outcomes other than the assessment procedure itself. Here, the outcome is called the criterion (Etsey, 2012). There are two types of criterion-related evidence. These are concurrent validity and predictive validity. When the criterion exists at the same time as the measure, we talk about concurrent validity. Concurrent validity refers to the ability of a test to predict an event in the present. In concurrent validity, one is asking whether the test score can be substituted for some less efficient way of gathering criterion data (such as using

a score from a group scholastic aptitude test instead of a more expensive-to-gather individual aptitude test score).

Again, for concurrent validity, data are collected at approximately the same time and the purpose is to substitute the assessment result for the scores of a related variable. For instant a test of swimming ability verses swimming itself to be scored. When the criterion occurs in the future, we talk about predictive validity. Predictive validity evidence refers to extent to which individual's future performance on a criterion can be predicted from their prior performance on an assessment instrument. For predictive validity, data are collected at different times. Scores on the predictor variables are collected prior to the scores on the criterion variables (Etsey, 2012).

The purpose is to predict the future performance of a criterion variable. For instance, using first year GPA to predict the final CGPA of a University student. Another example is to use students GMAT scores to predict their GPA in a graduate programme. We would use correlations to assess the strength of the association between the GMAT score with the criterion (i.e., GPA). Although concurrent and predictive validity differ in the time period when the criterion data are gathered, they are both concerned with prediction in a generalizability sense of the term. In this study, both concurrent and predictive reliability would aid one to tell whether an individual behaviour should be reinforced concurrently or based on one's behaviour, one will be able to perform a particular task in the future.

### **Assessment Standards**

Assessments depend on professional judgment. Testing standards, guidelines, and codes of practices are developed by large committees or testing

publishers to provide guidance on fairness practices for the broader educational communities (Xiaomei, 2014). Standards, guidelines, and codes of practices identify issues to consider in exercising professional judgment and in striving for the fair and equitable assessment of all students (JCTP, 2004).

However, not all of such documents are useful and relevant to all testing purposes. Gipps and Stobart (2009) noted that fairness considerations in large-scale high-stakes testing might be different from fairness considerations in classroom teacher-made testing. Therefore, for the purposes of usefulness and relevance, I considered only standards, guidelines and codes that pertain to large-scale testing, and these include:

1. The Standards for Educational and Psychological Tests (AERA et al., 2014), which is geared primarily for test developers, researchers, and psychometricians.
2. Responsibilities of Users of Standardized Test (JCTP, 2004), which provides a concise statement useful in the ethical practice of testing.
3. ETS Standards for Quality and Fairness (ETS, 2014), which helps to design, develop, and deliver technically sound, fair, accessible, and useful products and services.
4. The Principles (Joint Advisory Committee on Testing Practices, 1993), which was developed primarily in response to inappropriate use of large-scale assessment results in Canada.
5. Code of Professional Responsibilities in Educational Measurement (NCME, 1995), which serves as a statement of professional responsibilities for stakeholders in testing.

Newman and Wehlage (2013) noted that achievement tests tasks need to be organized and structured well so that they are contextualized, integrative, related to the curriculum taught, flexible (requires multiple applications of knowledge and skill), open to self-assessment and peer-assessment, contain specified standards and criteria. They again emphasize that authentic assessment task must consider the following standards:

Organization of information: The task asks students to organize, synthesize, interpret, explain, or evaluate complete information in addressing a concept, problem, or issue. Consideration of alternatives: The task asks students to consider alternative solutions, strategies, perspectives, or points of view in addressing a concept, problem, or issue. Disciplinary content: The task asks students to show understanding and/or use of ideas, theories, or perspectives considered central to an academic or professional discipline. Disciplinary process: The task asks students to use methods of inquiry, research, or communication characteristic of an academic or professional.

### **Assessment Techniques Used in the Schools in Assessing Students in CRS**

A central aspect of CRS syllabus is the concept of profile dimension that should be the basis for instruction and assessment. A 'dimension' is a psychological unit for describing a particular learning behaviour. The profile dimensions describe the underlying behaviours for teaching, learning and assessment. In Christian Religious Studies (Teaching Syllabus for Christian Religious Studies, 2010), the three profile dimensions specified for teaching, learning and testing are:

1. Knowledge and understanding 35%



2. Application of knowledge 40%

3. Attitudes and values 25% (Teaching Syllabus for Christian Religious Studies, 2010)

The CRS syllabus states that “both instruction and assessment be based on the profile dimensions of the subject’ (p. x). It emphasised that, in developing assessment procedures, teachers should try to select specific objectives in such a way to assess a representative sample of the syllabus objective in each assessment (M.O.E 2000). Cole (2013) has said that, evaluation means “to assess the value or worth of something”. In addition to assessing training in terms of merit and worth, evaluation is also concerned with the process and outcome of training. Assessing training process therefore means seeking answers to the question “did we do things right”? The CRS syllabus recommended projects which include practical work and investigative study, class tests, homework and terminal test. Some of these assessment modes may take the form discussed by Nitko (2001) below.

1. Short answer items: - it requires a student to respond to each item with a word, short phrase, number, or symbol. It assesses students’ performance of lower-order thinking skills such as recall and comprehension of information.

2. True-false item: - it consists of a statement or a proposition that a student must judge and mark as either true or false. There are at least six varieties: true-false, yes-no, right-wrong, correction, multiple true-false, and yes-no with explanation. They assess a student’s ability to identify the correctness or appropriateness of a variety of meaningful propositions.



3. Multiple-choice item: - It consists of one or more introductory sentences followed by a list of two or more suggested responses. The student must choose the correct answers from among the responses.

4. Essay items: - They are used to assess higher-order thinking and writing skills of students. Essay items are usually classified into two groups: restricted response items and extended response items.

### **Assessing Students' Outcomes**

Dimensions of Learning are an instructional framework based on the best of what research and theory say about learning. Its premise is that five types of thinking (the five dimensions of learning) are essential to successful learning (Marzano, Pickering & McTighe, 2017). The framework's strong grounding in research and theory, however, makes it a natural partner for authentic assessment. According to Marzano, et al, (2017) Dimensions of Learning and authentic assessment share similar assumptions about the nature of learning and the art and science of teaching. In fact, it is believed that Dimensions of Learning can help educators answer one of the most frequently asked questions concerning authentic assessment: How do you teach to authentic assessment (Marzano, et al, 2017)?

The instructional model can be used to develop a practical approach to students' assessment that answers many of the recent demands for reforms (Marzano, et al, 2017). For instance, they address the need for educators to specify not only the content-specific knowledge and skills students should acquire, but also the knowledge and skills that cut across many content areas and are useful to people in many situations during their lifetime.

## Principles of Constructing Classroom or Teacher-Made Tests in Assessing Students in CRS

Test plays a cardinal role in the assessment processes in educational settings. Good and quality test items are not just constructed by test constructors or experts. They require adequate and extensive planning so that the instructional objectives, the teaching strategy to be employed, the textual material, and the evaluative procedures are all related. Ideally, every test should be reviewed critically by other teachers to minimize the deficiencies identified in it by an expert. Without adequate and careful planning, one can be fairly certain that one's test will not be very good Tinkelman (2010). According to Tinkelman (2010, p. 46), "at the very least, inattention to planning can lead to waste and to delay due to failure to coordinate properly the various phases of test construction."

Based on the above, Mehrens and Lehmann (2009) outlined the following stages and steps as being important to the construction of the classroom or teacher-made test;

1. Specify the course or unit content
2. List the major course or unit objectives
3. Define each objective in terms of students' behaviour
4. Discard unrealistic objectives
5. Prepare a table of specifications
6. Decide on the type of item format to be used
7. Prepare test items that match the instructional objectives

In addition to the basic principles of test construction, Adamolekun (2012) indicated that, in writing of any classroom or teacher-made tests, it is prudent the teacher considers the following;

1. Identify the purpose of the test i.e. what the teacher wants to achieve by the test.
2. Select the test item type that will best measure the learning outcome.
3. Obtain a representative sample of student behaviour which the teacher would want to evaluate (e.g. in the affective domain; does the teacher want to know how a student has received a classroom activity, responding, valuing, organization, characterisation by a value complex?)
4. Construct test items of the proper level of difficulty.
5. Try to eliminate factors that are extraneous.

Classroom achievement tests are generally teacher-made tests (McDaniel, 2014). These tests are constructed by teachers to test the amount of learning done by students or their attainment at the end of a course unit, term or at the end of an academic year (Amedahe, 2012). According to Mehrens and Lehmann (2001), teacher-made tests usually measure attainment in a single subject in a specific class or form or grade. The predominance of teacher-made tests in every educational set up is given credence by the conclusions of studies by Herman, Dorr-Bremme, Stiggins and Bridgeford (as cited in Mehrens & Lehmann, 2001) that, in the face of the ever-increasing use of portfolios and performance tests to assess student progress, teacher-made tests are mostly the major basis for evaluating student progress in school.

The main purpose of teacher-made tests has been delineated by measurement experts (Etsey, 2004; Gronlund, 2012; Mehrens & Lehmann, 2009). All these authorities have agreed with the fact that the main purpose of a teacher-made test is to obtain valid, reliable, and useful information concerning students' achievement and thus contribute to the evaluation of educational progress and attainments for the total improvement of classroom teaching and learning. Teacher-made tests can be classified in a variety of ways. According to Mehrens and Lehmann (2001), one type of classification is based on the type of item format used - essay-type versus objective-type. Another classification is based on the stimulus material used to present the tests to students-verbal versus non-verbal, while other classifications may be based on the purposes of the tests and the use of the test results-criterion-referenced versus norm-referenced, achievement versus performance, and formative versus summative.

### **Administration of Classroom Achievement Tests in Assessing Students in CRS**

The guiding principle in test administration is to provide all examinees with a fair chance to demonstrate their achievement on what is being measured (Gronlund, 2012; Tamakloe et al., 2013). The need to maintain uniform conditions in test administration cannot be over-emphasised. This is especially essential for the test to yield consistent, reliable and valid scores without much influence of chance errors. This is emphasised by the JCSEPT (1999) by stating that, -reasonable effort should be made to assure the integrity of the test scores by eliminating opportunities for test takers to attain scores by fraudulent means (p. 64). This calls for ensuring a congenial psycho-physical atmosphere for test

taking (Tamakloe et al., 2013, p. 214). This was also emphasised by Airasian (cited in Amedahe & Gyimah, 2003) that test administration is concerned with the physical and psychological setting in which students take their tests.

The first and foremost task of the teacher is to prepare his students in advance for the test (Etsey, 2004). Etsey (2004) has emphasised that for students' maximum performance, they should be made aware of when (date and time) the test will be given, the conditions (number of items, place of test, open or closed book) under which the test will be given, the content areas (study questions or list of learning targets) that the test will cover, the emphasis or weighting of content areas, the kinds of items (objective-types or essay-types) on the test, how the test will be scored and graded, and the importance of the results of the test.

The physical conditions that need to be in place to ensure maximum performance on the part of students include adequate work space, quietness in the vicinity, good lighting and ventilation and comfortable temperature (Etsey, 2004; Gronlund, 2012; Lindquist, as cited in Tamakloe et al., 2013). Adequate work space is very essential for test administration because when tables and chairs are closely arranged together, students will not have the independence to work on their own. This will in no doubt lead to students copying from each other. In addition, tables provided for the examination must be conducive to the testing materials being used. For example, in Practical Geography examinations where topographical sheets are used, each student could use two tables or desks in order to get adequate work space (Tamakloe et al., 2013).

Noise and distraction in the testing environment should be kept at the barest minimum if not eliminated completely. Interruptions within and outside the

testing room has the tendency of affecting student's performance (Mehrens & Lehmann, 1991; Tamakloe et al., 2013). Etsey (2004) has pointed out that it is helpful to hang a -Do Not Disturb. "Testing in Progress" sign at the door of the testing room to warn people to keep off. Good lighting is important in effective test administration. This facilitates students' reading of instructions and test items without straining their eyes, thereby working faster (Gronlund, 2012). Good ventilation and comfortable temperature should be assured since their absence could create unrest or uneasiness in testees making concentration difficult (Tamakloe et al., 2013). Other basic physical conditions are that, all testing equipment must be in the room and readily available, and also, all possible emergencies during test administration must be expected and well catered for.

The psychological conditions in test administration, on the other hand, include the position of the invigilator, timing of the test, threatening behaviours of invigilators, and interruption to give instructions and announcements (Etsey, 2004; Bernstein, as cited in Gronlund, 2012; Tamakloe et al., 2013). A study on the examiner as an inhibiting factor, carried out by Bernstein (1953) and reported by Amedahe (2012) found out that, the presence of the examiner tended to inhibit the performance of those students who were nervous. The crux of the matter is that if the mere presence of the examiner or invigilator could affect the performance of students who are nervous, then there is no doubt that the position of the invigilator is very significant to the performance of students on examinations. Etsey (2004) has recommended that the invigilator should stand where all students could be viewed and move among the students once a while to check malpractices. Such movements should not disturb the students. He must be



vigilant. Reading novels or newspapers, making of and listening to telephone calls, dozing off and chatting are not allowed.

The timing of tests is very important. Tests must not be given immediately before or just after a long vacation, holidays or other important events where students are involved either physically or psychologically. Tests must also not be given when students would normally be doing something pleasant such as having lunch, athletics or other sporting activities as this will hamper students' concentration (Amedahe & Gyimah, 2003; Etsey, 2004).

Interruptions during testing, such as giving instruction, must be kept to the barest minimum and should always relate to the test. The time spent and time left to complete the test must be announced at regular intervals to enable students apportion their time to the test items. Where practicable, the time should be written on the chalkboard at 15-minutes intervals until near the end of the test when it could be changed every five minutes. Further, students should start the test promptly and stop on time (Amedahe & Gyimah, 2003; Etsey, 2004; Tamakloe et al., 2013). Teachers should always work at minimising test anxiety in students during testing. They should therefore, avoid, warning students to do their best because the test is important, telling students that they must work faster in order to finish on time, threatening dire consequences of failure in the test, and threatening students with tests if they do not behave (Amedahe & Gyimah, 2003; Etsey, 2004 ; Tamakloe et al., 2013).



## **Guidelines in Administering Achievement Tests in Assessing Students in CRS**

According to Etsey (2005), in administering test items, classroom teachers are to consider that, the following information are essential maximising students' performance.

1. Students must be made aware of the rules and regulations covering the conduct of the test. Penalties for malpractice such as cheating should be clearly spelt out and clearly adhered to.
2. Avoid giving tests immediately before or after a long vacation, holidays or other important events where all students are actively involved physically or psychologically/emotionally.
3. Avoid giving tests when students would normally be doing something pleasant e.g. having lunch etc.
4. The sitting arrangement must allow enough space so that students will not copy each other's work.
5. Adequate ventilation and lighting is expected in the testing room.
6. Provision must be made for extra answer sheets and writing materials.
7. Students should start the test promptly and stop on time.

## **Scoring of Classroom Achievement Tests (Essay tests) in Assessing Students in CRS**

According to Etsey (2004), essay tests can be scored by using the analytic scoring rubrics (also known as the point-score method) or holistic scoring rubrics (also called global-quality scaling or rating method). In analytic scoring, the main elements of the ideal answer are identified and points awarded to each element.

This works best on restricted response essays. In holistic scoring, the model answer serves as a standard. Each response is read for a general impression of its adequacy as compared to the standard. The general impression is then transferred into a numerical score. To check the consistency of the scoring, a first reading is done to sort the responses into several piles (mostly five A, B, C, D and E) according to the different levels of quality. The analytic, point-score or the trait method basically involves the use in scoring of an already prepared list of points or ideas considered essential to a good answer to the question, together with the number of points (marks) allotted to each idea raised or discussed in the answer (Nitko, 2001; Mehrens & Lehmann, 2001).

This is known as a marking scheme, a scoring rubric or a scoring key (Amedahe & Gyimah, 2003; Etsey, 2004; Tamakloe et al., 2013). The Holistic scoring rubric require the marker to make judgement about the overall quality of each student's response. Teachers do not mark each specific content elements that student included in the answer. According to Nitko (2001), "the Holistic scoring is probably more appropriate for extended respond essays involving a student's abilities to synthesize and create and when no definite correct answer can be pre-specified" (p. 195). The Holistic method is less objective than the Analytic method unless you have specified scoring criteria.

The scoring of essay-type tests according to Etsey (2004), is a highly important issue due to the fact that no matter how careful one is in writing the items, without equally taking careful steps to ensure consistency of scoring, the scores will not be reliable. The main reason for utmost care in the scoring of essay-type tests is the subjectivity involved. This is a major difference between

the essay- and objective-type tests (Amedahe & Gyimah, 2003; Etsey, 2004; Gronlund, 2012). According to Mehrens and Lehmann (2001), the decision on a method of scoring for essay-type tests depends to some extent on the type of score interpretation desired (norm-referenced or criterion-referenced) and the amount of diagnostic information needed about individual's responses. It also depends on the time and facilities available for reading the papers and whether the essay is of the restricted- or extended response type.

In order to improve objectivity in the scoring and reliability of the scores of essay-type tests, Mehrens and Lehmann (2001); Amedahe and Gyimah (2003); and Etsey (2004) have suggested the following techniques or principles to be adopted by scorers.

1. Constantly follow the marking scheme when scoring. It is one thing deciding to score all papers uniformly using a scoring guide and actually following the scoring guide constantly to achieve uniformity. Scorers should follow the marking scheme constantly as they score, as this reduces rater drift, which is the likelihood of either not paying attention to the scoring guide or interpreting it differently as time passes.
2. Prepare a form of scoring guide. This could either be an analytic scoring guide or a holistic scoring guide.
3. Comments should be provided and errors corrected on the answer scripts for students to facilitate learning. This is especially important in formative assessments where the comments should be on students' weaknesses and strengths in answering various items.

4. Scorers must also avoid being influenced by the first few papers they score since this can let them become too lenient or harsh in scoring other papers.
5. Score all responses item by item rather than script by script. Here, scorers must take one item at a time and score all the responses to it throughout before going to the next item. This principle is to minimise the carryover effect on the scores and thereby ensure consistency.
6. Score the scripts anonymously. Scripts should be identified by code numbers or any other means instead of the names of students. This principle is to reduce the halo-effect. This happens when a scorer's general impression of a person influences how the paper is scored.
7. Keep previously scored items out of sight when scoring the rest of the items. This principle is to minimise the carryover effects and ensure consistency of the scores.
8. Randomly reshuffle the scripts when beginning to score each set of items. This will minimise the bias introduced as a result of the position of one's script. Research by Hales and Tokar (cited in Mehrens & Lehmann, 2001) has shown that a student's essay grade will be influenced by the position of the paper, especially if the preceding answers were either very good or very poor. Mehrens and Lehmann (2001) have pointed out that randomly reshuffling of scripts is especially significant when teachers are working with high- and low level classes and read the best scripts first or last.
9. Try to score all responses to a particular item without interruption. This is to avoid unreliability of the scores as a result of the grader's standards varying markedly due to excessive interruptions in the course of scoring.

