USING THE CONCERNS BASED ADOPTION MODEL (CBAM) TO EVALUATE TEACHERS' CONCERNS ABOUT THE CAC IN THREE (3) PRIMARY SCHOOLS IN THE CARONI EDUCATION DISTRICT.

EDRS6900: Project Report

submitted in Partial Fulfillment of the Requirements for the Degree of

Master of Education [Concentration in Youth Guidance]

of

The University of the West Indies

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ABSTRACT

Using the Concerns Based Adoption Model (CBAM) to Evaluate Teachers' Concerns about the CAC in Three (3) Primary Schools in the Caroni Education District.

Anycia Ramoutar-Bhawan

The study used the Concerns-Based Adoption Model as its theoretical framework to evaluate the concerns of primary school teachers regarding the implementation of Continuous Assessment Component (CAC) of the Secondary Entrance Assessment (SEA). This multi-site case study employed a convergent parallel mixed methods design which was used to address the research questions. Both quantitative (Stages of Concern Questionnaire (SoCQ)) and qualitative data (interviews) were collected in a parallel manner, analyzed separately, and then merged. A purposive sampling of eight (8) teachers was selected for this study from three (3) primary schools in the Caroni Educational District.

The major findings of this study indicated that the teachers' most intense concerns were in the awareness, informational, personal, and management stages of concern. The teachers had intense self concerns (need for information on training,

support systems, school policy for (CAC) and task concerns (time management, resource allocation, management of assessment system).

Recommendations based on the findings in this study and for further research are made, for policy implementation in Trinidad and Tobago with an emphasis on teacher involvement in the educational process and also on improving CAC policy to better achieve its goals.

Keywords: Assessment, Teachers' Concerns, Concerns Based Adoption Model (CBAM), Continuous Assessment Component, Implementation

ACKNOWLEDGEMENTS

There are many people who made this accomplishment possible. I would like to gratefully acknowledge these people for their roles in making my study a reality:-

- My Heavenly Father, Jesus Christ for health, strength and intellect in this journey.
- My supervisor, Dr. Jerome De Lisle, has been a source of guidance and support to me from the beginning of this thesis. He has helped me to better understand my research and analysis through his thought-provoking questions. He has taught me so much about the research process, assessment, education, and writing, and I have been lucky to learn from him. I don't know how to thank Dr. Jerome De Lisle, my hero! You will never know how much you taught me, I'm so glad we shared this incredible journey.
- Ministry of Education for granting permission to conduct this study
- The teachers, principals, and other key informants for their time taken to complete the questionnaires and participate in the interview sessions, and also listening to me talk about my study. This study would not have been undertaken and completed without your cooperation, patience, time and invaluable experiences.
- My many friends especially Janet, who provided constant encouragement and "thesis" study partner.
- My parents and siblings for their support throughout the writing of this thesis for providing the motivation to embark on and complete this journey.

- My loving husband, thank you for all your support and attending to all my needs during this thesis writing process. You sacrificed so much for my success!

DEDICATION

To my husband, Paul Bhawan, his love and support provided me the strength and will power necessary to achieve this goal. He sacrificed so much and asked for little during this long journey. Thank you for your patience and dedication!

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LIST OF ABBREVIATIONS

CAC	Continuous Assessment Component
CBAM	Concern-Based Adoption Model
LoU	Levels of Use
MOE	Ministry of Education
SEA	Secondary Entrance Assessment
SoC	Stages of Concern
SoCQ	Stages of Concern Questionnaire

Chapter 1: Introduction

Background

Assessment has become a critical component of education in today's policy environment. School practices are largely conditioned by the traditional vision of assessment characterized by tests, examinations, selection, grades and marks (Buhagiar, 2007). However within recent times, the assessment of student achievement is changing as today's students face a world that demands new knowledge, skills, and behaviours that have not yet been defined in the information and knowledge age (Segers et al 2003).

Lambert and Lines (2000) defined assessment as "the process of gathering, interpreting, recording, and using information about pupils' responses to educational tasks" (p. 4). They suggested that the four purposes of assessment are: a) to provide feedback to teachers and students about progress to support future learning, b) to provide information about the level of pupils' achievement at points during and at the end of school, c) to provide the means for selecting by qualification, and d) to contribute to the information on which judgments are made concerning the effectiveness or quality of individuals and institutions in the system as a whole.