10. Score essay-type tests only when you are physically sound and mentally alert. This is to say that essays must be scored at a congenial time. This is because it is known that consistency in scoring essay tests is a function of the time the paper is scored (Karpicke & Roediger, 2008). Over excitement, depression, and any type of psychological or mental disequilibrium will affect the consistency of the scores of essay-type tests.
11. The mechanics of expressions such as correct grammar usage, flow of expression, quality of handwriting, orderly presentation of material and spelling should be judged separately from subject matter correctness.

#### **Assessment Tasks and Strategies**

Fox and Soller (2001), in their study on authentic assessment strategies and tools employed by teachers in Malawi found out that students in lower classes prefer working collaboratively using projects, computer-based simulation task, storytelling and demonstrations while students in upper classes also demonstrated high level performance in working competitively using writing samples, performance products, and graphic organizers. It was also revealed in the study that education systems that emphasize tests and examinations put some student at a disadvantage (Mbano, 2013; Nampota & Wella, 2014).

Fook and Sidhu (2010) conducted a study in Malaysia to investigate the different types of authentic assessment used in higher education in Malaysia. The study employed a qualitative research method and involved the use of instruments such as interview, document analysis and classroom observations to collect relevant data in the classroom.

The researchers identified that different types of authentic assessment were used. The study revealed that teachers employed the following assessment tools; portfolio (10%), article review (10%) performance product (20%), project (40%) and test (20%). The findings indicated that alternative and authentic assessment have more acceptances from students and should, therefore, be viewed as an alternative to traditional standardized assessment. The study again revealed that assessment practices in some subject areas like Mathematics, Science and Social Studies indicated favourable emphasis being given to formative assessment because 80% of the total marks have been allocated to on-going assessment and 20% was for the test. Moreover, students interviewed also agreed that project and portfolio assignment given were to a great extent real and authentic tasks that they could relate to their future workplace.

Beckmann, Senk and Thompson (2013) studied the assessment and grading practices of 19 high school mathematics teachers in the United States. Their study revealed that the most frequently used assessment tools were tests and quizzes and these determined about 77% of students' grades. Twelve of the nineteen teachers used other forms of assessment such as written projects, experiments, demonstrations or interviews with students. The study also revealed that teachers recorded a very high level of student participation in the written projects, experiments.

### **Self-Assessment**

Self-assessment is a valuable tool for learning and measurement. For example, when students' are engaged in assessing their own work, they try to learn the criteria for high-quality performance, and they experience a willingness



to apply those criteria (Herrera et al., 2007). However, Black and Wiliam (1998) remain concerned about student readiness to self-assess or evaluate peers. They propose that once students acquire a clear picture of the outcome or purpose, “they become more committed and more effective as learners: their own assessment become an object discussion with their teachers and with one another” (p. 7).

However, agreements exist among educators, in which they recognize the value of self and peer-assessment which helps students exert control over their learning (Chappuis & Stiggins, 2004). Initially, some teachers provide rubrics for student so that they can assess their progress. The rubrics incorporate the criteria that provide the opportunity for students to reflection the extent to which they have made progress. Atkin, Black, and Coffey (2001) illustrate a feature of alternative assessment that asks learners to ask three questions as they assess themselves: “where am I trying to go? where am I now; and how do I close the gap” (cited in Chappuis & Stiggins, 2004, pp.43).

### **Peer-Assessment**

Similar to self-assessment, educators consider peer-assessment advantageous, as it furthers opportunities for students to identify targeted learning goals (Herrera et al., 2007; & Chappuis & Stiggins, 2004). In peer-assessment, students often assess other students’ work compared to the criteria developed by the instructor, or both students and the class instructor. An important aspect of peer assessment is that it engages students in dialogue with their classmates, commenting on each other’s’ work rather than a one-way feedback system from instructor to student.

To enrich peer-assessment and use it productively, Black and Wiliam (1998) propose that students be trained to assess their peers purposefully, with the goal of improving learning. As students comment on their peers' work, they use informal language which is understandable to them. In addition, according to Herrera et al. (2007), given the concept of peer-assessment, students compare other students' work to the accepted criteria, which "enables them to discern outstanding elements of both their own and their classmate's performances and products" (pp. 34).

### **Performance-Based Assessments**

Linn and Miller (2005) explain performance-based assessment as "snapshots of students learning in time, which provide a longer exposure with panoramic lens, or real-time video" (pp.7). The idea that knowledge is constructed during the learning process and that a student discovers knowledge for him/herself, rather than receiving knowledge, inspires the notion of performance-based assessment. This approach facilitates both the way students take information and the way they store and apply this information to deal with novel situations (Herrera et al., 2007). This means that, in addition to eliciting constructed responses, performance based assessment incorporates authentic tasks that need higher level of thinking and application of skills. Herrera et al. (2007) interpret performance-based assessment as an opportunity that "tap[s] into the depth and breadth of students' learning" (pp. 28).

### **Co-operative Group Assessment**

The concept of group work or team work varies, depending on the context. In the West, particularly in the United States, an individual's success attracts more

attention than the accomplishments of team work, such as in sports (Herrera et al., 2007). However, recent recognition of collaborative or team work is increasing among educators, realizing that strength and skills of some students are well-defined when they are engaged in group activities such as cooperative learning or assessment. Herrera et al. (2007) observe that “collaborative or group activities often culminate in projects or experiments that may or may not require oral or written reporting” (pp. 38).

Slavin (2006) argues that planning for group assessment requires educators to consider both group efforts and individual liability. Herrera et al. (2007) note the complexity of assessing a cooperative group activity, in particular distinguishing an individual student’s effort and the contribution he or she makes performing a group activity or project. Teachers often document the thought and action of individual students in the process of performing an activity as they learn from cooperative activities and the dialogue that occurs among the students.

### **Portfolios**

Portfolio development is not a new concept in the history of education. According to Wiliam and Thompson (2008), gathering purposeful examples of students’ work that demonstrate their effort, progress, and level of understanding over a period to time, compose the main features of portfolio. However, what has changed through the course of time is the format and content, making portfolios meaningful and purposeful. Wiggins and McTighe (2007) maintain that unlike the traditional forms of assessment that take a “snapshot” of students at one point in time, portfolios “function like a photo album containing a variety of photos taken at different times and different contexts” (pp. 85). Similarly, Herrera et al. (2007)

assert that, the content of portfolios, which incorporate a collection of student work, “some indications that how student rated him/herself on the process and product included and the evidences of how those products met the established criteria” (pp. 29).

Investigators emphasize the importance of considering the intended purposes for developing portfolios. By establishing the targets for a portfolio, an instructor can decide what kind of student work to incorporate, who should manage it, how often to review it, and more (Wiggins & McTighe, 2007). The instructors regularly assign students to include writing samples, reflections, drawings, reading logs, student self-evaluation, and progress notes, visual and audio clips, among the many. According to Herrera et al. (2007), the common forms of portfolios contain best examples of students’ work that illustrate their learning and progress.

In addition, portfolios are considered a good alternative to traditional forms of assessment because they incorporate the perspective of students and teachers about learning and assessment. Another significance of a portfolio is that unlike the traditional synoptic evaluations, such as the final exam or any standardized test that happens once, portfolios provide a longitudinal observation of student progress as they show incremental gains in knowledge, skills, and proficiencies (Herrera et al., 2007). Portfolios are also authentic because they are driven by classroom activities; in most cases, they reflect “in-process adaptations to instructional methods and assessment”, and they assess learning which motivates students (Herrera et al., 2007, pp. 32).

## Assessment for Learning

Assessment for Learning (commonly called formative assessment) has been defined as the process of seeking and interpreting evidence for use by learners and their teachers to decide where learners are in their learning, where they need to go and how best to get there (Assessment Reform Group, 2002). Assessment *for* learning occurs throughout the learning process. It is designed to make each student's understanding visible, so that teachers can decide what they can do to help students progress. Students learn in individual and idiosyncratic ways, yet, at the same time, there are predictable patterns of connections and preconceptions that some students may experience as they move along the continuum from emergent to proficient. In assessment *for* learning, teachers use assessment as an investigative tool to find out as much as they can about what their students know and can do, and what confusions, preconceptions, or gaps they might have (Black & William, 2008).

The wide variety of information that teachers collect about their students' learning processes provides the basis for determining what they need to do next to move student learning forward. It provides the basis for providing descriptive feedback for students and deciding on groupings, instructional strategies, and resources.

## Teachers' Roles in Assessment for Learning

Assessment *for* learning occurs throughout the learning process. According to Linn and Gronlund (2010), assessment for learning is interactive, with teachers:

1. aligning instruction with the targeted outcomes.

2. identifying particular learning needs of students or groups.
3. selecting and adapting materials and resources.
4. creating differentiated teaching strategies and learning opportunities for helping individual students move forward in their learning.
5. providing immediate feedback and direction to students.

Teachers also use assessment *for* learning to enhance students' motivation and commitment to learning. When teachers commit to learning as the focus of assessment, they change the classroom culture to one of student success. They make visible what students believe to be true, and use that information to help students move forward in manageable, efficient, and respectful ways.

### **Assessment as Learning**

Assessment as Learning (AaL) is one of the three forms of assessment recommended for religious education. The others are Assessment for Learning (AfL) and Assessment of Learning (AoL). With Assessment as Learning, the teacher facilitates the self assessment of learners by sharing with them the purpose, goals and objectives of their learning. It is a comprehensive process which seeks to help the metacognition of the students. As compared to AoL and AfL in which the teacher plays an active role, AaL focuses on the learners and how they can identify their strengths and weaknesses through reflection on their work.

In the Manitoba Education, Citizenship and Youth (2006) publication, *Rethinking Classroom Assessment with purpose in Mind*, the meaning and purpose of assessment are identified. The purpose of AaL, as indicated in the document, is to ensure that, students become critical connectors between learning



and assessment. It is to emphasise that learning is not just about the transfer of knowledge from the knowledgeable (teacher) to the ignorant (learner). As students become active in the teaching and learning process, they are assisted to be critical assessors of what they learn and relate what they learn to prior knowledge.

On Assessment as Learning, Afflerbach (2002) submitted (using English reading as an example) that:

“Too many students have reading assessment done to them or for them. Only reading assessment that is done with students and eventually by students can foster true independence and success in reading. Accomplished readers are flexible in their routines of metacognition and comprehension monitoring, as demanded by the particular act of reading. The ability of self- assess is multifaceted and good readers apply their self assessment strategies on demand” (pp. 99).

The position of Afflerbach (2002) may apply to all subjects in the Senior High Schools, including Christian Religious Studies. The position emphasise the need to share learning targets with learners so that they can self assess their progress in the learning outcomes. This enhances independent learning and promotes self confidence among learners. Assessment involving learners may discourage rote learning that has characterised traditional classroom assessment practices.

Traditional assessment practices aimed at grading and rewarding successful students and punishing others. Students were expected to meet basic standards in subject areas such as reading, writing and arithmetic (Reeves, 2004; Stiggins, 2006). Assessment must however help all students and provide them

with the opportunity for productive responses. Assessment as Learning hinges on the idea that students learn best when they know what is expected and required for success and understand how to close the gap between their own work and the standard for success (Stinggins, 2006).

A scoring guide could be used to provide students with the kind of knowledge. This leads to students becoming self regulated learners (Saddler & Andrade, 2004). Such scoring guides can serve as teaching tools of evaluation and accountability (Andrade, 2000). Andrade and Yink (2005) after studying the use of rubrics to guide undergraduate students' learning, concluded that using scoring guides support the process of formative assessment. Andrede (2005) however adds that the value of employing scoring guide is depended on the quality of employing scoring guide. Black and William (1998) reviewed studies that incorporated some kind of formative assessment in their strategies. They concluded that, formative assessment produce significant and often substantial learning gains. Furthermore, since successful students already make good use of assessment, improved assessment that includes frequent feedback aids low achieving students, thereby closing the range of achievement outcomes while raising the achievement of all students involved.

### **Teachers' Role in Assessment as Learning (AaL)**

Like any other form of assessment, assessment as Learning places an amount of responsibility on the teacher. Teachers are responsible for providing instruction and assessment that helps students to reflect, monitor and think about their own learning. Students have to be supported to appreciate what high quality academic work is (Saddler, 2006). This support can best be provided by teachers

who need to help learners to “develop a store of tactics which can be drawn upon to modify their own work (ibid).

Stinggins (2006) argued that responsible teachers must always use the teaching and learning process to help learners to understand that failure is acceptable but must be followed by improvement. It defines success as “gradual improvement in academic work. Learners must self assess work and improve upon it if there are gaps. Teachers must use students’ involvement in assessment, record-keeping and communication process to improve performance. Self assessment, monitoring and evaluation are skills that must be nurtured in students. For the learners to be metacognitively aware of these skills, teachers must teach and model, while students practice what they are taught.

Eight roles of the teacher have been identified by Manitoba Education, Citizenship and Youth (2006) to promote assessment as Learning. Teachers must:

1. Model and teach the skills of self assessment.
2. Guide students in setting goals and monitoring their progress toward them.
3. Provide exemplars and models of good practice and quality work that reflect curriculum outcomes.
4. Work with students to develop clear criteria of good practice.
5. Guide students in developing internal feedback or self monitoring mechanisms to validate and question their own thinking, and become comfortable with the ambiguity and uncertainty that is inevitable in learning anything new.
6. Provide regular and challenging opportunities to practice, so that students can become confident, competent self assessors.

7. Monitor students' metacognitive processes as well as their learning and provide descriptive feedback.
8. Create an environment where it is safe for students to take chances and where support is readily available.

### **Assessment of Learning**

Assessment of learning (commonly called summative assessment) refers to strategies designed to confirm what students know, demonstrate whether or not they have met curriculum outcomes or the goals of their individualized programs, or to certify proficiency and make decisions about students' future programs or placements (Black & William, 2008). It is designed to provide evidence of achievement to parents, other educators, the students themselves, and sometimes to outside groups (e.g., employers, other educational institutions). The purpose of assessment that typically comes at the end of a course or unit of instruction is to determine the extent to which the instructional goals have been achieved and for grading or certification of student achievement (Black & William, 2008).

Assessment *of* learning is the assessment that becomes public and results in statements or symbols about how well students are learning. It often contributes to pivotal decisions that will affect students' futures. It is important, then, that the underlying logic and measurement of assessment *of* learning be credible and defensible.

### **Teachers' Roles in Assessment of Learning**

Because the consequences of assessment of learning are often far-reaching and affect students seriously, teachers have the responsibility of reporting student learning accurately and fairly, based on evidence obtained from a variety of

contexts and applications. According to Assessment Reform Group (2002), effective assessment *of learning* requires that teachers provide:

1. a rationale for undertaking a particular assessment *of learning* at a particular point in time.
2. clear descriptions of the intended learning.
3. processes that make it possible for students to demonstrate their competence and skill.
4. a range of alternative mechanisms for assessing the same outcomes.
5. public and defensible reference points for making judgements.
6. transparent approaches to interpretation.
7. descriptions of the assessment process.
8. strategies for recourse in the event of disagreement about the decisions.

With the help of their teachers, students can look forward to assessment *of learning* tasks as occasions to show their competence, as well as the depth and breadth of their learning.

### **Challenges of Assessment Practice**

Eshun (2014) conducted a study to investigate the influence of achievement test on classroom practices of teachers and the challenges they encounter in the Social Studies classroom in Ghana. The study used a descriptive case study design and it involved 10 senior high schools and twenty teachers randomly sampled from fifty-seven (57) senior high schools in the Central Region of Ghana. Semi-structured interview guide was the main instrument used for data collection. The research found out that the forms of achievement test some

teachers used in their classrooms were limited due to examination policies, time, resources and assessment methods employed by their schools.

Furthermore, they revealed that most teachers they observed were not using assessment techniques that involved students in the teaching and learning process. Again, they indicated that some teachers revealed that using the achievement test would delay them in completing topics in their syllabuses given to them. Beckmann, Senk and Thompson (2013) in their study conducted in USA identified three reasons why teachers do not use multiple assessment methods. First, some teachers had limited knowledge of different forms of assessment. Second, teachers felt they had no time to create/develop authentic.

Effective assessment is unique, not only with its assessment objectives, but with the number of pupils (and therefore classes) that a teacher of Effective assessment will have. An Effective assessment teacher needs to assess these pupils on a scale that is extremely burdensome, if not impossible, as a task to complete adequately (Rogers, 2016; Elliot et al, 2016).

Some of the challenges for effective assessment stem from the system from which they arise, either at a national, policy, level or within a school. Many bemoan the work of Ofsted (2016) and lay the blame for workload issues at their door. However, Ofsted do not require a particular style or frequency of marking to be seen in pupil books (Ofsted, 2016), nor do they expect to see a prescribed style of teaching (Ofsted, 2016). Despite this, implicitly or explicitly, Government pressure (Davis & Winch, 2015), has led to a culture in which teachers face excessive workloads due to schools requiring teachers to have detailed marking and records of pupils' performance (Barmby, 2006; Butt & Lance, 2005).



The Department of Education tried to respond to these concerns, publishing research on unnecessary and unproductive workload (DfE, 2015). They discovered that 56% of respondents listed ‘recording, inputting, monitoring and analysing data’ and 53% gave ‘Excessive/depth of marking – detail and frequency’ as the tasks which are most unproductive.

In 2016, the Education Endowment Foundation (EEF) published a report in response to the workload crisis. They found that there was little research into the methods of marking, the research which there was drew upon small-scale studies and research by practitioner-researchers. Whilst providing a good basis for further research, it did not provide conclusive evidence or methods which could be employed whole scale in the English education system (EEF, 2016).

The EEF searched for the evidence behind certain marking and assessment claims, they concluded that there is limited, or no, evidence to suggest that any of the regularly held beliefs about; ‘grading, corrections, thoroughness, pupil responses, creating a dialogue, targets and frequency and speed’ (EEF, 2016, pp.8) are effective. This is not to say that these methods are not effective, just that there is insufficient evidence to say that they are. This still leaves teachers in a situation where they are unclear as how best to assess pupils.

John and Wheeler (2008) state that, assessment should contribute towards the maintenance of records of a student's progress over a period of time. Measuring achievement over time enables teachers to monitor improvement and provide important intervention if and when children require it so they are kept on target. The tracking of pupil progress is important, but it is not always practical. RE teachers, in particular, have large numbers of classes and pupils, so to develop

a system which allows for the measurement of achievement over a period of time  
is not an easy or efficient task.



### Conceptual Framework

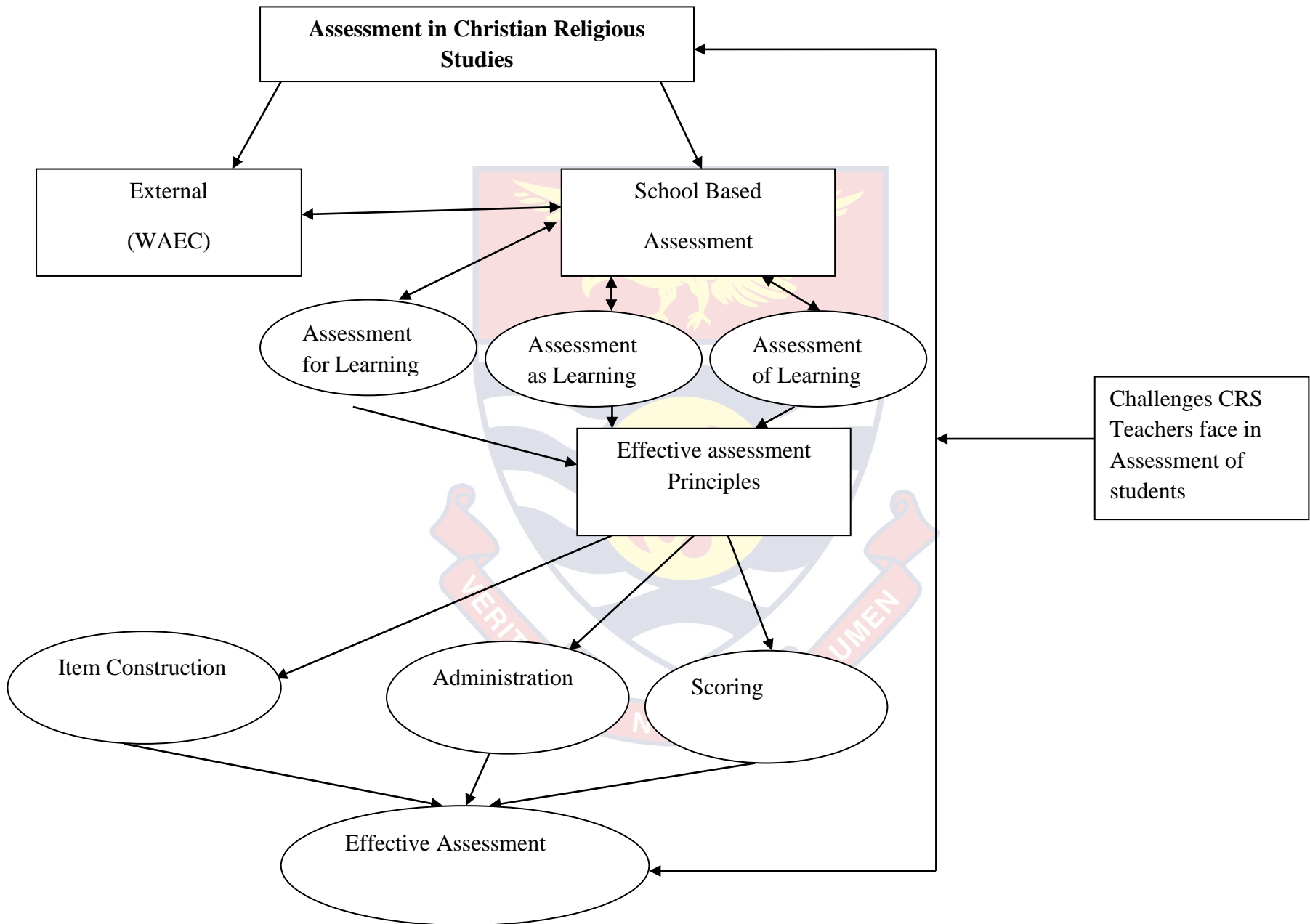


Fig. 1

The framework portrays and depicts the key variables in the study. Figure 1 depicts the nature of assessment in CRS adopted which include the standardized examination (externally conducted by WAEC) and the school based assessment adopted by teachers in various schools. There is an interrelationship between the school based assessment and the standardized examination (externally conducted by WAEC) because, the various schools submit 30% of the continuous assessment scores of each student which constitutes part of the total scores for the standardized examination (externally conducted by WAEC). The nature of assessments (i.e. the school based assessment and that of WAEC) may be in line with the three forms of assessment (Assessment for Learning, Assessment as learning, or Assessment of Learning). These three forms of assessment of assessment in CRS adopted must satisfy effective assessment principles involved in item construction, administration and scoring in order for an effective assessment to be conducted that gives an actual picture of the true representation of how much a student possesses the constructs expected of him/her. That notwithstanding, every facet of the assessment process (nature of assessment, form of assessment and effective assessment principles) is fraught with challenges that may impede the entire process of effective assessment.

### **Chapter Summary**

This chapter reviewed literature on assessment practices of CRS teachers. The chapter considered the theoretical and conceptual reviews of research related to the study. It also consists of a conceptual framework. The chapter concludes with a chapter summary.

## CHAPTER THREE

### RESEARCH METHODS

#### Introduction

This chapter describes the procedure through which data would be collected for the study. It comprises the research approach, research design, population, sample and sampling procedure, data collection instruments, validity and reliability of instruments, data collection procedure and data processing and analysis as well as ethical considerations.

#### Research Approach

Perhaps the positivist and interpretive perspectives are the two major paradigms driving social enquiry today (Creswell, 2007). Each of these paradigms has a philosophical and theoretical ancestry and foundation, and includes ontological assumptions about the nature of reality, as well as the epistemological assumptions about how that reality can be known (Blaikie, 2000).

Positivism is the study of social phenomenon in accordance with the principles underlying the natural sciences. Neuman (2004) indicated that because the positivists conduct research by assuming that the study of social world should be based on the same lines as in natural sciences, they are often inclined to view social reality as being made up of objective facts which can be measured precisely using statistical tools (Neuman, 2004). The positivist approach has been described by Giddens (2009) as an approach to research activity which is based on the principle of direct observation, and can therefore, be explained by theoretical statements such as establishing causal, law-like generalizations.

According to Comte (1970), by employing the positivist approach, the social researcher gains an understanding of the social world that assists him or her in predicting the behaviour of social phenomenon, and by so doing, the researcher is able to shape social life in a more progressive manner. Comte, who is believed to have coined the term positivist, sought to create an approach to the study of society that explained the laws surrounding social world in just the same way as natural science explained phenomenon in the physical world. Creswell (2007) adopted this position as a way of rescuing the social (moral) sciences from what he regarded as an unsatisfactory state. He believed that all scientific explanations have fundamentally the same logical structure.

Positivists may use inductive and deductive inquiry, but the idea is to establish a more generalized law or principle that enables the researcher to use logical deduction in specifying how that idea operates in some concrete, practical situations. The positivist empirically tests outcomes predicted by the principle in concrete settings using very precise measures (Giddens, 2009). In this way, the established general law or principle tends to cover many specific situations.

According to Neuman (2004), the vast majority of positivist studies are quantitative, and positivists generally see experimentation as the ideal approach of social science research. The positivist also uses some quantitative techniques including surveys or existing statistics, but tend to see them as approximations of the experiment for situations where an experiment is impossible (Neuman, 2004). I share in the view of the positivist therefore, my study is nested in the Positivists view of research approach.



## Research Design

The research design that was chosen for the study was the cross-sectional descriptive survey. According to Amedahe (2004), “cross-sectional descriptive survey specifies the nature of a given phenomenon” (p. 50). Gay (as cited in Amedahe, 2004), explains that cross-sectional descriptive survey involves the collection of data in order to answer research questions concerning the current status of the subjects of the study. Dawson (2002) posits that a research design is the conceptual structure within which research would be conducted. In the context of this study, the cross-sectional descriptive survey design was adopted because it offers the researcher the opportunity to assess, observe and describe the assessment practices of CRS teachers in Senior High Schools in the Bono, Bono East and Ahafo regions at a specific point in time.

According to Murphy (2009), the major advantage that goes with this type of design is that, the data collection techniques present several advantages as they provide a multifaceted approach for data collection. For example, a survey can provide statistics about an event while also illustrating how people experience that event. Again, Murphy stated that the descriptive research design also offers a unique means of data collection thus it provides more accurate picture of events and seeks to explain peoples’ perceptions and behaviour on the basis of data gathered at a point in time (Murphy, 2009).

However, the design has some weaknesses. Confidentiality is the primary weakness of descriptive research (Murphy, 2009). According to Murphy (2009), respondents are often not truthful as they feel the need to tell the researcher what

they think the researcher wants to hear and also participants may refuse to provide responses they view to be too personal. Another weakness of this design, according to Murphy (2009) is that it presents the possibility for error and subjectivity. However, the design will be used despite its weaknesses because it seeks to explain people's perceptions and behaviour on the basis of data gathered at a point in time and can provide statistics about an event while also illustrating how people experience that event thus providing a multifaceted approach for data collection.

### **Population**

A population in a research refers to the larger group of people with common observable features to which one hopes to apply the research result (Fraenkel & Wallen, 2003). The population for the study comprised all CRS teachers in the Senior High Schools in the Bono, Bono East and Ahafo Regions. There was a target population of 124 CRS teachers in the Bono, Bono East and Ahafo regions of Ghana (Education Information Management System, 2019). Out of this, there was an accessible population of 96 CRS teachers in the 96 Senior High Schools in the Bono, Bono East and Ahafo regions. CRS teachers were used because they could provide information in relation to the knowledge of CRS teachers in assessment practices; the assessment strategies CRS teachers use in assessing their students; the extent to which CRS teachers practice assessment as learning; how CRS teachers adhere to the principles of test construction, administration and scoring in Senior High Schools; as well as the challenges CRS teachers face in the assessment of students in Senior High Schools in the Bono, Bono East and Ahafo regions.

## Sample and Sampling Procedures

A sample is a sub-group of the target population that the researcher plans to study for the purpose of making a generalization about a target population (Creswell, 2008). All 96 CRS teachers in the 96 Senior High Schools in the Bono, Bono East and Ahafo regions were involved in the study. This constituted the sample size of CRS teachers for the study.

The census study was employed to involve all the CRS teachers in the Bono, Bono East and Ahafo regions of Ghana due to their limited number. Census surveys are the types of surveys involving the process of collecting information about each member of a given population. The use of census surveys is usually employed for statistical research and population count. One of the advantages of census surveys over the other types of surveys is accuracy. Since the respondents involved in census surveys are the members of a given population, the survey data to be collected will be more reliable and accurate than the data gathered from sampling surveys. However, among the other types of surveys, census surveys are considered to be the most time consuming and physically demanding. Unlike sampling surveys, census surveys require statistical data from each member of the population and not just a portion of it. Researchers need to gather information from every single member of the given population in order to come up with accurate results so encountering reluctant respondents will be very difficult. Since the researchers need to travel often to gather data, census surveys tend to be more costly too.

## Data Collection Instruments

Instrument for data collection is a tool that is used by researcher for collection of data in social science research (Bhandarkar & Wilkinson, 2010). The questionnaire was the main instrument for data collection for this study. A self-designed questionnaire (for CRS teachers) was employed in this study. Reasons for the choice of the instrument are that, questionnaire affords greater assurance of confidentiality and anonymity to respondents (Sarantakos, 2005). Again, questionnaire is described as structured instrument for gathering data from a potentially large number of respondents, within a shorter possible time when especially the population is easily accessible to make it uneconomical for reasons of time or funds to interview every subject in the study (Osuala, 2005; Deng, 2010). The questionnaire is also appropriate when the respondents are literates and since the CRS teachers could read and write, the study adopted the questionnaire.

In reference from the above this study employed structured questionnaire to gather data from the respondents. To ensure quick and easy response to the items, the questionnaire was the closed ended type and was drafted on a five-point Likert scale (1=Strongly Disagree (SD); 2= Disagree (D); 3= Uncertain (U); 4= Agree (A) and 5= Strongly Agree (SA). This made it possible for analysis of data using both descriptive and inferential statistics.

The questionnaire consisted of 96 items in six sections (A, B, C, D, E and F). The A part entailed five (5) items geared towards obtaining information about the demographic characteristics of the respondents. Section B consisted of ten (10) items which aimed at obtaining information on the knowledge level of CRS teachers in

assessment practices. Section C had fourteen (14) items which looked at the assessment strategies CRS teachers' use in assessing their students. Again, section D was made up of twenty (20) items which looked at the extent to which CRS teachers practice assessment as learning. Section E consisted of 38 items (construction principle- 16 items; administration principle- 11; and scoring principle- 11) which considered how CRS teachers adhere to the principles of test construction, administration and scoring. Finally, Section F consisted of 9 items which considered the challenges CRS teachers face in the assessment of their students.

### **Validity and Reliability of the Instrument**

Validity ensures that inferences based on collected data are accurate and meaningful. It is necessary to have experts examine the instrument items and judge their representativeness (McMillan & Schumacher, 2001). According to Dambudzo (2009), the idea of validity hinges on the extent to which research data and the methods of obtaining the data are deemed accurate, honest and on target. Practically, the validity of an instrument is assessed in relation to the extent to which evidence can be generated in support of the claim that the instrument measures the attributes targeted in the proposed research. To ensure the validity of the construct, the self-developed questionnaire was evaluated by my supervisors in the Department of Art Education. Based on this, some changes were made on the questionnaire prior to the pre-testing. Thereafter, a pilot test of the instrument was carried out in three Senior High Schools in the Ashanti Region to check the reliability of the instrument. Apart from proximity reasons, this area was chosen for the pilot testing because the curriculum and CRS syllabus implemented in Senior High Schools in the Ashanti

Region are similar to that of Senior High Schools in the Bono, Bono East and Ahafo regions and hence CRS teachers may adopt similar assessment practices and encounter similar challenges of assessment practices in the Ashanti Region as it pertains in the study area. The data gathered was analysed and the Cronbach's alpha established for each of the items that fall under the five research questions formulated to guide the study.

The questionnaire for the CRS teachers consisted of six (6) sections i.e. sections A, B, C, D, E and F covering various relevant areas such as demographic characteristics; knowledge level of CRS teachers in assessment practices; assessment strategies CRS teachers use in assessing their students; extent to which CRS teachers practice assessment for learning, assessment as learning, and assessment of learning; how CRS teachers adhere to the principles of test construction, administration and scoring; as well as challenges of assessment practices. The homogeneity values (Cronbach's alpha) of the scales vary between .70 and .98. The Cronbach's alpha of .72 was obtained for the CRS teachers' questionnaire. The 6 sections cover the following areas: demographic information (items no. 1, 2, 3, 4; 5; Cronbach's alpha 0.71). This area covers background information such as gender, age of respondents, number of years in teaching service, highest academic qualification and highest professional teaching qualification. Section B (items no. 6, 7, 8, 9, 10, 11; 12; 13; 14; 15 Cronbach's alpha 0.98) included the knowledge level of CRS teachers in assessment practices. Section C (Items no. 16, 17, 18; 19; 20; 21; 22; 23; 24; 25; 26; 27; 28; 29; Cronbach's alpha 0.76) consisted the assessment strategies CRS teachers use in assessing their students. Section D (items no. 30, 31, 32, 33, 34, 35, 36, 37, 38,



39; 40; 41; 42; 43; 44; 45; 46; 47; 48; 49; Cronbach`s alpha 0.78): This section covered the extent to which CRS teachers practice assessment for learning, assessment as learning, and assessment of learning. Section E (items no. 50, 51, 52, 53, 54, 55, 56, 57; 58; 59; 60; 61; 62; 63; 64; 65; 66; 67; 68; 69; 70; 71; 72; 73; 74; 75; 76; 77; 78; 79; 80; 81; 82; 83; 84; 85; 86; 87; Cronbach`s alpha 0.81) included how CRS teachers adhere to the principles of test construction, administration and scoring. Finally, Section F (items no. 87; 88; 89; 90; 91; 92; 93; 94; 95; 96; Cronbach`s alpha 0.91) included the challenges of assessment practices.

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 hypotheses 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”. With this, the instrument 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 was capable of collecting quality and useful data for the study.

### **Data Collection Procedure**

A letter of introduction was collected from the Department of Art Education in the University of Cape Coast, to seek for permission from the Head teachers in the SHS in the study area. The researcher also established the necessary contacts with the head teachers of the schools to seek permission to administer the questionnaire.

A discussion was held with teachers and head teachers of the various Senior High Schools selected for the study to agree on a convenient time to administer the instrument. A brief self-introduction was made by the researcher to explain the purpose of the study to the respondents before the questionnaires were distributed to them. The CRS teachers were supervised by the researcher to complete the questionnaire. To ensure high response rate, the questionnaire was self-administered and retrieved on the same day. The respondents were given enough time to complete the questionnaire. The data collection exercise took three (3) weeks to complete due to the tight schedules of the respondents.

### **Data Processing and Analysis**

This study sought to assess the assessment practices of CRS teachers in Senior High Schools in the Bono, Bono East and Ahafo regions of Ghana. To answer the research questions formulated to guide the study, the type of statistics that was employed in the analysis of the data was descriptive statistics. Specifically, the data from the questionnaire was used to analyse research questions 1-5 through the computation of frequencies, percentages, as well as mean of means distributions. This was done with the use of computer software called Statistical Product for Service Solutions (SPSS) version 25.

### **Ethical Considerations**

McNabb (2004) points out that there are four stages in research ethics, namely: planning, data gathering, processing and interpretation of data as well as the dissemination of results. At the data collection stage, in conducting administering questionnaires, due honesty was exercised. The teachers were given the opportunity

to fill their questionnaires privately, in order to ensure confidentiality. In dissemination of results, measures were taken to ensure privacy, anonymity and confidentiality of all participants. This means that the names of the participants were not used or revealed throughout the research project (Maree, 2007). The discussion of the findings was based on the trends that emerged from the data and not from any preconceived ideas.

### **Chapter Summary**

This chapter outlined the general research design for the study and the methods used to collect the data. The descriptive research design specifically, the cross-sectional descriptive survey was adopted for the study. The data was gathered from all CRS teachers in the Senior High Schools in the Bono, Bono East and Ahafo Regions of Ghana. The census survey method was used to involve all the teachers in the study. Again, the study made use of questionnaire to collect data regarding assessment practices of Christian Religious Studies teachers in Senior High Schools. The chapter dealt with other areas validity and reliability of instrument, data collection instruments, data collection procedure, data processing and analysis, as well as ethical considerations.