Nagy (2000) proclaimed the three roles of assessment as gate keeping, accountability, and instructional diagnosis. For example, policymakers use assessments to monitor the quality of education and to formulate policies. Administrators and principals identify program strengths and weaknesses to plan and improve programs. Teachers use assessments to perform individual diagnosis, monitor student progress, carry out curriculum evaluation, and determine grades. Finally, parents and students use assessments to assess student strengths and

weaknesses, determine school accountability, and make informed educational and career decisions (NCREL, 1991).

According to Wiliam and Thompson (2008, 59) three functions are served by educational assessments-- supporting learning (formative), certifying the achievements or potential of individuals (summative), and evaluating the quality of educational institutions or programs (evaluative). Wiliam (2007) further emphasizes that assessment information helps learning when used by teachers and students to modify teaching and learning activities. In their recent writing on integrating assessment practices, Wiliam and Thompson (2008, 64) further articulate this view:

> The "big idea" is that evidence about student learning is used to adjust instruction to better meet student needs— in other words, that teaching is *adaptive* to the student's learning needs.

Unfortunately, such seamlessness between teaching, learning, and assessment that should occur naturally in the classroom (Ellis 2001; Perrone 1994, 11-13; Simmons 1994, 22-23; Wragg 1997) is not at the center of the learning process.

Recent trends in educational assessment have emphasized the importance of ongoing classroom assessment and not just the assigning of a grade at the end of learning, as has been traditionally done (Davies, 2008; McMillan, 2007; O'Connor, 2007). Current trends in assessment focus on judging student progress in three ways: **assessment *for* learning, assessment *as* learning** and **assessment *of* learning**. Each assessment approach serves a different purpose.

(a) ***Assessment of learning***: This is a summative assessment (Cole & Chan, 1987) and can pressurize teachers to encourage students to practice prior to tests in order to raise their scores (Popham, cited in Behar- Horenstein, & Seabert, 2002).

(b) ***Assessment for learning***: This assessment shifts the focus from making judgments (at the end of a unit or course) to create descriptions (such as keeping portfolios, keeping records of reflective interviews and keeping anecdotal records of students (Earl, 2003). Assessment for learning support ongoing teaching and learning (Assessment Reform Group, as cited in Price, Pierson, & Light, 2011; Heritage, as cited in Price, Pierson, & Light, 2011).

(c) ***Assessment as learning***: In this type of assessment the student is actively engaged in making sense of information and relating it to his or her prior knowledge and in mastering the skills involved. Making sense of the process is called metacognition. It occurs when students personally monitor what they are learning. They use the feedback from this monitoring to make judgments, adaptations and even major changes in what they understand (Earl, 2003).

In our educational system in Trinidad and Tobago, assessment in the primary school has traditionally been linked with formal exams, such as: formally school leaving exam followed by Common Entrance and presently Secondary Entrance Assessment. According to Andrews, Keller & Wideen, 1998, "What is taught and learned in schools is often determined by what is being tested."

Black et al. (2003) noted that when external tests are involved, such as the Secondary Entrance Assessment, the process can move 'from developing understanding to ''teaching to the test''. More generally, the pressures exerted by current external testing and assessment requirements are not fully consistent with good formative practices' (Black et al., 2003, p. 56). The high-stakes nature of most examinations means they exert a backwash effect on the education system in terms of what is taught (resulting in "teaching to the test" or even "teaching the test") and learned,

having an impact, for better or worse, on the skills and knowledge profile of graduates (West and Crighton, 1999). These tests have potentially negative consequences for individual students, particularly those from disadvantaged groups, who may be excluded from the education of their choice (or any kind of education at all) on the basis of their performance (Greaney and Kellaghan, 1995).

Secondary Entrance Assessment is presently taken by students in Trinidad and Tobago in Standard five (5) which marks the end of their seven years in primary school. The examination is consist of three subject areas which include:- Mathematics, Language Arts and Creative Writing. This high stake exam results is used for placement purposes in secondary schools. Therefore, as a result, the Continuous Assessment Programme (CAP) has been placed on a back burner in the classrooms since there is more emphasis placed on "evaluation of learning", rather than "evaluation for learning".

The Continuous Assessment Programme (CAP) was installed in the Primary School system of Trinidad and Tobago in 1998, initially as a pilot followed by —full implementation in 2000. The programme was developed as part of the Fourth Basic Education reform project and its recommendations for upgrading nationwide testing, assessment and evaluation (World Bank, 1995). Although information on Continuous Assessment Programs (CAP) was made available to teachers, this approach (constructivist) was not implemented in the classrooms since professional development was seriously lacking in this implementation. According to Gardner 2006, continuous assessment is an important aspect of teacher's classroom work and that attention to improving its practice can enhance learners' achievement.

In April 2012, the Ministry of Education Curriculum Planning & Development Division introduced Continuous Assessment Component (CAC) of the Secondary Entrance Assessment (SEA). Continuous Assessment, a term applied to ongoing

Classroom Assessment using alternatives to testing, has emerged as an important aspect of the educational portfolio (Resnick and Resnick, 1992; Shepard, 1997; Wiggins, 1989). Le Grange and Reddy (1998) defined continuous assessment as "the assessment of the whole learner on an ongoing basis over a period of time, where cumulative judgments of the learner's abilities in specific areas are made in order to facilitate further positive learning" (p. 11) whereas Mazibuko and Ginindza (2005:78) describe continuous assessment as a formative evaluation measure conducted during the teaching and learning process with "the aim of influencing and informing the overall instructional process."

Continuous assessment has been used in many schools around the world to enhance students' learning. Nitko (1994) identified four models in which to combine continuous assessment results and national examination results:

1. Continuous assessments are used only at the school level but do not count toward certification.
2. Continuous assessments are used toward certification and selection using a compensatory model.
3. Continuous assessments contribute toward certification or selection, but fix the percent weight (eg.40 %).
4. Continuous assessment scores used for certification and examinations is used for selection.

Continuous Assessment Component (CAC) of the Secondary Entrance Assessment (SEA) for Primary Schools of Trinidad and Tobago 'is a programme consisting of curricula objectives for achieving skills, competencies and content, not previously subject to assessment on the national scale' (Trinidad and Tobago

Guardian, 2012, June 3). The programme further claims that "these competencies and skills will be gained by students as they participate in active, hands-on learning, and such learning is increased by supportive, detailed feedback provided by the teachers from practices and assessments before the final assessment is done." (Trinidad and Tobago Newsday, 2012, September 26). The CAC is a strategy for assessment of knowledge, understanding, skills and attitudes that relies on the classroom teacher and the classroom situation to achieve authentic assessment of student learning, it is not a Continuous Assessment Programme but an assessment plan with elements that encourage developmental learning, that relies on the classroom teacher and the classroom situation to encourage authentic assessment of and for student learning and thereby achieve the desired value outcomes (Trinidad and Tobago (Trinidad and Tobago Newsday, 2012, September 26).

The introduction of an innovation into an educational system presents many new challenges (Hall & Hord, 1987; 2001), which may result in teachers experiencing various feelings, attitudes, and beliefs (Holloway, 2003). In order to affect change, these factors need to be understood and addressed during the change process (Holloway, 2003). In addition, for significant change to occur, educational innovations must align with teachers' personal beliefs and pedagogical preference (Nash, 2002). Nitko (1995:321) states that any plan for continuous assessment is only as strong as the teacher's ability to use it appropriately. This illustrates that teachers are the key players as implementers of any innovation in the classrooms.

It is quite evident that educators have attempted to improve the educational field through the adoption of various approaches and strategies due mainly to the increasing criticism about high stakes examinations but with limited success on the broad scale of change. The importance of taking into account teachers' own attitudes

and perceptions in situations where they are expected to implement new and mandatory policies and practices are of major importance for the success of the innovation process (Guskey 1988, Houston 1990, Wittrock 1986, Senger 1999). Research has shown that concerns exert a powerful influence on the implementation of reforms and determine the type of assistance that teachers may need in the adoption process. Innovations that are consistent with the belief systems of teachers have a greater chance of adoption; innovations that are more radical will create greater instability and more resistance from teachers.

As teacher readiness is a key to assessing a teacher's ability to initiate, develop or adopt a given innovation, it is useful for administrators and educators to understand teachers' concerns, both before and during the implementation phase of an innovation (Fullan 1999). Teachers develop concerns in relation to new programs or innovations that are related to their daily job (Hall & Hord, 2001). These concerns are teachers' thoughts, worries, and reactions. Teachers have a significant role in implementing any innovation in the classroom. The concerns people have regarding any innovation may determine the degree of innovation success more than its objective features (Hall & Hord, 2001; Van Den Berg, 1993).