## CHAPTER FOUR

### RESULTS AND DISCUSSION

#### Introduction

The purpose of the study was to find out the assessment practices of Christian Religious Studies (C.R.S) teachers in Senior High Schools in the Bono, Bono East and Ahafo regions of Ghana. Questionnaires (for teachers) were employed to gather the requisite data for the study. The data from the teachers were analyzed through the computation of frequencies, percentages, and mean of means distributions. The descriptive statistics was employed in the data analysis. This chapter presents the interpretations discussions and inferences that were made from the output.

#### Analysis of Data from Teachers

Table 1 shows the characteristics of CRS teachers from the Senior High Schools in the Bono, Bono East and Ahafo regions of Ghana, who served as respondents for the study.

**Table 1: Characteristics of Teachers**

| Variable                  | Subscale      | No. | %    |
|---------------------------|---------------|-----|------|
| Gender                    | Male          | 69  | 71.9 |
|                           | Female        | 27  | 28.1 |
| Age                       | 20-29 years   | 6   | 6.2  |
|                           | 30-39 years   | 45  | 46.9 |
|                           | 40-49 years   | 21  | 21.9 |
|                           | 50-59 years   | 24  | 25.0 |
| Years in Teaching Service | Under 5 years | 9   | 9.4  |
|                           | 6-10 years    | 54  | 56.2 |

Table 1 Cont'd.

|                                     |                       |    |      |
|-------------------------------------|-----------------------|----|------|
|                                     | Above 10 years        | 33 | 34.4 |
| Academic Qualification              | Bachelors Degree      | 75 | 78.1 |
|                                     | Masters of Arts       | 15 | 15.6 |
|                                     | Master of Philosophy  | 6  | 6.2  |
| Major Subject(s) Areas              | Religious Studies     | 52 | 54.2 |
|                                     | Other subject areas   | 44 | 45.8 |
| Professional Teaching Qualification | Teacher's Cert "A"    | 3  | 3.1  |
|                                     | PGDE                  | 33 | 34.4 |
|                                     | Bachelor of Education | 39 | 40.6 |
|                                     | Masters in Education  | 21 | 21.9 |

**Source: Field Data, 2020**

From Table 1, all the 96 CRS teachers were involved in the study. This represents a return rate of 100.0%. Concerning the gender of the teachers involved in the study, 77.9% were males, while 28.1% were females. So a greater number of respondents in the study area were males. Also, the majority of the respondents were between 30-39 years. This is because, 6.2% were between 20-29 years, 46.9% were between 30-39 years, 21.9% were between 40-49 years, and 25.0% were between 50-59 years. In line with years in the teaching service, 9.4% had worked under 5 years, 56.2% had 6-10 years of working experience, and 34.4% had more than 10 years of working experience. Therefore, the majority of the teachers had taught between 6-10 years. This means that the majority of the teachers had taught CRS for quite a good number of years and may have a great deal of experience when it comes to assessment practices of Christian Religious Studies in Senior High Schools. Regarding academic qualification, 78.1% had Bachelors Degree, 15.6% Master of

Arts, and 6.2% had Master of Philosophy. Thus the majority of the respondents had Bachelors Degree as their highest academic qualification. In terms of the major subject(s) areas offered, 54.2% majored in Religious Studies whereas 45.8% majored in other subject areas which included: political science, social studies, guidance and counseling, theology, social work, sociology, history, African studies and history. Therefore, it is evident that the majority of the CRS teachers majored in Religious Studies and this is important for the study because CRS teachers who majored in Religious Studies are better prepared to teach the subject compared with their counterparts who did not major in Religious Studies. Although the majority of the CRS teachers majored in Religious Studies, it is very worrying that a considerable number of the CRS teachers (44, 45.8%) did not major in Religious Studies and this presupposes that, they did not do methods of teaching Religious Studies as well as assessment practices in Christian Religious Studies. In line with professional teaching qualification, 3.1% had Teacher's Cert "A", 34.4% had Post Graduate Diploma in Education (PGDE), 40.6% had Bachelor of Education, and 21.9% had Masters in Education. This means that the majority of the respondents were professional teachers who had Bachelors of Education.

This section presents the results and discussions of data collected to answer the five research questions formulated to guide the study. It comprised data from the questionnaire.



**Knowledge of CRS Teachers in Assessment Practices**

Research Question 1: What is the knowledge of CRS teachers in assessment in Senior High Schools in the Bono, Bono East and Ahafo regions of Ghana?

The aim of this research objective was to find out the knowledge of CRS teachers in assessment in Senior High Schools in the Bono, Bono East and Ahafo regions of Ghana. The responses given by the CRS teachers are shown in Table 2.

**Table 2: Knowledge of CRS Teachers in Assessment Practices**

| Statements:  | M    | SD   |
|--|------|------|
| Students must be involved in the assessment process.         | 4.41 | .66  |
| Students' capabilities must be considered during assessment. | 4.41 | .70  |
| Assessment is an integral part of the educational process.   | 4.63 | .49  |
| Assessment measures students' knowledge and skills.          | 4.47 | .61  |
| Assessment involves different kinds of assessment.           | 4.41 | .70  |
| Assessment must be comprehensive.                            | 4.31 | .73  |
| Assessment considers risks and benefits of students.         | 4.19 | .73  |
| Assessment is congruent with planned learning.               | 4.25 | .66  |
| Assessment is transparent.                                   | 4.22 | 1.00 |
| Assessment involves classroom evaluation.                    | 4.50 | .66  |

**Source: Field Data, 2020**

Scale:

- 1 = Strongly Disagree;      2 = Disagree;      3 = Uncertain;  
 4 = Agree;      5 = Strongly Agree

Mean of means = 4.38

Mean of standard deviation = .69

Table 2 sought to find out the knowledge of CRS teachers in assessment practices in Senior High Schools in the Bono, Bono East and Ahafo regions of Ghana. The means and standard deviation were obtained based on the responses recorded for each of the items on the questionnaire that were given to the respondents. The computation was done with the use of the Statistical Package for Service Solutions version 21. The coding of the items was done in line with the scale provided under Table 2 (1= Strongly Disagree; 2=Disagree; 3= Uncertain; 4= Agree; and 5= Strongly Agree). A mean of means of 4.38 and a mean of standard deviation of .69 were realized. Further discussions of individual items are presented in the paragraphs below.

From Table 2, a mean of 4.41 and a standard deviation of .66 were achieved for the statement: “Students must be involved in the assessment process”. This means that, the respondents agreed that students must be involved in the assessment process. Again, when the CRS teachers were asked whether students’ capabilities must be considered during assessment, they agreed to the statement. Here, a mean of 4.41 and a standard deviation of .70 were obtained for this item showing the respondents agreed to the statement. Several scholars (Amedahe & Gyimah, 2003; Etsey, 2004; Tamakloe et al., 2013) have explained that, there should be clarity in the test items vis-à-vis the ability level of the testees and the material the test is measuring. It also refers to the kinds of knowledge the test is measuring and how adequately the test items relate to the content and course objectives Also, from

Table 2, the teachers strongly agreed that assessment is an integral part of the educational process. This is evidenced by the mean score of 4.63 and a standard deviation of .49 for this item. The mean is approximately 5, showing that the respondents strongly agreed to the statement. This finding resonates with that of McDaniel (2014) that assessment is an integral part of the educational process. Its aims include fostering learning, improving, teaching, and providing information about what has been done or achieved. Regarding the statement; “Assessment measures students’ knowledge and skills”, the majority of the teachers agreed to the statement. This can be seen from the mean of 4.47 and a standard deviation of .61 that were realized. This finding is in line with that of Etsey (2012) who stated that achievement test “measures the extent of present knowledge and skills. In achievement testing, test takers are given the opportunity to demonstrate their acquired knowledge and skills in specific learning situations” (p. 41). Also, a mean of 4.41 and a standard deviation .70 were recorded for the item “Assessment involves different kinds of assessment”. This means that, the majority of the teachers agreed to this statement. This is because the mean falls on scale 4 (agree) looking at the scale under Table 2.

The finding depicts that, most of the teachers agreed to the statement: “Assessment must be comprehensive”. With a mean of 4.31 and a standard deviation of .73 it could be concluded that the mean falls into the scale of 4 (agree). Again, when the respondents were asked whether assessment considers risks and benefits of students, they agreed to the statement. Here, a mean of 4.19 and a standard deviation of .73 were obtained for this item showing the respondents agreed to the statement.

Also, from Table 2, the teachers agreed that assessment is congruent with planned learning. This is evidenced by the mean score of 4.25 and a standard deviation of .66 for this item. The mean is approximately 4, showing that the respondents agreed. In line with this, Gronlund (2013) asserts that “the key to effective achievement testing is careful planning” (p. 15). Regarding the statement; “Assessment is transparent”, the majority of the teachers agreed to the statement. This can be seen from the mean of 4.22 and a standard deviation of 1.00 that were realized. The high standard deviation obtained indicates that there were variations recorded for this item. However, it still remains that the majority of the respondents agreed to the statement. Also, a mean of 4.50 and a standard deviation .66 were recorded for the item “Assessment involves classroom evaluation” This means that, the majority of the teachers strongly agreed that, assessment involves classroom evaluation. This is because the mean falls on scale 5 (strongly agree) when approximated to the nearest whole number looking at the scale under Table 2.

From the above discussions, it can be concluded that, the CRS teachers in the Senior High Schools in the Bono, Bono East and Ahafo regions of Ghana were knowledgeable in assessment practices. This is because, the teachers agreed that students must be involved in the assessment process, students’ capabilities must be considered during assessment, and that assessment is an integral part of the educational process. Also, the teachers agreed that assessment measures students’ knowledge and skills, assessment involves different kinds of assessment, and assessment must be comprehensive. Again, the teachers agreed that assessment

considers risks and benefits of students, assessment is congruent with planned learning, assessment is transparent, and assessment involves classroom evaluation.

### Assessment Strategies CRS Teachers Use in Assessing their Students

Research Question 2: What assessment strategies do CRS teachers use in assessing their students in Senior High Schools in the Bono, Bono East and Ahafo regions of Ghana?

The aim of this research objective was to find out the assessment strategies CRS teachers use in assessing their students in Senior High Schools in the Bono, Bono East and Ahafo regions of Ghana. The responses given by the respondents are shown in Table 3.

**Table 3: Assessment Strategies CRS Teachers Use in Assessing their Students**

| Statements:                         | M    | SD   |
|-------------------------------------|------|------|
| Assessing work samples (Portfolio). | 1.72 | 1.28 |
| Role-Play.                          | 3.09 | 1.02 |
| Experiments/Demonstrations.         | 1.97 | 1.00 |
| Projects.                           | 2.84 | 1.18 |
| Exhibitions.                        | 2.03 | .99  |
| Story Telling.                      | 4.03 | .89  |
| Presentations.                      | 3.94 | .79  |
| Group assignment.                   | 4.13 | .74  |
| Individual assessment.              | 4.75 | .50  |
| Homework.                           | 4.84 | .37  |
| Peer assessment.                    | 4.66 | 1.03 |
| Questioning                         | 4.75 | .50  |

Table 3 Cont'd.

|                      |      |     |
|----------------------|------|-----|
| Class exercises      | 4.84 | .37 |
| Quizzes/ class tests | 4.69 | .59 |

**Source: Field Data, 2020**

Scale:

1 = Never;                      2 = Rarely;                      3 = Sometimes;  
 4 = Often;                      5 =Very Often

Mean of means = 3.73

Mean of standard deviation = .80

Table 3 sought to find out the assessment strategies CRS teachers use in assessing their students in Senior High Schools in the Bono, Bono East and Ahafo regions of Ghana. The means and standard deviation were obtained based on the responses recorded for each of the items on the questionnaire that were given to the teachers. A mean of means of 3.73 and a mean of standard deviation of .80 were realized. This means that the majority of the teachers often used most of the assessment strategies that were posed to them. Further discussions of individual items are presented in the paragraphs below.

From Table 3, a mean of 1.72 and a standard deviation of 1.28 were achieved for the statement: “Assessing work samples (Portfolio)”. This means that, the teachers rarely assessed students using their work samples (portfolio). The high standard deviation obtained indicates that there were variations in the responses recorded for the item. Unlike the traditional synoptic evaluations, such as the final exam or any standardized test that happens once, portfolios provide a longitudinal observation of student progress as they show incremental gains in knowledge, skills,



and proficiencies (Herrera et al., 2007). Again, when the teachers were asked whether they used role-play, the respondents indicated that they sometimes assessed their students using role-play. Here, a mean of 3.09 and a standard deviation of 1.02 were obtained for this item showing the respondents sometimes assessed their student using role-play. Also, from Table 3, the teachers indicated that they rarely assessed their students using experiments/demonstrations. This is evidenced by the mean score of 1.97 and a standard deviation of 1.00 for this item. The mean is approximately 2, showing that the respondents rarely used experiments/demonstrations. Regarding the use of projects, the majority of the teachers indicated that they sometimes assessed their students using projects. This can be seen from the mean of 2.84 and a standard deviation of 1.18 that were realized. Also, a mean of 2.03 and a standard deviation .99 were recorded for the item “Exhibitions”. This means that, the majority of the teachers rarely assessed their students using exhibitions. This is because the mean falls on scale 2 (rarely) looking at the scale under Table 3.

The finding depicts that, most of the teachers often assessed their students using story telling. With a mean of 4.03 and a standard deviation of .89 it could be concluded that the mean falls into the scale of 4 (often). Thus, the majority of the teachers often assessed their students using story telling. Again, when the respondents were asked whether they assessed their students using presentations, they agreed by indicating “often” to the statement. Here, a mean of 3.94 and a standard deviation of .79 were obtained for this item showing the respondents often assessed their students using presentations. Also, from Table 3, the teachers often

assessed their students using group assignment. This is evidenced by the mean score of 4.13 and a standard deviation of .74 for this item. The mean is approximately 4, showing that the respondents often assessed their students using group assignment. Recent recognition of collaborative or team work is increasing among educators, realizing that strength and skills of some students are well-defined when they are engaged in group activities such as cooperative learning or assessment (Herrera et al., 2007). Regarding the use of individual assessment, the majority of the teachers agreed by indicating “very often” to the statement. This can be seen from the mean of 4.75 and a standard deviation of .50 that were realized. This means that, the teachers assessed their students very often using individual assessment. Again, when the teachers were asked whether they assessed their students using homework, they agreed by indicating “very often” to the statement. Here, a mean of 4.84 and a standard deviation of .37 were obtained for this item showing the respondents assessed their students very often using homework.

Also, from Table 3, the teachers indicated that they assessed their students very often using peer assessment. This is evidenced by the mean score of 4.66 and a standard deviation of 1.03 for this item. The mean is approximately 5, showing that the respondents used the peer assessment strategy very often. Black and Wiliam (1998) propose that students be trained to assess their peers purposefully, with the goal of improving learning. The finding also depicts that, most of the teachers used the questioning strategy very often. With a mean of 4.75 and a standard deviation of .50 it could be concluded that the mean falls into the scale of 5 (very often). Regarding the use of class exercises, the majority of the teachers agreed that they

assessed their students very often using class exercises. This can be seen from the mean of 4.84 and a standard deviation of .37 that were realized. Concerning the use of quizzes/ class tests, a mean of 4.69 and a standard deviation of .59 were achieved. Thus, the majority of the teachers assessed their students very often using quizzes/ class tests.

From the above discussions, it can be concluded that, the CRS teachers used assessment strategies such as: storytelling, presentations, group assignment, individual assessment, homework, peer assessment, questioning, class exercises, and quizzes/ class tests very often. Also, teachers sometimes used projects and the role-play strategies in assessing their students. However, the teachers rarely assessed the work samples of their students (portfolio), and they rarely used experiments/ demonstrations, as well as exhibitions.

**Extent to which CRS Teachers Practice Assessment for Learning (AfL), Assessment as Learning (AaL), and Assessment of Learning (AoL)**

Research Question 3: To what extent do CRS teachers practice assessment for learning (AfL), assessment as learning (AaL), and assessment of learning (AoL) in Senior High Schools in the Bono, Bono East and Ahafo regions of Ghana?

The aim of this research objective was to find out the extent to which CRS teachers practice assessment for learning (AfL), assessment as learning (AaL), and assessment of learning (AoL) in Senior High Schools in the Bono, Bono East and Ahafo regions of Ghana. Table 4 presents the extent to which CRS teachers practice assessment for learning (AfL).

**Table 4: Extent to which CRS Teachers Practice Assessment for Learning (AfL)**

| Statements: As a CRS teacher, I adopt the following practices of Assessment for Learning (formative assessment)                        | M    | SD  |
|--|------|-----|
| I align instruction with the targeted outcomes.  | 4.50 | .56 |
| I identify particular learning needs of students or groups.  | 4.38 | .49 |
| I select and adapt materials and resources.  | 4.44 | .56 |
| I create differentiated teaching strategies and learning opportunities for helping individual students move forward in their learning. | 4.63 | .49 |
| I provide immediate feedback and direction to students.  | 4.63 | .49 |

**Source: Field Data, 2020**

Scale:

1 = Strongly Disagree; 2 = Disagree; 3 = Uncertain;  
4 = Agree; 5 = Strongly Agree

Mean of means = 4.52

Mean of standard deviation = .52

Table 4 sought to find out the extent to which CRS teachers practice assessment for learning (AfL). A mean of means of 4.52 and a mean of standard deviation of .52 were realized. This means that the majority of the teachers strongly agreed that they adopted the practices of assessment for learning (formative assessment). Further discussions of individual items are presented in the paragraphs below.

From Table 4, a mean of 4.50 and a standard deviation of .56 were achieved for the statement: “I align instruction with the targeted outcomes”. This means that,

the teachers strongly agreed to the statement. This finding is in agreement with Linn and Gronlund (2010) that in assessment as learning, teachers must align instruction with the targeted outcomes. Again, when the teachers were asked whether they identify particular learning needs of student or groups, the respondents agreed to the statement. Here, a mean of 4.38 and a standard deviation of .49 were obtained for this item showing the respondents agreed that they identified particular learning needs of students or groups. In assessment for learning, teachers use assessment as an investigative tool to find out as much as they can about what their students know and can do, and what confusions, preconceptions, or gaps they might have (Black & William, 2008). Also, from Table 4, the teachers agreed that they select and adapt materials and resources. This is evidenced by the mean score of 4.44 and a standard deviation of .56 for this item. The mean is approximately 4, showing that the respondents agreed to the statement. Regarding the statement: “I create differentiated teaching strategies and learning opportunities for helping individual students move forward in their learning”, the majority of the teachers strongly agreed to the statement. This can be seen from the mean of 4.63 and a standard deviation of .49 that were realized. This finding is in line with that of Linn and Gronlund (2010) that, assessment for learning is interactive, with teachers creating differentiated teaching strategies and learning opportunities for helping individual students move forward in their learning. Also, a mean of 4.63 and a standard deviation .49 were recorded for the item “I provide immediate feedback and direction to students”. This means that, the majority of the teachers strongly agreed to the statement. This is because the mean falls on scale 5 (strongly agree) looking at the scale under Table 4.

The responses from the teachers on the extent to which CRS teachers practice assessment as learning (AaL) are shown in Table 5.

**Table 5: Extent to which CRS Teachers Practice Assessment as Learning (AaL)**

| Statements: As a CRS teacher, I adopt the following practices of Assessment as Learning                         | M    | SD   |
|---|------|------|
| I teach the skills of self assessment.  | 3.72 | .88  |
| I guide students to set goals.  | 3.72 | .95  |
| I help students to develop good professional practice that reflect curriculum outcomes.                         | 3.81 | 1.05 |
| I help students to develop clear criteria of good practice.   | 3.84 | .87  |
| I guide students to develop self-monitoring mechanisms to question their own thinking.                          | 3.69 | .85  |
| I provide students with challenging opportunities to practice to become confident and competent self assessors. | 4.00 | .75  |
| I monitor students' meta cognitive processes and learning and provide feedback.                                 | 4.09 | .73  |
| I guide students to create safe environment for other students to work.   | 4.22 | .86  |

**Source: Field Data, 2020**

Scale:

1 = Strongly Disagree;

2 = Disagree;

3 = Uncertain;

4 = Agree;

5 =Strongly Agree

Mean of means = 3.89

Mean of standard deviation = .87



From Table 5, a mean of means of 3.89 and a mean of standard deviation of .87 were realized showing that the majority of the teachers agreed that they adopted the practices of assessment as learning. Details of the individual items are presented in the subsequent paragraphs.

The finding depicts that, most of the teachers agreed that they teach the skills of self assessment. With a mean of 3.72 and a standard deviation of .88 it could be concluded that the mean falls into the scale of 4 (agree). Thus, the majority of the teachers teach the skills of self assessment. This finding confirms that of Manitoba Education, Citizenship and Youth (2006) that, teachers must model and teach the skills of self assessment. Again, when the respondents were asked whether they guide students to set goals, they agreed to the statement. Here, a mean of 3.72 and a standard deviation of .95 were obtained for this item showing that the respondents guide students to set goals. Also, from Table 5, the teachers help students to develop good professional practice that reflect curriculum outcomes. This is evidenced by the mean score of 3.81 and a standard deviation of 1.05 for this item. The mean is approximately 4, showing that the respondents agreed to the statement. However, the high standard deviation obtained indicates that there were variations and that not all the teachers agreed to the statement. However, it still remains that the majority of the teachers agreed to the statement. According to Manitoba Education, Citizenship and Youth (2006), teachers must provide exemplars and models of good practice and quality work that reflect curriculum outcomes. Regarding the statement: “I help students to develop clear criteria of good practice” the majority of the teachers agreed to the statement. This can be seen from the mean of 3.84 and a standard

deviation of .87 that were realized. This means that, the teachers help students to develop clear criteria of good practice.

Again, when the teachers were asked whether they guide students to develop self-monitoring mechanisms to question their own thinking, they agreed to the statement. Here, a mean of 3.69 and a standard deviation of .85 were obtained for this item showing the respondents guide students to develop self-monitoring mechanisms to question their own thinking. Manitoba Education, Citizenship and Youth (2006) asserts that, teachers must guide students in developing internal feedback or self monitoring mechanisms to validate and question their own thinking, and become comfortable with the ambiguity and uncertainty that is inevitable in learning anything new. Also, from Table 5, the teachers indicated that they provide students with challenging opportunities to practice to become confident and competent self assessors. This is evidenced by the mean score of 4.00 and a standard deviation of .75 for this item. The mean falls on scale 4 (agree) showing that the respondents provide students with challenging opportunities to practice to become confident and competent self assessors. The finding also depicts that, most of the teachers monitor students' meta-cognitive processes and learning and provide feedback. With a mean of 4.09 and a standard deviation of .73 it could be concluded that the mean falls into the scale of 4 (agree). This finding confirms that of Manitoba Education, Citizenship and Youth (2006) that, teachers must monitor students' metacognitive processes as well as their learning and provide descriptive feedback. Regarding the statement: "I guide students to create safe environment for other students to work", a mean of 4.22 and a standard deviation of .86 were obtained for

the statement. Thus, the majority of the teachers guide students to create safe environment for other students to work.

The responses from the teachers on the extent to which CRS teachers practice assessment for learning (AoL) are shown in Table 6.

**Table 6: Extent to which CRS Teachers Practice Assessment of Learning (AoL)**

| Statements: In practising Assessment of Learning (summative assessment) as a CRS teacher, I provide: | M    | SD  |
|--|------|-----|
| ... a rationale for undertaking a particular assessment of learning at a particular point in time.   | 4.16 | .80 |
| ... clear descriptions of the intended learning.   | 4.25 | .79 |
| ... processes that make it possible for students to demonstrate their competence and skill.          | 4.34 | .69 |
| ... a range of alternative mechanisms for assessing the same outcomes.                               | 4.16 | .72 |
| ... public and defensible reference points for making judgments.                                     | 4.31 | .89 |
| ... transparent approaches to interpretation.  | 4.13 | .93 |
| ... descriptions of the assessment process.  | 4.13 | .70 |

Source: Field Data, 2020

Scale:

1 = Strongly Disagree;

2 = Disagree;

3 = Uncertain;

4 = Agree;

5 =Strongly Agree

Mean of means = 4.21

Mean of standard deviation = .79

Table 6 sought to find out the extent to which CRS teachers practice assessment of learning (AoL). A mean of means of 4.21 and a mean of standard deviation of .79 were realized. This means that the majority of the teachers agreed that they adopted the practices of assessment of learning. Further discussions of individual items are presented in the paragraphs below.

From Table 6, a mean of 4.16 and a standard deviation of .80 were achieved for the statement: “I provide a rationale for undertaking a particular assessment of learning at a particular point in time”. This means that, the teachers agreed to the statement. Assessment as learning is designed to provide evidence of achievement to parents, other educators, the students themselves, and sometimes to outside groups (e.g., employers, other educational institutions) (Black & William, 2008). Again, when the teachers were asked whether they provide clear descriptions of the intended learning, the respondents agreed to the statement. Here, a mean of 4.25 and a standard deviation of .79 were obtained for this item showing that the respondents agreed that they provide clear descriptions of the intended learning. Also, from Table 6, the teachers agreed that they provide processes that make it possible for students to demonstrate their competence and skill. This is evidenced by the mean score of 4.34 and a standard deviation of .69 for this item. The mean is approximately 4, showing that the respondents agreed to the statement. Teachers provide processes that make it possible for students to demonstrate their competence and skill (Assessment Reform Group, 2002). Regarding the statement: “I provide a range of alternative mechanisms for assessing the same outcomes”, the majority of the teachers agreed to the statement. This can be seen from the mean of 4.16 and a

standard deviation of .72 that were realized. Also, a mean of 4.31 and a standard deviation .89 were recorded for the item “I provide public and defensible reference points for making judgments”. This means that, the majority of the teachers agreed to the statement. This is because the mean falls on scale 4 (agree) looking at the scale under Table 6. Concerning the statement: “I provide transparent approaches to interpretation”, a mean of 4.13 and a standard deviation of .93 were achieved. Thus, the majority of the teachers provide transparent approaches to interpretation. According to Assessment Reform Group (2002), effective assessment of learning requires that teachers provide transparent approaches to interpretation. When the teachers were asked whether they provide descriptions of the assessment process, the majority of the respondents agreed to the statement. This is evidenced in the mean of 4.13 and a standard deviation of .70 that were realized.

It can be concluded that, to a high extent, the CRS teachers practiced assessment for learning (AfL), assessment as learning (AaL), and assessment of Learning (AoL). In practising assessment for learning (AfL), the CRS teachers align instruction with the targeted outcomes, identify particular learning needs of students or groups, select and adapt materials and resources, create differentiated teaching strategies and learning opportunities for helping individual students move forward in their learning, and provide immediate feedback and direction to students. Also, the CRS teachers practice assessment as learning (AaL) by teaching the skills of self assessment, guiding students to set goals, helping students to develop good professional practice that reflect curriculum outcomes, and helping students to develop clear criteria of good practice. The teachers also guide students to develop

self-monitoring mechanisms to question their own thinking, provide students with challenging opportunities to practice to become confident and competent self assessors, monitor students' meta-cognitive processes and learning and provide feedback, and guide student to create safe environment for their students to work. Again, in practising assessment of learning (AoL) the CRS teachers provide a rationale for undertaking a particular assessment of learning at a particular point in time, provide clear descriptions of the intended learning, provide processes that make it possible for students to demonstrate their competence and skill, provide a range of alternative mechanisms for assessing the same outcomes. The teachers also provide public and defensible reference points for making judgments, provide transparent approaches to interpretation, and provide descriptions of the assessment process.

### **How CRS Teachers Adhere to the Principles of Test Construction, Administration and Scoring**

Research Question 4: How do CRS teachers adhere to the principles of test construction, administration and scoring in Senior High Schools in the Bono, Bono East and Ahafo regions of Ghana?

This research objective sought to find out how CRS teachers adhere to the principles of test construction, administration and scoring in Senior High Schools in the Bono, Bono East and Ahafo regions of Ghana. Table 7 presents the extent to which CRS teachers adhere to the principles of test construction.



**Table 7: Extent to which CRS Teachers Adhere to the Principles of Test Construction**

| Statements: As a CRS teacher, I do the following when constructing test items... | M    | SD   |
|--|------|------|
| I state the purpose of the test.   | 4.56 | .56  |
| I specify the construct to be measured.  | 4.22 | .74  |
| I use a test specification table.  | 4.38 | .74  |
| I match learning outcomes to the items.  | 4.38 | .55  |
| I construct test items when it is time to assess.                                | 3.94 | 1.20 |
| I ask colleagues in subject area to review test items.                           | 4.19 | .89  |
| I consider the meaning of wording against different ethnic background.           | 4.00 | .87  |
| I consider students' language proficiency.                                       | 4.16 | .67  |
| I consider variation of students with respect to physical disability.            | 4.00 | .83  |
| I consider the time individual will spend on a question.                         | 4.22 | .86  |
| I try solving the questions myself to determine the time required.               | 4.34 | .82  |
| I provide clear and simple instructions on how test is to be answered.           | 4.38 | .65  |
| I evaluate test items given to the students.                                     | 4.25 | .50  |
| I write test items at least two weeks before time for test administration.       | 4.13 | .82  |
| I write more test items than needed.   | 4.25 | .75  |
| I follow the principles of test construction for each format.                    | 4.50 | .56  |

**Source: Field Data, 2020**

Scale:

1 = Strongly Disagree;                      2 = Disagree;                      3 = Uncertain;

4 = Agree;                                      5 = Strongly Agree

Mean of means = 4.24

Mean of standard deviation = .75

Table 7 sought to find out the extent to which CRS teachers adhere to the principles of test construction. A mean of means of 4.24 and a mean of standard deviation of .75 were realized. This means that the majority of the teachers agreed that they adopted the principles of test construction to a high extent. Further discussions of individual items are presented in the paragraphs below.

From Table 7, a mean of 4.56 and a standard deviation of .56 were achieved for the statement: “I state the purpose of the test”. This means that, the teachers strongly agreed to the statement. Gronlund (2013) asserts that, “the key to effective achievement testing is careful planning” (p. 15). It is during the planning stage that the purpose of the test must be determined. Again, when the teachers were asked whether they specify the construct to be measured, the respondents agreed to the statement. Here, a mean of 4.22 and a standard deviation of .74 were obtained for this item showing the respondents agreed that they specify the construct to be measured. Also, from Table 7, the teachers agreed that they use a test specification table. This is evidenced by the mean score of 4.38 and a standard deviation of .74 for this item. The mean is approximately 4, showing that the respondents agreed to the statement. This finding confirms that of Etsey (2004) that a table of specifications must be kept before the teacher and continually referred to as the items are written.

Regarding the statement: “I match learning outcomes to the items”, the majority of the teachers agreed to the statement. This can be seen from the mean of 4.38 and a standard deviation of .55 that were realized. Mehrens and Lehmann (2014) asserts that, test items must be related to and match the instructional objectives. Also, a mean of 3.94 and a standard deviation 1.20 were recorded for the item “I construct test items when it is time to assess”. This means that, the majority of the teachers agreed to the statement. This is because the mean falls on scale 4 (agree) looking at the scale under Table 7. However, the high standard deviation obtained which is higher than the mean of standard deviation of .75 indicates that there were variations and that not all the respondents agreed to the statement. However, it still remains that the majority of the teachers agreed to the statement.

The finding depicts that, most of the teachers agreed that they ask colleagues in subject area to review test items. With a mean of 4.19 and a standard deviation of .89 it could be concluded that the mean falls into the scale of 4 (agree). Thus, the majority of the teachers ask colleagues in subject area to review test items. Etsey (2004) has suggested that the items must be critically examined at least a week after writing them. He has emphasised that where possible, fellow teachers or colleagues in the same subject area should review the test items. Again, when the respondents were asked whether they consider the meaning of wording against different ethnic background, they agreed to the statement. Here, a mean of 4.00 and a standard deviation of .87 were obtained for this item showing that the respondents consider the meaning of wording against different ethnic background. Also, from Table 7, the teachers consider students’ language proficiency. This is evidenced by the mean

score of 4.16 and a standard deviation of .67 for this item. The mean is approximately 4, showing that the respondents agreed to the statement. Regarding the statement: “I consider variation of students with respect to physical disability” the majority of the teachers agreed to the statement. This can be seen from the mean of 4.00 and a standard deviation of .83 that were realized. This means that, the teachers consider variation of students with respect to physical disability. Again, when the teachers were asked whether they consider the time individual will spend on a question, they agreed to the statement. Here, a mean of 4.22 and a standard deviation of .86 were obtained for this item showing the respondents consider the time individual will spend on a question.

Also, from Table 7, the teachers indicated that they try solving the questions themselves to determine the time required. This is evidenced by the mean score of 4.34 and a standard deviation of .82 for this item. The mean falls on scale 4 (agree) showing that the respondents try solving the questions themselves to determine the time required. The finding also depicts that, most of the teachers provide clear and simple instructions on how test is to be answered. With a mean of 4.38 and a standard deviation of .65 it could be concluded that the mean falls into the scale of 4 (agree). Regarding the statement: “I evaluate test items given to the students”, a mean of 4.25 and a standard deviation of .50 were obtained for the statement. Thus, the majority of the teachers evaluate test items given to the students. From Table 7, a mean of 4.13 and a standard deviation of .82 were achieved for the statement: “I write test items at least two weeks before time for test administration”. This means that, the teachers agreed to the statement. Etsey (2004) explains that test items must

be written in advance (at least two weeks) of the testing date to permit reviews and editing. Again, when the teachers were asked whether they write more test items than needed, the respondents agreed to the statement. Here, a mean of 4.25 and a standard deviation of .75 were obtained for this item showing that the respondents agreed that they write more test items than needed. This finding is in agreement with Mehrens and Lehmann (2014) who suggested that the initial number of items should be 25% more while Hanna (cited in Amedahe, 2012) has suggested 10% more items than are actually needed in the test. Also, from Table 7, the teachers strongly agreed that they follow the principles of test construction for each format. This is evidenced by the mean score of 4.50 and a standard deviation of .56 for this item. The mean is approximately 5, showing that the respondents strongly agreed to the statement.

From the foregoing, it can be concluded that, CRS teachers adhered to the principles of test construction to a high extent. In adhering to the principles of test construction, the CRS teachers state the purpose of the test, specify the construct to be measured, use a test specification table, and match learning outcomes to the items. Also, the teachers construct test items when it is time to assess, ask colleagues in subject area to review test items, consider the meaning of wording against different ethnic background, and consider students' language proficiency. The teachers indicated that, they consider variation of students with respect to physical disability, consider the time individual will spend on a question, try solving the questions themselves to determine the time required, and provide clear and simple instructions on how test is to be answered. Again, the teachers evaluate test items given to the students, write test items at least two weeks before time for test administration, write

more test items than needed, and follow the principles of test construction for each format.

Table 8 shows the extent to which CRS teachers adhere to the principles of test administration.

**Table 8: Extent to which CRS Teachers Adhere to the Principles of Test Administration**

| Statements: As a CRS teacher, I do the following when administering test items... | M    | SD   |
|---|------|------|
| I make students aware of the rules and regulations covering the test.             | 4.50 | .71  |
| I make room for adequate ventilation and lighting.                                | 4.28 | .80  |
| I make provision for extra sheets and writing materials.                          | 4.44 | .71  |
| I allow students to start and stop test on time.                                  | 4.47 | .71  |
| I give more instructions during the time the students are taking the test.        | 4.06 | 1.09 |
| I inform students in advance about areas for the test.                            | 4.47 | .75  |
| I prepare classroom a day before test is taken.                                   | 3.38 | .82  |
| I inform students about the test format.  | 4.38 | .78  |
| I make provision for emergencies during the time the test is taken.               | 4.38 | .65  |
| I proof read all the items.   | 4.65 | .60  |
| I use “DO NOT DISTURB SIGN” at the entrance of classroom.                         | 2.13 | 1.22 |

**Source: Field Data, 2020**



Scale:

1 = Strongly Disagree;                      2 = Disagree;                      3 = Uncertain;

4 = Agree;                                      5 = Strongly Agree

Mean of means = 4.10

Mean of standard deviation = .80

A mean of means of 4.10 and a mean of standard deviation of .80 were realized. This means that the majority of the teachers agreed that they adopted the principles of test administration to a high extent. Details of the individual items are presented in the subsequent paragraphs.