The research on change process addresses the importance of identifying individuals' concerns, perceptions, feelings, and attitudes towards the implementation of an innovation (Hall, Geogre, & Rutherford, 1979). "According to Rogers and Marcus (1989), in order to effectively manage change, the human component must be understood and given top priority" (Hawes, 1993). Therefore, the concerns of teachers about the implantation of CAC must be identified, and appropriate interventions must be provided to assist teachers in implementing this innovation effectively.

Statement of the Problem

Continuous Assessment Component (CAC) of the Secondary Entrance Assessment (SEA) is being implemented by the Ministry of Education with the intention of improving learning and guiding teaching in particular and raising the standard of education in general. In addition to this, it is assumed that CAC would create opportunities for classroom teachers to assess their students' oral skills in a gradual and relaxed manner. Consequently, in an educational system, the basic unit of change in any reform movement designed to improve student achievement is the individual teacher in the context of their school environment (Eisner, 1998; Hall & Hord, 2001).

According to Hall & Hord, 1987; concerns of individuals about the implementation of an innovation (the change) must be the addressed if change is to be facilitated. "Neglecting to understand how individuals experience the change process is the primary reason (school) reforms are unsuccessful. Educational change depends on what teachers do and think-it's a simple and complex as that" (Fullan, 1991, p.117). Therefore, the concerns, needs and perceptions of those required to implement the change must be understood by the individuals who are required to implement the change as well as by the individuals who must oversee the change. Understanding the views and opinions of teachers through the necessary feedback mechanisms is therefore critical to the success of the implementation of the Continuous Assessment Component (CAC) of the Secondary Entrance Assessment (SEA) and could provide recommendations for the introduction of future educational policies.

The success of educational change is dependent on what the teacher thinks and does (Hammonds, 2002). It therefore becomes expedient for teacher concerns to be

identified and addressed to ensure successful implementation of any educational change. The thrust of the study was, determine the nature and dynamics of teachers' concerns on the implementation of the Continuous Assessment Component (CAC) of the Secondary Entrance Assessment (SEA) in three (3) Primary Schools in the Caroni Education District in Trinidad and Tobago.

Purpose of the Study

The Continuous Assessment Component (CAC) of the Secondary Entrance Assessment (SEA) is a new innovation; therefore not much research has been done in this area. This innovation specifically deals with assessment of students in the primary schools, be it, summative or formative, formal or informal. Therefore, the purpose of this Mixed Methods research is to evaluate teachers' concerns about the implementation of the Continuous Assessment Component (CAC) of the Secondary Entrance Assessment (SEA). This study utilises the Concerns-Based Adoption Model (CBAM) methodology that conceptualizes and facilitates the education change process (Hall & Hord, 2001).

Significance of the Study

The intent of this study is to provide curricula developers with a clearer picture of the interrelated factors within a teacher's work environment as they relate to the implementation of the CAC. The findings obtained from this study will assist to:

- highlight the concerns of the teachers involved in this change process.

- provide curricula developers with a better understanding of the interrelated factors within a teacher's work environment as they relate to the implementation of the CAC.
- to provide more understanding of the change process in examining whether demographic variables such as years of experience, gender, and area of schooling affect the implementation process
- make recommendations to the policy makers regarding the monitoring of Continuous Assessment Component (CAC) with a view to improving its implementation.

Theoretical Framework for the Study

The Concerns-Based Adoption Model, or CBAM, (B. Hall, Wallace Jr., & Dosset, 1973), a participant-based change framework that has been used a number of times in studying the adoption of educational innovations, seems an appropriate framework for the examination of implementation of CAC of the SEA. CBAM is widely accepted in educational research due to its participant-based focus on understanding individual's attitudes, perceptions, thoughts, and considerations toward using new innovations (N.B. Adams, 2002; Casey & Rakes, 2002; Harris, Stanz, Zaaiman, & Groenewald, 2004; Hord, Rutherford, Huling, & Hall, 2009; Rakes & Casey, 2002; Sweeny, 2003; Talab & Newhouse, 1993).

The CBAM framework has been described as a comprehensive tool for empowering individuals to address changes in educational settings and is noted for its inclusive perspective that pays attention to individuals and the organization that are involved in the change process (Petherbridge, 2007). Key to the CBAM

framework is the notion that facilitating change means understanding the existing attitudes and perceptions of those involved in the change process, with the central underlying assumption asserting that the single most important factor in any change process is the people involved (G. Hall & S. Hord, 1987; G.E. Hall & Hord, 2001).

Teachers are key players in any attempt to promote innovations in syllabus design (Fullan 1999, Markee 1993, Hord et. al 1988). Therefore, the theoretical framework for this study lies in Hall and Hord's (2001) Concerns Based Adoption Model. This model provides a different perspective on facilitating adoption of change or an innovation. It is about the parallel process of change that teachers go through whenever they engage on something new or different (Horsely & Loucks-Horsely, 1998:1).

Designed as a diagnostic but not prescriptive tool, the three components (SoC, LOU, IC) of the Concerns-Based Adoption Model inform the facilitator as to how best facilitate the adoption of an innovation (Straub, 2009:634). The CBAM does not describe the whys of an innovation adoption but rather, it deals with how understanding concerns of a population (of teachers) can facilitate innovation adoption.

Research Questions

The study was guided by the following research questions:-

1. What are the concerns of teachers when implementing the Continuous Assessment Component (CAC) of the Secondary Entrance Assessment (SEA)?

2. To what extent are teacher demographic variables such as gender, years of experience, area of schooling (rural, semi-rural and urban) related to teachers perceived concern?
3. What are teachers' levels of use with respect to the implementation of the CAC?
4. What are the components of the Continuous Assessment Component and how are these components being implemented?

Assumptions of the Study

The assumptions for the study were as follows:-

- The assumptions and characteristics of the case study defined the nature of the research process and allowed the researcher to learn more about the study participants and how they perceived the implementation of CAC of the SEA as a change agent;
- The participants responded voluntarily without influence from the researcher;
- The participants answered honestly based on their knowledge, understanding, and experience.
- Participants understand the instruments.

Operational Definitions of Key Terms

Assessment- is a systematic basis for making inferences about learning and development of students. It is the process of defining, selecting, collecting,

analyzing, interpreting and using information to increase students' learning and development. Erwin (1991)

Change-development process that takes time to occur

Change Processes - "Understanding the dynamics of change as it unfolds in a situation, including insights into how to manage change" (Fullan, 2004, p. 15).

Concern – "The composite representation of the feelings, preoccupation, thought, and consideration given to a particular issue or task" (Hall, George, & Rutherford, 1998, p. 5).

Concerns-Based Adoption Model (CBAM) – "A framework for measuring implementation and for facilitating changes in schools" (George, Hall, & Stiegelbauer, 2006, p. xi). CBAM contains three components: Stages of Concern, Levels of Use, and Innovation Configuration.

Continuous assessment - Ongoing holistic assessment in the classroom designed to produce data that leads to improvement in teaching and learning.

Formative Assessment - Assessment that is embedded with teaching and learning, involving providing various sources of feedback to students and designed primarily to provide high quality information for, improving teaching and learning, ultimately leading to improvement in student learning outcomes.

Implementation- The process of putting into practice an idea , programme or set of activities and structures new to people attempting or expected to change.(Fullan, 2001, p.69)

Innovation - "…the content of a given new program" (Fullan, 2007, p. 11); "An idea, practice, or object that is perceived as new by an individual or other unit of adoption" (Rogers, 2003, p. 12).

Mixed Methods Research Design - A research methodology that combines quantitative and qualitative approaches in an integrative fashion. There are several design types and variants with different emphases in terms of weighting and sequencing

Stages of Concern about an Innovation (SoCQ) -The Stages of Concern about an Innovation survey instrument consists of 35 Likert-scale questions and one, open-ended question regarding attitudes towards an innovation. Additionally, it contains a quick scoring device for assigning participants to an appropriate level of concern (G. Hall et al., 1977; G. Hall & Hord, 2006).

Summative Assessment - Assessment designed to provide a summary measure of the state of learning among students.

Theory of Concern Development- posits that early in a change effort, teachers have more intense self concerns about an innovation. As implementation progresses, their concerns tend to shift more to the task of using the innovation. Ultimately, if the

innovation is appropriate and the necessary supports re available, various kinds of impact concerns can become most intense (Hord & Hall, 1987)

Organization of the Paper

This chapter introduced the study by detailing a description of the problem that gave rise to the study, the purpose and significance of the study, the research questions that the study seeks to answer and definitions of key terms used throughout the paper. Chapter two (2) contains a review of the literature that speaks about educational reform, the theoretical framework of this study and a description of the evaluand, CAC. Chapter three (3) presents a description of the research method and procedures followed during the course of the study. In addition, trustworthy strategies, ethical considerations, limitations and delimitations are also included. Chapter four (4) includes the findings of the data in relation to the research questions. Chapter five (5) provides a summary and discussion of the findings of the study. It also provides recommendations based on the findings with reference to the literature and also further studies in this area.