The finding depicts that, most of the teachers strongly agreed that they make students aware of the rules and regulations covering the test. With a mean of 4.50 and a standard deviation of .71 it could be concluded that the mean falls into the scale of 5 (strongly agree). Thus, the majority of the teachers make students aware of the rules and regulations covering the test. This finding supports that of Etsey (2005) that, in administering test items, students must be made aware of the rules and regulations covering the conduct of the test. Penalties for malpractice such as cheating should be clearly spelt out and clearly adhered to. Again, when the respondents were asked whether they make room for adequate ventilation and lighting, they agreed to the statement. Here, a mean of 4.28 and a standard deviation of .80 were obtained for this item showing that the respondents make room for adequate ventilation and lighting. The physical conditions that need to be in place to ensure maximum performance on the part of students include adequate work space, quietness in the vicinity, good lighting and ventilation and comfortable temperature

(Etsey, 2004; Gronlund, 2012; Lindquist, as cited in Tamakloe et al., 2013). Good lighting is important in effective test administration. This facilitates students' reading of instructions and test items without straining their eyes, thereby working faster (Gronlund, 2012). Also, from Table 8, the teachers make provision for extra sheets and writing materials. This is evidenced by the mean score of 4.44 and a standard deviation of .71 for this item. The mean is approximately 4, showing that the respondents agreed to the statement. Regarding the statement: "I allow students to start and stop test on time" the majority of the teachers agreed to the statement. This can be seen from the mean of 4.47 and a standard deviation of .71 that were realized. This means that, the teachers allow students to start and stop test on time. Nunnally (2015), and Ebel and Frisbie (2014) assert that, a good working rule is to try to set a time limit such that about 90 percent of the students will feel that they have enough time to complete the test. Again, when the teachers were asked whether they give more instructions during the time the students are taking the test, they agreed to the statement. Here, a mean of 4.06 and a standard deviation of 1.09 were obtained for this item showing the respondents give more instructions during the time the students are taking the test. There is the need to consider the psychological conditions in test administration which include, threatening behaviours of invigilators, and interruption to give instructions and announcements (Etsey, 2004; Bernstein, as cited in Gronlund, 2012; Tamakloe et al., 2013).

Also, from Table 8, the teachers indicated that they inform students in advance about areas for the test. This is evidenced by the mean score of 4.47 and a standard deviation of .75 for this item. The mean falls on scale 4 (agree) showing

that the respondents inform students in advance about areas for the test. On the fairness criterion, consideration is given to whether students have been given advance notice of the test, whether students have been adequately prepared for the test, and whether students understand the testing procedures (Amedahe & Gyimah, 2003; Etsey, 2004; Tamakloe et al., 2013). The teacher is to prepare his students in advance for the test (Etsey, 2004). Etsey (2004) has emphasised that for students' maximum performance, they should be made aware of when (date and time) the test will be given, the conditions (number of items, place of test, open or closed book) under which the test will be given, the content areas (study questions or list of learning targets) that the test will cover, the emphasis or weighting of content areas, the kinds of items (objective-types or essay-types) on the test, how the test will be scored and graded, and the importance of the results of the test.

The finding also depicts that, most of the teachers were uncertain as to whether they prepare classroom a day before test is taken. With a mean of 3.38 and a standard deviation of .82 it could be concluded that the mean falls into the scale of 3 (uncertain). Regarding the statement: "I inform students about the test format", a mean of 4.38 and a standard deviation of .78 were obtained for the statement. Thus, the majority of the teachers inform students about the test format. From Table 8, a mean of 4.38 and a standard deviation of .65 were achieved for the statement: "I make provision for emergencies during the time the test is taken". This means that, the teachers agreed to the statement. This finding is in agreement with Tamakloe et al. (2013) who explains that emergencies during test administration must be expected and well catered for. Again, when the teachers were asked whether they proof read

all the items, the respondents strongly agreed to the statement. Here, a mean of 4.65 and a standard deviation of .60 were obtained for this item showing that the respondents strongly agreed that they proof read all the items. Also, from Table 8, the teachers disagreed that they use “DO NOT DISTURB SIGN” at the entrance of classroom. This is evidenced by the mean score of 2.13 and a standard deviation of 1.22 for this item. The mean is approximately 2, showing that the respondents disagreed to the statement. Noise and distraction in the testing environment should be kept at the barest minimum if not eliminated completely. Interruptions within and outside the testing room has the tendency of affecting student’s performance (Mehrens & Lehmann, 1991; Tamakloe et al., 2013). Etsey (2004) has pointed out that it is helpful to hang a -Do Not Disturb. “Testing in Progress” sign at the door of the testing room to warn people to keep off.

It can be concluded that, CRS teachers adhered to the principles of test administration to a high extent. In adhering to the principles of test administration, the CRS teachers make students aware of the rules and regulations covering the test, make room for adequate ventilation and lighting, make provision for extra sheets and writing materials, and allow students to start and stop test on time. Also, the teachers give more instructions during the time the students are taking the test, inform students in advance about areas for the test, inform students about the test format, make provision for emergencies during the time the test is taken, and proof read all test items. However, the teachers did not use “DO NOT DISTURB SIGN” at the entrance of classroom. Also, teachers were uncertain as to whether they prepare classroom a day before test is taken.

Table 9 shows the extent to which CRS teachers adhere to the principles of test scoring.

**Table 9: Extent to which CRS Teachers Adhere to the Principles of Test Scoring**

| Statements: As a CRS teacher, I do the following when scoring test items...              | M    | SD   |
|--|------|------|
| I mark papers just after the test is taken.  | 3.63 | .75  |
| I prepare a scoring guide.   | 4.40 | .70  |
| I make sure test takers are kept anonymous.  | 3.65 | 1.02 |
| I grade the responses item by item.  | 4.21 | .78  |
| I keep scores of previous items out of sight.  | 4.06 | .90  |
| I periodically rescore previously scored items.  | 2.00 | .94  |
| I shuffle scripts before scoring.  | 2.13 | .86  |
| I score essay test when I am physically sound and mentally alert in a sound environment. | 4.38 | .74  |
| I constantly follow the scoring guide.   | 4.34 | .54  |
| I score a particular item on all papers at a sitting.                                    | 2.09 | .88  |
| I provide comments and correct errors on scripts.  | 4.65 | .48  |

**Source: Field Data, 2020**

Scale:

1 = Strongly Disagree;                      2 = Disagree;                      3 = Uncertain;  
 4 = Agree;                                      5 =Strongly Agree

Mean of means = 3.60

Mean of standard deviation = .78

Table 9 sought to find out the extent to which CRS teachers adhere to the principles of test scoring. A mean of means of 3.60 and a mean of standard deviation of .78 were realized. This means that the majority of the teachers agreed that they adopted the principles of test scoring to a high extent. Further discussions of individual items are presented in the paragraphs below.

From Table 9, a mean of 3.63 and a standard deviation of .75 were achieved for the statement: “I mark papers just after the test is taken”. This means that, the teachers agreed to the statement. Again, when the teachers were asked whether they prepare a scoring guide, the respondents agreed to the statement. Here, a mean of 4.40 and a standard deviation of .70 were obtained for this item showing the respondents agreed that they prepare a scoring guide. according to Etsey (2004) and Amedahe and Gyimah (2003), the marking scheme must be prepared when the items are still fresh in the teacher’s mind and always before the administration of the test. This way, defective items that do not match their expected responses would be recognised and reviewed. Also, from Table 9, the teachers agreed that they make sure test takers are kept anonymous. This is evidenced by the mean score of 3.65 and a standard deviation of 1.02 for this item. The mean is approximately 4, showing that the respondents agreed to the statement. However, the high standard deviation obtained which is higher than the mean of standard deviation of .75 indicates that there were variations and that not all the respondents agreed to the statement. However, it still remains that the majority of the teachers agreed to the statement. Mehrens and Lehmann (2001), Amedahe and Gyimah (2003), and Etsey (2004) suggest that there is the need to score the scripts anonymously. Scripts should be



identified by code numbers or any other means instead of the names of students. This principle is to reduce the halo-effect. This happens when a scorer's general impression of a person influences how the paper is scored. Regarding the statement: "I grade the responses item by item", the majority of the teachers agreed to the statement. This can be seen from the mean of 4.21 and a standard deviation of .78 that were realized.

Also, a mean of 4.06 and a standard deviation .90 were recorded for the item "I keep scores of previous items out of sight". This means that, the majority of the teachers agreed to the statement. This is because the mean falls on scale 4 (agree) looking at the scale under Table 9. The finding depicts that, most of the teachers disagreed that they periodically rescore previously scored items. With a mean of 2.00 and a standard deviation of .94 it could be concluded that the mean falls into the scale of 2 (disagree). Thus, the majority of the teachers do not periodically rescore previously scored items. Again, when the respondents were asked whether they shuffle scripts before scoring, they disagreed to the statement. Here, a mean of 2.13 and a standard deviation of .86 were obtained for this item showing that the respondents do not shuffle scripts before scoring. Research by Hales and Tokar (cited in Mehrens & Lehmann, 2001) has shown that a student's essay grade will be influenced by the position of the paper, especially if the preceding answers were either very good or very poor. Mehrens and Lehmann (2001) have pointed out that randomly reshuffling of scripts is especially significant when teachers are working with high- and low level classes and read the best scripts first or last. Also, from Table 9, the teachers score essay test when they are physically sound and mentally

alert in a sound environment. This is evidenced by the mean score of 4.38 and a standard deviation of .74 for this item. The mean is approximately 4, showing that the respondents agreed to the statement. According to Karpicke and Roediger (2008), over excitement, depression, and any type of psychological or mental disequilibrium will affect the consistency of the scores of essay-type tests.

Regarding the statement: “I constantly follow the scoring guide” the majority of the teachers agreed to the statement. This can be seen from the mean of 4.34 and a standard deviation of .54 that were realized. This means that, the teachers constantly follow the scoring guide. This finding is in agreement with Mehrens and Lehmann (2001), Amedahe and Gyimah (2003), and Etsey (2004) who suggested that, scorers should constantly follow the marking scheme when scoring as this reduces rater drift, which is the likelihood of either not paying attention to the scoring guide or interpreting it differently as time passes. Again, when the teachers were asked whether they score a particular item on all papers at a sitting, they disagreed to the statement. Here, a mean of 2.09 and a standard deviation of .88 were obtained for this item showing the respondents do not score particular items on all papers at a sitting. This finding supports that of Mehrens and Lehmann (2001), Amedahe and Gyimah (2003) and Etsey (2004) who explain that scorers must take one item at a time and score all the responses to it throughout before going to the next item. This principle is to minimise the carryover effect on the scores and thereby ensure consistency. The finding also depicts that, most of the teachers provide comments and correct errors on scripts. With a mean of 4.65 and a standard deviation of .48 it could be concluded that the mean falls into the scale of 5 (strongly agree). Comments

should be provided and errors corrected on the answer scripts for students to facilitate learning. This is especially important in formative assessments where the comments should be on students' weaknesses and strengths in answering various items (Mehrens & Lehmann, 2001; Amedahe & Gyimah, 2003; Etsey, 2004).

From the foregoing, it can be concluded that, CRS teachers adhered to the principles of test scoring. This is because, the CRS teachers mark papers just after the test is taken, prepare a scoring guide, make sure test takers are kept anonymous, and grade the responses item by item. Again, the teachers keep scores of previous items out of sight, score essay test when they are physically sound and mentally alert in a sound environment, constantly follow the scoring guide, and provide comments and correct errors on scripts. However, the teachers did not shuffle scripts before scoring, and they did not score a particular item on all papers at a sitting. Again, the teachers did not periodically rescore previously scored items.

### **Challenges of Assessment Practices**

Research Question 5: What challenges do CRS teachers face in assessment of students in Senior High Schools in the Bono, Bono East and Ahafo regions of Ghana?

The aim of this research objective was to find out the challenges CRS teachers face in assessment of students in Senior High Schools in the Bono, Bono East and Ahafo regions of Ghana. Table 10 presents the responses from the teachers.

**Table 10: Challenges CRS Teachers face in Assessment of Students**

| Statements:  | M    | SD   |
|--|------|------|
| The school assessment system makes it difficult for me to follow the assessment practices.                                   | 4.31 | .92  |
| Lack of funds to embark on some activities and projects to help to follow the assessment practices.                          | 4.50 | .97  |
| Lack of support from the school authorities in terms of logistics and facilities to help to follow the assessment practices. | 4.28 | 1.01 |
| Lack of motivation from school authorities to help me follow the assessment practices.                                       | 4.34 | .99  |
| Developing achievement testing task is difficult.  | 4.09 | .81  |
| Inadequate time allotted on the timetable for various subjects does not permit the use of achievement testing.               | 4.13 | 1.03 |
| Inadequate time to prepare in terms of gathering information and materials to be used for achievement testing.               | 4.00 | 1.00 |
| Large class size makes it difficult to assess students in following the assessment practices.                                | 4.53 | .75  |
| Some topics are difficult to be assessed in following the assessment practices.  | 4.28 | 1.07 |

**Source: Field Data, 2020**

Scale:

1 = Strongly Disagree;                      2 = Disagree;                      3 = Uncertain;

4 = Agree;                                      5 = Strongly Agree

Mean of means = 4.27

Mean of standard deviation = .95

Table 10 sought to find out the challenges CRS teachers face in the assessment of students. A mean of means of 4.27 and a mean of standard deviation of .95 were realized. This means that the majority of the teachers agreed to the various challenges encountered in the assessment of students that were posed to them. Details of the items are presented in the paragraphs below.

From Table 10, a mean of 4.31 and a standard deviation of .92 were achieved for the statement: “The school assessment system makes it difficult for me to follow the assessment practices”. This means that, the teachers agreed to the statement. This finding supports that of Eshun (2014) who found out that the forms of achievement test some teachers used in their classrooms were limited due to examination policies, time, resources and assessment methods employed by their schools. Again, when the teachers were asked whether lack of funds to embark on some activities and projects to help follow the assessment practices was a challenge they encountered, the respondents strongly agreed to the statement. Here, a mean of 4.50 and a standard deviation of .97 were obtained for this item showing the respondents strongly agreed that lack of funds to embark on some activities and projects to help follow the assessment practices was a challenge they encountered. Also, from Table 10, the teachers agreed that lack of support from the school authorities in terms of logistics

and facilities to help to follow the assessment practices was another problem they encountered. This is evidenced by the mean score of 4.28 and a standard deviation of 1.01 for this item. The mean is approximately 4, showing that the respondents agreed to the statement. However, the high standard deviation obtained which is higher than the mean of standard deviation of .95 indicates that there were variations and that not all the respondents agreed to the statement. However, it still remains that the majority of the teachers agreed to the statement. Regarding the statement: “Lack of motivation from school authorities to help me follow the assessment practices”, the majority of the teachers agreed to the statement. This can be seen from the mean of 4.34 and a standard deviation of .99 that were realized. Also, a mean of 4.09 and a standard deviation .81 were recorded for the item “Developing achievement testing task is difficult”. This means that, the majority of the teachers agreed to the statement. This is because the mean falls on scale 4 (agree) looking at the scale under Table 10.

The finding depicts that, most of the teachers agreed that inadequate time allotted on the timetable for various subjects does not permit the use of achievement testing. With a mean of 4.13 and a standard deviation of 1.03 it could be concluded that the mean falls into the scale of 4 (agree). Thus, the majority of the teachers agreed to the statement. However, the high standard deviation obtained which is higher than the mean of standard deviation of .95 indicates that there were variations and that not all the respondents agreed to the statement. However, it still remains that the majority of the teachers agreed to the statement. This finding is in agreement with Beckmann, Senk and Thompson (2013) who found out that, teachers felt they



had no time to create/develop various forms of assessment. Again, when the respondents were asked whether inadequate time to prepare in terms of gathering information and materials to be used for achievement testing was a challenge to them, they agreed to the statement. Here, a mean of 4.00 and a standard deviation of 1.00 were obtained for this item showing that inadequate time to prepare in terms of gathering information and materials to be used for achievement testing was a challenge CRS teachers faced in assessing their students. Also, from Table 10, the majority of the teachers strongly agreed that large class size makes it difficult to assess students in following the assessment practices. This is evidenced by the mean score of 4.53 and a standard deviation of .75 for this item. The mean is approximately 5, showing that the respondents strongly agreed to the statement. Effective assessment is unique, not only with its assessment objectives, but with the number of pupils (and therefore classes) that a teacher of effective assessment will have. An Effective assessment teacher needs to assess these pupils on a scale that is extremely burdensome, if not impossible, as a task to complete adequately (Rogers, 2016; Elliot et al, 2016). Regarding the statement: “Some topics are difficult to be assessed in following the assessment practices” the majority of the teachers agreed to the statement. This can be seen from the mean of 4.28 and a standard deviation of 1.07 that were realized. This means that, the majority of the teachers agreed that some topics are difficult to be assessed in following the assessment practices.

It can be concluded that, CRS teachers encountered a number of challenges in assessing their students. This is because the school assessment system makes it difficult for teachers to follow the assessment practices, and that, some of the

teachers only punish students when they see that it is time for them to write exams and tests. Also, the teachers indicated that, lack of funds to embark on some activities and projects to help follow the assessment practices, lack of support from the school authorities in terms of logistics and facilities to help follow the assessment practices, lack of motivation from school authorities to help teachers follow the assessment practices, difficulty in developing achievement testing task, and inadequate time allotted on the timetable for various subjects does not permit the use of achievement testing. Other challenges included inadequate time to prepare in terms of gathering information and materials to be used for achievement testing, large class size which makes it difficult to assess students in following the assessment practices, and the fact that some topics are difficult to be assessed in following the assessment practices.

### **Chapter Summary**

The study sought to find out the assessment practices of Christian Religious Studies teachers in Senior High Schools in the Bono, Bono East and Ahafo regions of Ghana. The chapter covered extracts from the questionnaire. Specifically, the research sought to examine the knowledge of CRS teachers in assessment practices in Senior High Schools; assessment strategies CRS teachers use in assessing their students in Senior High Schools; explore the extent to which CRS teachers practice Assessment for Learning (AfL), Assessment as Learning (AaL), and Assessment of Learning (AoL) in Senior High Schools; investigate how CRS teachers adhere to the principles of test construction, administration and scoring in Senior High Schools; as well as the challenges CRS teachers face in the assessment of students in Senior

High Schools. It was realized that, the CRS teachers were knowledgeable in assessment practices. This is because, the teachers involved students in the assessment process, considered students' capabilities during assessment, and agreed that assessment is an integral part of the educational process. Also, the teachers agreed that assessment measures students' knowledge and skills, assessment involves different kinds of assessment, and assessment must be comprehensive. Again, the teachers agreed that assessment considers risks and benefits of students, assessment is congruent with planned learning, assessment is transparent, and assessment involves classroom evaluation. Also, the findings of the study depict that the CRS teachers used assessment strategies such as: storytelling, presentations, group assignment, individual assessment, homework, peer assessment, questioning, class exercises, and quizzes/ class tests very often. Also, teachers sometimes used projects and the role-play strategies in assessing their students. However, the teachers rarely assessed the work samples of their students (portfolio), and they rarely used experiments/ demonstrations, as well as exhibitions.

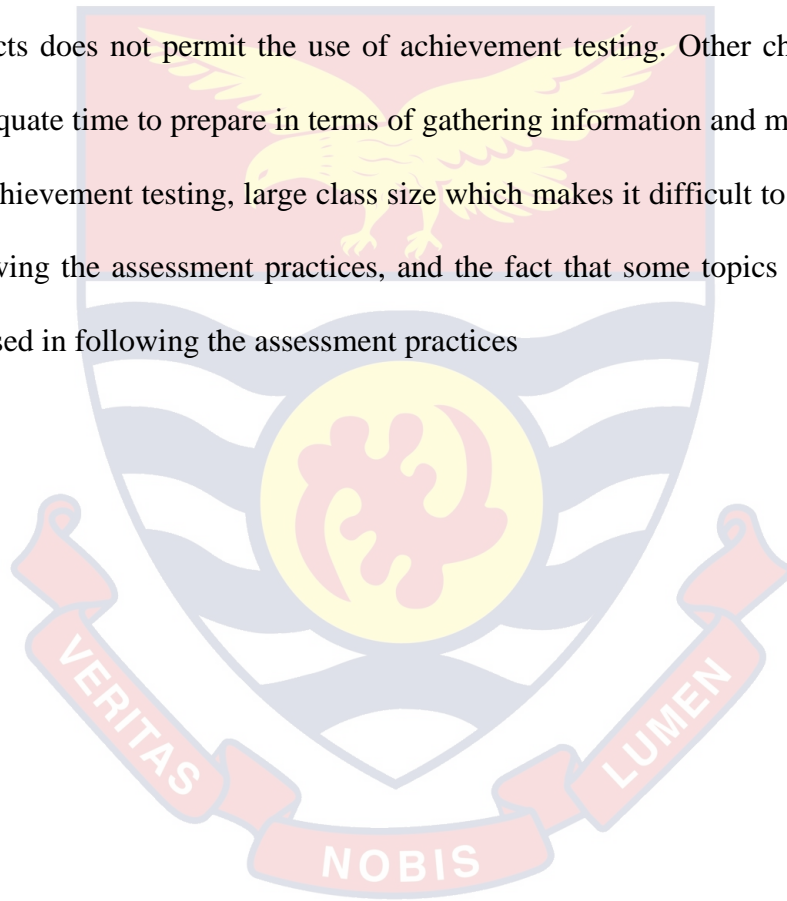
Again, it was found out that, to a high extent, the CRS teachers practiced Assessment for Learning (AfL), Assessment as Learning (AaL), and Assessment of Learning (AoL). In practising Assessment for Learning (AfL), the CRS teachers align instruction with the targeted outcomes, identify particular learning needs of students or groups, create differentiated teaching strategies and learning opportunities for helping individual students move forward in their learning, and provide immediate feedback and direction to students. Also, the CRS teachers practice Assessment as Learning (AaL) by teaching the skills of self assessment,

guiding students to set goals, helping students to develop good professional practice that reflect curriculum outcomes, and helping students to develop clear criteria of good practice. Again, in practising Assessment of Learning (AoL) the CRS teachers provide a rationale for undertaking a particular assessment of learning at a particular point in time, provide clear descriptions of the intended learning, and provide a range of alternative mechanisms for assessing the same outcomes.

The findings depicted that, teachers adhered to the principles of test construction, administration and scoring to a high extent. In adhering to the principles of test construction, the teachers state the purpose of the test, specify the construct to be measured, use a test specification table, and match learning outcomes to the items. In adhering to the principles of test administration, the teachers make students aware of the rules and regulations covering the test, make room for adequate ventilation and lighting, make provision for extra sheets and writing materials, and allow students to start and stop test on time. However, the teachers did not use “DO NOT DISTURB SIGN” at the entrance of classroom. Also, teachers were uncertain as to whether they prepare classroom a day before test is taken. In adhering to the principles of test scoring, the CRS teachers mark papers just after the test is taken, prepare a scoring guide, make sure test takers are kept anonymous, and grade the responses item by item. However, the teachers did not shuffle scripts before scoring, and they did not score a particular item on all papers at a sitting. Again, the teachers did not periodically rescore previously scored items.

Finally, it was realized that, teachers encountered a number of challenges in assessing their students. This is because the school assessment system makes it

difficult for teachers to follow the assessment practices, lack of funds to embark on some activities and projects to help follow the assessment practices, and lack of support from the school authorities in terms of logistics and facilities to help follow the assessment practices. Also, the teachers indicated lack of motivation from school authorities to help teachers follow the assessment practices, difficulty in developing achievement testing task, and inadequate time allotted on the timetable for various subjects does not permit the use of achievement testing. Other challenges included inadequate time to prepare in terms of gathering information and materials to be used for achievement testing, large class size which makes it difficult to assess students in following the assessment practices, and the fact that some topics are difficult to be assessed in following the assessment practices



## 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, conclusions and offers the implications for future research.

#### Summary of the Study

Assessment is a process of measuring behaviours and using the results obtained in taking relevant decisions about a programme (Uguanyi, as cited in Oche, 2014). In educational assessment, information is gathered to determine whether teaching and learning are effective. It is a comprehensive exercise that is carried out both in the course of learning (formative) and at the terminal end of learning (summative). Learners' progression is determined by the outcome of the assessment of the teacher. The teacher determines whether the learner has acquired the intended values, skills, attitudes and knowledge. Decisions relating to the learner, teacher competence and effectiveness of a particular methodology are made through a comprehensive assessment exercise. However, it is evident from studies (Amedahe, 2012; Quagrain, 2014) that, most Ghanaian teachers had limited skills for constructing assessments, the objective and essay type tests, which are the most frequently used instruments in our schools. Amedahe (2012) stated that "teacher - based tests may be based on a number of factors, notably among them are, training in assessment techniques, class size and a particular school's policy in assessment standards with implications on validity and reliability of the assessment results" (p.



112-113). Hence, it can be concluded that most teachers lack the basic skills to assess their students in class. Hence, this study sought to find out the assessment practices of Christian Religious Studies (C.R.S) teachers in Senior High Schools in the Bono, Bono East and Ahafo regions of Ghana.

In order to find answers to the research questions that were formulated to guide the study, the cross-sectional descriptive survey research design was adopted for the study. The study covered all the CRS teachers in Senior High Schools in the Bono, Bono East and Ahafo regions of Ghana. In all, 96 CRS teachers in the Bono, Bono East and Ahafo regions of Ghana were involved in the study. The census method was used to involve all the respondents in the study. The questionnaire was the instrument used in collecting data to address the research questions. The questionnaire was the five point Likert scale type to ensure quick and easy response to the items. It is worthy to note that, the instrument was subjected to reliability and validity test. The data gathered was analysed using the computation of frequencies, percentages, means and standard deviations. The following were the main findings of the study.

### **Key Findings**

1. It was realized that the CRS teachers were knowledgeable in assessment practices. This is because, the teachers involved students in the assessment process, considered students' capabilities during assessment, and agreed that assessment is an integral part of the educational process. Also, the teachers agreed that assessment measures students' knowledge and skills, assessment involves different kinds of assessment, and assessment must be

comprehensive. Again, the teachers agreed that assessment considers risks and benefits of students, assessment is congruent with planned learning, assessment is transparent, and assessment involves classroom evaluation.

2. The findings of the study depict that the CRS teachers used assessment strategies such as: storytelling, presentations, group assignment, individual assessment, homework, peer assessment, questioning, class exercises, and quizzes/ class tests very often. Also, teachers sometimes used projects and the role-play strategies in assessing their students. However, the teachers rarely assessed the work samples of their students (portfolio), and they rarely used experiments/ demonstrations, as well as exhibitions.
3. It was found out that, to a high extent, the CRS teachers practiced Assessment for Learning (AfL), Assessment as Learning (AaL), and Assessment of Learning (AoL). In practising Assessment for Learning (AfL), the CRS teachers align instruction with the targeted outcomes, identify particular learning needs of students or groups, create differentiated teaching strategies and learning opportunities for helping individual students move forward in their learning, and provide immediate feedback and direction to students. Also, the CRS teachers practice Assessment as Learning (AaL) by teaching the skills of self assessment, guiding students to set goals, helping students to develop good professional practice that reflect curriculum outcomes, and helping students to develop clear criteria of good practice. Again, in practising Assessment of Learning (AoL) the CRS teachers provide a rationale for undertaking a particular assessment of learning at a particular

point in time, provide clear descriptions of the intended learning, and provide a range of alternative mechanisms for assessing the same outcomes.

4. The findings depicted that, teachers adhered to the principles of test construction, administration and scoring to a high extent. In adhering to the principles of test construction, the teachers state the purpose of the test, specify the construct to be measured, use a test specification table, and match learning outcomes to the items. In adhering to the principles of test administration, the teachers make students aware of the rules and regulations covering the test, make room for adequate ventilation and lighting, make provision for extra sheets and writing materials, and allow students to start and stop test on time. However, the teachers did not use “DO NOT DISTURB SIGN” at the entrance of classroom. Also, teachers were uncertain as to whether they prepare classroom a day before test is taken. In adhering to the principles of test scoring, the CRS teachers mark papers just after the test is taken, prepare a scoring guide, make sure test takers are kept anonymous, and grade the responses item by item. However, the teachers did not shuffle scripts before scoring, and they did not score a particular item on all papers at a sitting. Again, the teachers did not periodically rescore previously scored items.
5. It was realized that, teachers encountered a number of challenges in assessing their students. This is because the school assessment system makes it difficult for teachers to follow the assessment practices, and that, some of the teachers only punish students when they see that it is time for them to write exams and

tests. Also, the teachers indicated that, lack of funds to embark on some activities and projects to help follow the assessment practices, lack of support from the school authorities in terms of logistics and facilities to help follow the assessment practices, lack of motivation from school authorities to help teachers follow the assessment practices, difficulty in developing achievement testing task, and inadequate time allotted on the timetable for various subjects does not permit the use of achievement testing. Other challenges included inadequate time to prepare in terms of gathering information and materials to be used for achievement testing, large class size which makes it difficult to assess students in following the assessment practices, and the fact that some topics are difficult to be assessed in following the assessment practices.

### **Conclusions**

The following conclusions could be drawn from the findings of the study. In the first place, it can be concluded that, the CRS teachers in the Senior High Schools in the Bono, Bono East and Ahafo regions of Ghana were knowledgeable in assessment practices. The fact that the teachers agreed to most of the statements attest to this fact. This is not surprising because, the findings of the study depicted that most of the teachers had education as their professional teaching qualification, and as the situation pertains in most schools, assessment practices is compulsory for all education students. However, as to whether the CRS teachers were putting their knowledge in assessment practices which they acquired from their training into use is another question and the other objectives of this study sought to ascertain that.

Again, it can be concluded that, the CRS teachers employed a lot of assessment strategies in assessing their students. Some of these strategies included: storytelling, presentations, group assignment, individual assessment, homework, peer assessment, questioning, class exercises, and quizzes/ class tests very often. However, the study realized that the CRS teachers sometimes used projects and the role-play strategies in assessing their students. Perhaps, time constraints do not permit the teachers to use such strategies all the time. Again, it was realized that the CRS teachers rarely assessed the work samples of their students (portfolio), and they rarely used experiments/ demonstrations, as well as exhibitions. This raises a lot of questions. Perhaps, CRS as a subject does not lend itself with the use of some of these assessment strategies. It could also be that the teachers are not conversant with the use of such strategies in assessing their students.

Concerning the extent to which CRS teachers practice Assessment for Learning (AfL), Assessment as Learning (AaL), and Assessment of Learning (AoL) in Senior High Schools, it can be concluded that, to a high extent, the CRS teachers practiced Assessment for Learning (AfL), Assessment as Learning (AaL), and Assessment of LEARNING (AoL). This is not surprising because from time to time, teachers need to assess their students using both formative and summative assessments procedures for the purposes of making decisions regarding how well each student possesses the constructs he or she needs to possess. However, although the teachers agreed that they practiced Assessment for Learning (AfL), Assessment as Learning (AaL), and Assessment of Learning (AoL), it was realized that, the mean of standard deviations that was attained for Assessment as Learning (AaL) was the

highest indicating that there were variations indicating that, not all the teachers practiced Assessment as Learning (AaL). This raises a lot of questions. Perhaps, not all the teachers are conversant with the practice of Assessment as Learning (AaL). Hence the use of observation guide could have helped to obtain first hand information regarding teachers' familiarity with Assessment as Learning (AaL) and the extent to which they practiced Assessment as Learning (AaL).

Also, it can be concluded that, the CRS teachers adhered to the principles of test construction, administration and scoring to a high extent. However, in adhering to the principles of test construction, the CRS teachers indicated that they construct test items when it is time to assess, and at the same time write test items at least two weeks before time for test administration. This is a contradiction which raises a lot of questions. How can teachers claim to write test items at least two weeks before time for test administration and at the same time construct test items when it is time to assess? Perhaps, the teachers were not frank in responding to the items and may not have realized that they contradicted themselves in ticking the "agreed" items. Also, although the CRS teachers adhered to the principles of test administration to a high extent, they did not prepare classroom a day before test is taken, and they did not use the "DO NOT DISTURB SIGN" at the entrance of classroom. It could be that, perhaps, the teachers do not know that there is the need for them to put the "DO NOT DISTURB SIGN" during test administration. Also, teachers' inability to prepare classroom a day before test is taken may be due to lack of infrastructure. Again, in adhering to the principles of test scoring, teachers did not shuffle scripts



before scoring, and they did not score a particular item on all papers at a sitting. Again, the teachers did not periodically rescore previously scored items.

In relation to the challenges of assessment practices, it can be concluded that, CRS teachers encountered a number of challenges in assessing their students. For instance, the teachers indicated that the school assessment system makes it difficult for them to follow the assessment practices. This raises a lot of questions because the study already established that, the CRS teachers were knowledgeable in assessment practices. Therefore, it could be that the school peculiar challenges made it difficult for them to practice what they know. It is not surprising that some of the teachers indicated that some teachers only punish students when they see that it is time for them to write exams and tests. Such activities tend to de-motivate teachers and also hampers the practice of assessment in our schools. The teachers mentioned lack of funds to embark on some activities and projects to help follow the assessment practices, and lack of support from the school authorities in terms of logistics and facilities to help follow the assessment practices. Also, the teachers indicated lack of motivation from school authorities to help teachers follow the assessment practices, difficulty in developing achievement testing task, and inadequate time allotted on the timetable for various subjects does not permit the use of achievement testing. Other challenges included inadequate time to prepare in terms of gathering information and materials to be used for achievement testing, large class size which makes it difficult to assess students in following the assessment practices, and the fact that some topics are difficult to be assessed in following the assessment practices.

## Recommendations

Based on the findings and conclusions drawn from the study, the following recommendations have been made.

1. It is commendable that, the CRS teachers were knowledgeable in assessment practices. This was so because most of the teachers had education as their professional teaching qualification, and as the situation pertains in most schools, assessment practices as a subject, is compulsory for all education students. Therefore, the study recommends that, Ministry of Education (MoE) and the Ghana Education Service (GES) should ensure that CRS as a subject is taught by professional teachers with education background because they have done assessment practices and that will enhance their knowledge in assessment practices compared with their counterparts who do not have background in education.
2. Again, the CRS teachers employed a lot of assessment strategies in assessing their students. However, it is recommended that, workshops should be organized for CRS teachers who are already in the field of teaching on assessment strategies such as: projects, the role-play, and assessing the work samples of students (portfolio). Also, the various Colleges of Education as well as universities should provide sufficient training to trainee teachers on how to assess their students using these strategies. Teachers should also be encouraged to adopt such strategies and should not be discouraged to use such strategies due to time constraints. However, the use of experiment as an assessment strategy may be difficult to be used by CRS teachers considering the nature of the

subject compared with other subjects such as physics, chemistry, biology, etc. that have laboratories and hence lend themselves with the use of experiments.

3. It is commendable that, to a high extent, the CRS teachers practiced Assessment for Learning (AfL), Assessment as Learning (AaL), and Assessment of Learning (AoL). The study recommends that, the Ministry of Education (MoE) and the Ghana Education Service (GES) should organize in-service training for teachers concerning the practice of Assessment as Learning (AaL). Teachers should be given training on how to teach the skills of self assessment, guide students to set goals, and help students to develop good professional practice that reflect curriculum outcomes. Teachers should also develop clear criteria of good practice, guide students to develop self-monitoring mechanisms to question their own thinking, and provide student with challenging opportunities to practice to become confident and competent self assessors.
4. It is suggested that teachers should write test items at least two weeks before time for test administration so that they can have enough time to read over and correct wrongly constructed items before test is administered. This would also ensure that teachers have enough time to ensure that the test covers all the major areas that need to be examined. Also, teachers should prepare classroom a day before test is taken and in the case of lack of infrastructure, then classroom should be made ready and prepared hours before test is taken. Teachers should also use the “DO NOT DISTURB SIGN” at the entrance of classroom during test administration. Again, teachers should shuffle scripts before scoring, and

should score a particular item on all papers at a sitting. Again, the teachers should periodically rescore previously scored items.

5. It is recommended that, the Ministry of Education (MoE) and the Ghana Education Service (GES) should make funds available to the schools so that they can have enough infrastructure and logistics in order to embark on some activities and projects to help follow the assessment practices. Head teachers should make the Parent-Teacher Associations and old student unions aware of their predicaments and encourage them to support them with their needs if help is not coming from government. Also, head teachers should discourage teachers to desist from the behavior of punishing students when it time to write exams or tests because such activities de-motivates teachers and makes it difficult for them to follow the assessment practices. Again, since the problem of large class sizes makes it difficult to assess students in following the assessment practices, head teachers through the District Directors of Education as well as the Regional Directors of Education should ensure that the Ministry of Education recruits more teachers so that the various class sizes can be reduced as much as possible. This will enable teachers assess students following the assessment practices.

#### **Areas for Further Research**

This study examined the assessment practices of Christian Religious Studies (C.R.S) teachers in Senior High Schools in the Bono, Bono East and Ahafo regions of Ghana. The study could be replicated in colleges and institutions in the country to find out what persists there. Also, the research was conducted using the

questionnaire as the only research instrument so future studies should incorporate other instruments like the interview, observation etc. in order to have first hand information and in-depth information. This will also make the study interactive with the respondents. Future studies may consider investigating teachers' familiarity with Assessment as Learning (AaL) as well as the extent to which teachers practice Assessment as Learning (AaL) as an assessment strategy.