Chapter 2: Literature Review

Introduction

This review of literature will be organized into the following sections:

- **EDUCATIONAL REFORM**
  - — Premise About Educational Change
  - — Describing the Evaluand: Continuous Assessment Component (CAC)

- **THEORETICAL FRAMEWORK**
  - — Concerns Based Adoption Model (CBAM)
  - — The Change Process
  - — Teacher's Concerns

- **EDUCATIONAL REFORM**

Educational reform fundamentally redesigns teaching and learning, builds school-wide vision and has the capacity to identify and solve problems, and understands that anticipatory and collegial school organizations generate commitment for reform (Newmann & Clune, 1992). According to Fullan (1993), the purpose of educational reform is presumably to help schools accomplish their goals more effectively by replacing some programs or practices with better ones.

Fullan and Hargreaves (1992) argued that reform would not be successful until education leaders and teachers own the change process, accept the change, and have a working knowledge of how to implement the change. Teachers' thoughts and

concerns about reformed curricula in many cases can prevent them from undergoing a significant change (Christou, Eliophotou-Menon, & Philippou, 2004; Manouchehri, 2000; Romberg, 1997; Van den Berg, Sleegers, Geijsel, &Vandenberghe, 2000).

Several studies in educational reform have shown that certain factors have a significant impact on teachers' understanding or comprehension of change: time (Moreno, 1999); teachers' expertise (Bandura, 1977); teachers' understanding of learning materials (Sparks, 1997); and years of teaching experience (Tell, 2000). Although it is difficult to change the teachers' core beliefs, resolving their concerns about the reform can facilitate the implementation process of reformed teaching materials (Fullan, 1999; Hord, Rutherford, Huling-Austin, & Hall, 1987).

Likewise, assessment reform is one of the most highly favoured concepts in improving teaching, learning, and accountability for educational institutions (McMillan, 2001; Stiggins, 2005). Even though large-scale assessments have always received considerable attention, what occurs in the classroom is increasingly more important (Davies, 2008; Hargreaves, Earl, & Schmidt, 2002; James & Pedder, 2006; Lukin, Bardalos, Eckout, & Mickelson, 2004; O'Connor, 2007). Recent trends in educational assessment have emphasized the importance of ongoing classroom assessment and not just the assigning of a grade at the end of learning, as has been traditionally done (Davies, 2008; McMillan, 2007; O'Connor, 2007).

Ultimately the fate of any educational reform effort will rest in the hands of the classroom teachers (Henry & Clements, 1999). Teachers will make fundamental decisions regarding how the innovation will be implemented in the classrooms (Sandholtz et al., 1997). Furthermore, the greatest obstacle to implementation will be teachers' beliefs about teaching and learning (Philipp, 2007; Ross et al., 2003).

— ***Premise about Educational Change***

Alwan (2006) defined educational change as an ongoing process that takes place with or without deliberate introduction of something different to education. Research by Fullan and Stiegelbauer (1991) has indicated that for the change process to be successful, premises about the change process should be understood and considered by the facilitators.

According to Hall and Loucks (1978), the change facilitator's comprehension of the premises regarding changes in the educational system is important to understand in order to evaluate how change affects someone impacted by the implementation of the change. Hall and Loucks (1978) further states that change is a personal occurrence, and the person affected should have ample time to accept and understand the change process. Change will create concerns for the teacher during its implementation. The success of the change process is dependent upon the affected individual "buying-into" the change. Likewise, the demands and pressures associated with educational change make teachers express lots of concerns, especially about issues of transition from the existing programme to the change programme (Armstrong, 2003).

Hargreaves (2000:281) explains the difficulty of bringing about educational change as follows:

- Poor conceptualization or lack of clear demonstration about the change itself;
- The change tends to be too broad and ambitious such that educators have to work on too many fronts;

- The change moves at a too fast pace in order to enable educators to cope with or too slow such that teachers become impatient or bored to move on to something else;
- Lack of resources or withdrawal of resources once the first flush of innovation is over;
- Lack of long-term commitment to the change to carry people through the anxiety, frustration and despair of early experimentation and unavoidable setbacks;
- Lack of commitment from the key staff who are affected by the change or who should be contributing to it;
- Non-involvement of learners in educational change which may be due to the lack of explanation to them. Such a situation motivates the learners to yearn for and cling to old ways of learning which they are familiar with;
- Pursuance of change in isolation such that it becomes undermined by these elements which are not changed yet.