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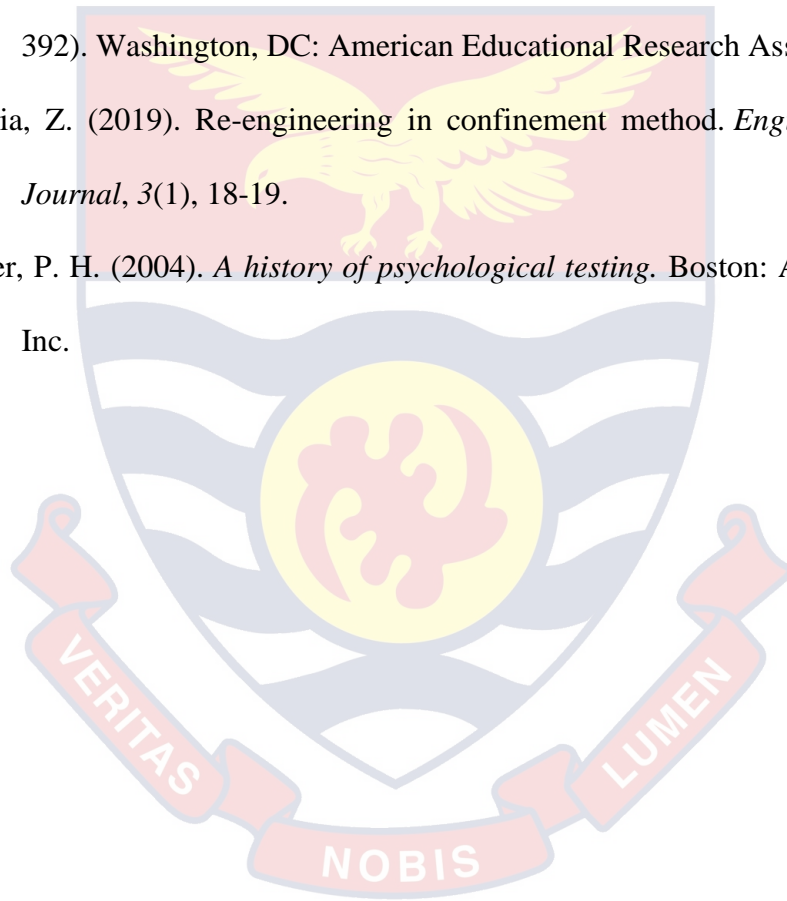
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**APPENDIX: QUESTIONNAIRE FOR TEACHERS**  
**UNIVERSITY OF CAPE COAST**  
**COLLEGE OF EDUCATION STUDIES**  
**DEPARTMENT OF ART EDUCATION**

**Dear Respondent**

The study seeks to investigate the *Assessment Practices of Christian Religious Studies Teachers in Senior High Schools*.

Your full input will help make informed decisions about the **Assessment Practices**. It would therefore be appreciated if you could provide responses to **all** items on the questionnaire, and do it **honestly**. You are assured of complete **confidentiality** and **anonymity** of all information provided. **Nothing** will ever be published or reported that will associate your name and/or school with your responses to the survey questions. Therefore, you **should not** write your name, and/or school name on any part of the instrument. Your participation in this study is **completely voluntary**. Again, questions on this survey instrument have gone through a thorough review by professionals at the University of Cape Coast, and have been declared **ethical** for educational research. You hereby consent to voluntarily participate in this study by providing responses to items of the various sections of this instrument. Thank You.

**SECTION A: DEMOGRAPHIC CHARACTERISTICS**

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

**1. Gender:**

a) Male [ ]

b) Female [ ]

**2. Age of Respondents:**

a. 20-29 years [ ]

b. 30-39 years [ ]

c. 40 -49 years. [ ]

d. 50-59 years [ ]

e. 60 years and above [ ]

**3. Number of years in teaching service**

a) Under 5 years [ ]

b) 6 – 10 years [ ]

c) Above 10 years [ ]

**4. Highest academic qualification:**

a. Bachelor's Degree [ ]

b. Master of Arts [ ]

c. Master of Philosophy [ ]

d. Other (specify).....

Please indicate your **Major** and **Minor** subjects respectively in relation to question 4.

Major..... Minor.....

**5. 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: KNOWLEDGE LEVEL OF CRS TEACHERS IN  
ASSESSMENT PRACTICES**

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

|     | <b>Knowledge of CRS teachers in Assessment</b>               | <b>SA</b> | <b>A</b> | <b>U</b> | <b>D</b> | <b>SD</b> |
|-----|--|-----------|----------|----------|----------|-----------|
| 6.  | Students must be involved in the assessment process.         |           |          |          |          |           |
| 7.  | Students' capabilities must be considered during assessment. |           |          |          |          |           |
| 8.  | Assessment is an integral part of the educational process.   |           |          |          |          |           |
| 9.  | Assessment measures students' knowledge and skills.          |           |          |          |          |           |
| 10. | Assessment involves different kinds of assessment.           |           |          |          |          |           |
| 11. | Assessment must be comprehensive.                            |           |          |          |          |           |
| 12. | Assessment considers risks and benefits of students.         |           |          |          |          |           |
| 13. | Assessment is congruent with planned learning.               |           |          |          |          |           |
| 14. | Assessment is transparent.                                   |           |          |          |          |           |
| 15. | Assessment involves classroom evaluation.                    |           |          |          |          |           |

**SECTION C: ASSESSMENT STRATEGIES CRS TEACHERS USE IN  
ASSESSING THEIR STUDENTS**

Please tick (✓) the appropriate box to indicate your opinion on these statements. Key: Very Often (VO); Often (O); Sometimes (S); Rarely (R); and Never (N) to the statements below.

|     | <b>Statement: As a CRS teacher, I adopt the following assessment strategies:</b> | <b>VO</b> | <b>O</b> | <b>S</b> | <b>R</b> | <b>N</b> |
|-----|--|-----------|----------|----------|----------|----------|
| 16. | Assessing work samples (Portfolio)   |           |          |          |          |          |
| 17. | Role-Play  |           |          |          |          |          |
| 18. | Experiments/Demonstrations   |           |          |          |          |          |
| 19. | Projects   |           |          |          |          |          |
| 20. | Exhibitions  |           |          |          |          |          |
| 21. | Story Telling  |           |          |          |          |          |
| 22. | Presentations  |           |          |          |          |          |
| 23. | Group assignment   |           |          |          |          |          |
| 24. | Individual assessment  |           |          |          |          |          |
| 25. | Homework   |           |          |          |          |          |
| 26. | Peer assessment  |           |          |          |          |          |
| 27. | Questioning  |           |          |          |          |          |
| 28. | Class exercises  |           |          |          |          |          |
| 29. | Quizzes/class tests  |           |          |          |          |          |

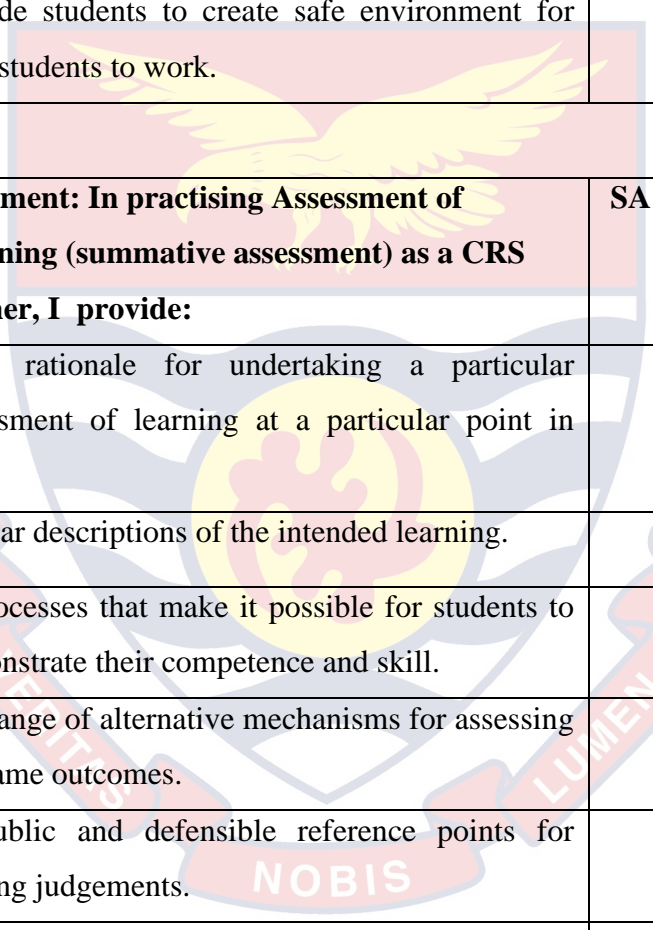
Please specify any other assessment strategies .....

.....

**SECTION D: EXTENT TO WHICH CRS TEACHERS PRACTICE  
ASSESSMENT FOR LEARNING, ASSESSMENT AS LEARNING, AND  
ASSESSMENT OF LEARNING**

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

|  | <b>Statement: As a CRS teacher, I adopt the following practices of Assessment for Learning (formative assessment):</b>                 | <b>SA</b> | <b>A</b> | <b>U</b> | <b>D</b> | <b>SD</b> |
|--|--|-----------|----------|----------|----------|-----------|
| 30.  | I align instruction with the targeted outcomes.  |           |          |          |          |           |
| 31.  | I identify particular learning needs of students or groups.  |           |          |          |          |           |
| 32.  | I select and adapt materials and resources.  |           |          |          |          |           |
| 33.  | I create differentiated teaching strategies and learning opportunities for helping individual students move forward in their learning. |           |          |          |          |           |
| 34.  | I provide immediate feedback and direction to students.  |           |          |          |          |           |
| <b>Statement: As a CRS teacher, I adopt the following practices of Assessment as Learning:</b> |  |           |          |          |          |           |
| 35.  | I teach the skills of self assessment.   |           |          |          |          |           |
| 36.  | I guide students to set goals.   |           |          |          |          |           |
| 37.  | I help students to develop good professional practice that reflect curriculum outcomes.  |           |          |          |          |           |
| 38.  | I help students to develop clear criteria of good practice.  |           |          |          |          |           |

|   |   |           |          |          |          |           |
|---|---|-----------|----------|----------|----------|-----------|
| 39.   | I guide students to develop self-monitoring mechanisms to question their own thinking.                          |           |          |          |          |           |
| 40.   | I provide students with challenging opportunities to practice to become confident and competent self assessors. |           |          |          |          |           |
| 41.   | I monitor students' metacognitive processes and learning and provide feedback.                                  |           |          |          |          |           |
| 42.   | I guide students to create safe environment for their students to work.   |           |          |          |          |           |
|  |   |           |          |          |          |           |
|   | <b>Statement: In practising Assessment of Learning (summative assessment) as a CRS teacher, I provide:</b>      | <b>SA</b> | <b>A</b> | <b>U</b> | <b>D</b> | <b>SD</b> |
| 43.   | ... a rationale for undertaking a particular assessment of learning at a particular point in time.              |           |          |          |          |           |
| 44.   | ... clear descriptions of the intended learning.  |           |          |          |          |           |
| 45.   | ... processes that make it possible for students to demonstrate their competence and skill.                     |           |          |          |          |           |
| 46.   | ... a range of alternative mechanisms for assessing the same outcomes.  |           |          |          |          |           |
| 47.   | ... public and defensible reference points for making judgements.   |           |          |          |          |           |
| 48.   | ... transparent approaches to interpretation.   |           |          |          |          |           |
| 49.   | ... descriptions of the assessment process.   |           |          |          |          |           |

**SECTION E: HOW CRS TEACHERS ADHERE TO THE PRINCIPLES OF  
TEST CONSTRUCTION, ADMINISTRATION AND SCORING**

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

**CONSTRUCTING PRINCIPLE**

|     | <b>Statement: As a CRS teacher, I do the following when constructing test items...</b> | <b>SA</b> | <b>A</b> | <b>U</b> | <b>D</b> | <b>SD</b> |
|-----|--|-----------|----------|----------|----------|-----------|
| 50. | I state the purpose of the test.   |           |          |          |          |           |
| 51. | I specify the construct to be measured.  |           |          |          |          |           |
| 52. | I use a test specification table.  |           |          |          |          |           |
| 53. | I match learning outcomes to the items.  |           |          |          |          |           |
| 54. | I construct test items when it is time to assess.                                      |           |          |          |          |           |
| 55. | I ask colleagues in subject area to review test items.                                 |           |          |          |          |           |
| 56. | I consider the meaning of wording against different ethnic background.                 |           |          |          |          |           |
| 57. | I consider students' language proficiency.   |           |          |          |          |           |
| 58. | I consider variation of students with respect to physical disability.                  |           |          |          |          |           |
| 59. | I consider the time individual will spend on a question.                               |           |          |          |          |           |
| 60. | I try solving the questions myself to determine the time required.                     |           |          |          |          |           |
| 61. | I provide clear and simple instructions on how test is to be answered.                 |           |          |          |          |           |
| 62. | I evaluate test items given to the students.   |           |          |          |          |           |

|     |  |  |  |  |  |  |
|-----|--|--|--|--|--|--|
| 63. | I write test items at least two weeks before time for test administration. |  |  |  |  |  |
| 64. | I write more test items than needed.                                       |  |  |  |  |  |
| 65. | I follow the principles of test construction for each format.              |  |  |  |  |  |

**ADMINISTRATION PRINCIPLE**

|     | <b>Statement: As a CRS teacher, I do the following when administering test items...</b> | SA | A | U | D | SD |
|-----|---|----|---|---|---|----|
| 66. | I make students aware of the rules and regulations covering the test.                   |    |   |   |   |    |
| 67. | I make room for adequate ventilation and lighting.                                      |    |   |   |   |    |
| 68. | I make provision for extra sheets and writing materials.                                |    |   |   |   |    |
| 69. | I allow students to start and stop test on time.  |    |   |   |   |    |
| 70. | I give more instructions during the time the students are taking the test.              |    |   |   |   |    |
| 71. | I inform students in advance about areas for the test.                                  |    |   |   |   |    |
| 72. | I prepare classroom a day before test is taken.   |    |   |   |   |    |
| 73. | I inform students about the test format.  |    |   |   |   |    |
| 74. | I make provision for emergencies during the   |    |   |   |   |    |



|     |   |  |  |  |  |  |
|-----|---|--|--|--|--|--|
|     | time the test is taken.                                   |  |  |  |  |  |
| 75. | I proof read all test items.                              |  |  |  |  |  |
| 76. | I use “DO NOT DISTURB SIGN” at the entrance of classroom. |  |  |  |  |  |

**SCORING PRINCIPLE**

|     | <b>Statement: As a CRS teacher, I do the following when scoring test items ....</b>      | SA | A | U | D | SD |
|-----|--|----|---|---|---|----|
| 77. | I mark papers just after the test is taken.  |    |   |   |   |    |
| 78. | I prepare a scoring guide.   |    |   |   |   |    |
| 79. | I make sure test takers are kept anonymous.  |    |   |   |   |    |
| 80. | I grade the responses item by item.  |    |   |   |   |    |
| 81. | I keep scores of previous items out of sight.  |    |   |   |   |    |
| 82. | I periodically rescore previously scored items.  |    |   |   |   |    |
| 83. | I shuffle scripts before scoring.  |    |   |   |   |    |
| 84. | I score essay test when I am physically sound and mentally alert in a sound environment. |    |   |   |   |    |
| 85. | I constantly follow the scoring guide.   |    |   |   |   |    |
| 86. | I score a particular item on all papers at a sitting.                                    |    |   |   |   |    |
| 87. | I provide comments and correct errors on scripts.  |    |   |   |   |    |

**SECTION F: CHALLENGES OF ASSESSMENT PRACTICES**

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

|     | <b>Statement: Which of the following challenges do you encounter in your assessment practices as a CRS teacher?</b>          | <b>SA</b> | <b>A</b> | <b>U</b> | <b>D</b> | <b>SD</b> |
|-----|--|-----------|----------|----------|----------|-----------|
| 88. | The school assessment system makes it difficult for me to follow the assessment practices.                                   |           |          |          |          |           |
| 89. | Lack of funds to embark on some activities and projects to help to follow the assessment practices.                          |           |          |          |          |           |
| 90. | Lack of support from the school authorities in terms of logistics and facilities to help to follow the assessment practices. |           |          |          |          |           |
| 91. | Lack of motivation from school authorities to help me follow the assessment practices.                                       |           |          |          |          |           |
| 92. | Developing achievement testing task is difficult.  |           |          |          |          |           |
| 93. | Inadequate time allotted on the timetable for various subjects does not permit the use of achievement testing.               |           |          |          |          |           |
| 94. | Inadequate time to prepare in terms of gathering information and materials to be used for achievement testing.               |           |          |          |          |           |

|     |   |  |  |  |  |  |
|-----|---|--|--|--|--|--|
| 95. | Large class size makes it difficult to assess students in following the assessment practices. |  |  |  |  |  |
| 96. | Some topics are difficult to be assessed in following the assessment practices                |  |  |  |  |  |

Please specify any other challenges .....

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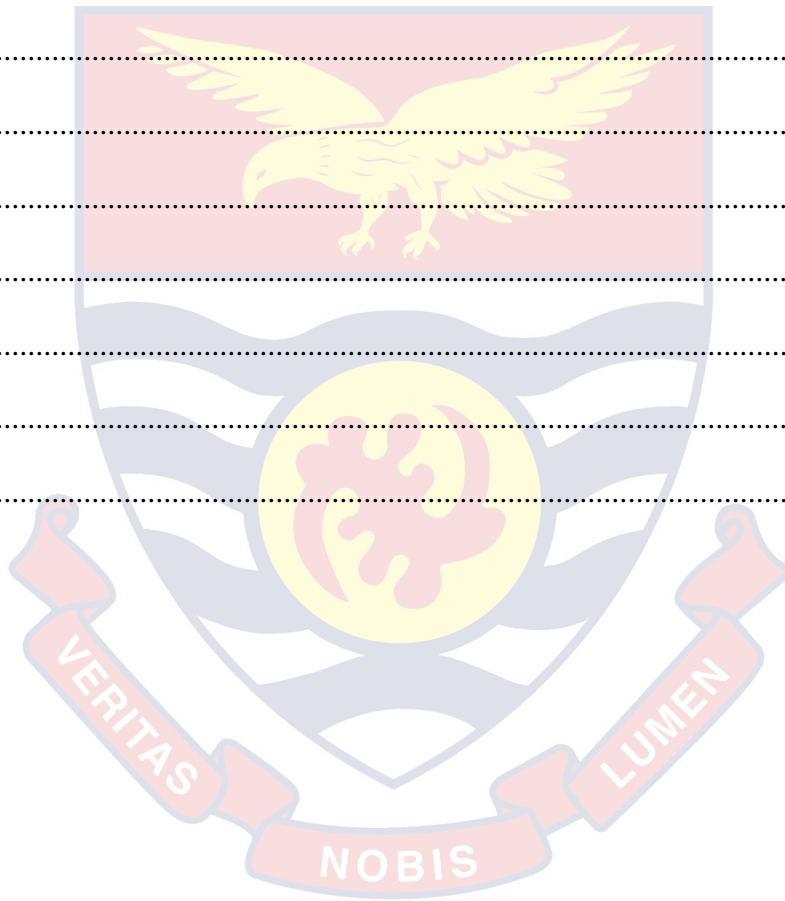
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**Thank You**