According to Fullan (1991:117), "Educational change depends on what teachers do and think---it is as simple and as complex as that." MacGilchrist et al (1997) cited by Bell & Kitchie (2002:60) offer some key messages about change:

- It takes time.
- A school's capacity for change will vary.
- Change is complex.
- Change needs to be well led and managed.
- Teachers need to be the main agents of change.
- Pupils need to be the main focus of change.

- Change agent refers to people who act as catalysts and assumes the responsibility for managing the change. The processes are called change agents. (Robbins & DeCenzo: 232)

To bring about change in schools, and to a large degree educational restructuring, educational change must first be addressed at the personal level. Change must satisfy the individual person. Therefore, to change individual behaviour within the organization, which subsequently leads to organizational restructuring, individuals must relinquish old behaviors and substitute new ones. Similarly, sustaining the change process in organizational restructuring requires congruence of personal values with organizational goals (Hallinger & Hausman, 1993). Rosenholtz (1989) concluded:

> Educators are willing to change if they perceive the ideas themselves to be educationally sound; if they are able to adapt the broad policy framework of the change to their particular situation; if there is sufficient clarity about their role expectations; if there is a reasonable assurance that the political climate will be stable enough for the changes to remain in force long enough to be implemented thoroughly; and, experienced in a manner that enables them to develop and sustain the internal capacity for change (p.17).

— ***Describing the Evaluand: Continuous Assessment Component (C.A.C.)***

In this study, the evaluand is the Continuous Assessment Programme in Trinidad and Tobago. Details of the programme were found in the MOE published document entitled, "Continuous Assessment Component of the Secondary Entrance Assessment-Administrator's Manual" obtained from the Government of the Republic of Trinidad and Tobago, Ministry of Education.

The Ministry of Education as part of its strategic plan 2011-2015, has identified the Continuous Assessment Component (CAC) as a major priority for the design and development for a quality education system. The implementation of this initiative will ensure greater opportunity for success of all students at the primary level.

The Curriculum Division has taken a multi-pronged approach to curriculum renewal that includes a revision of the present curriculum in which continuous assessment (CA) is integral to the teaching and learning process. The Ministry of Education from September 2012 implemented a programme of school-based assessments which will contribute to the final score of the SEA.

It is expected that the implementation of the CAC will add value to the SEA by ensuring that the varied abilities, learning styles, interests and talents of primary school students are identified and met through a system of specified curriculum objectives, instructional approaches, and activity-based or performance assessment tasks. This system is intended to support both under-performing students and those who are high achievers. The Continuous Assessment Component aims to improve students' performance by

- Reducing the stressful situation that the students experience with a single examination and thereby impact on their emotional maturity and happiness.
- Using authentic assessment areas that cater to the various learning styles of students.

Subjects included in the CAC are Agricultural Science, Visual and Performing Arts (Music, Dance, Drama and Art and Craft), Physical Education, Social Studies (Citizenship, Character Education and Etiquette), Science, Mathematics and English

Language Arts. It is expected that the enhanced curriculum offering for the CAC will result in

- The provision of greater opportunities for students to achieve their full potential
- More academically balanced student since closer attention will be paid to students' multiple intelligences
- Higher levels of positive engagement in school life through active participation in school and class activities
- Increased focus on the development of students' talents and skills (Trinidad and Tobago. Curriculum Planning and Development Division, 2013).

THEORETICAL FRAMEWORK

The CBAM framework was developed on the premise that the single most important factor in any change process is the people involved in the change, therefore, facilitating change means understanding the existing attitudes and perceptions of those involved in the process (Hall & Hord, 1987; 2001). It was designed for the study of the adoption of any new educational innovation (Hall, George & Rutherford, 1979).

The following literature review will discuss the core principles and essential components of the Concerns Based Adoption Model (Hall & Hord, 1987; 2001) as a framework to evaluate the concerns of teachers on the implementation of CAC of the SEA.

— ***Concerns Based Adoption Model (CBAM)***

The ***Concerns-Based Adoption Model*** (CBAM) (Hall, George and Rutherford, 1986) (CBAM) was the most relevant model for this study. It provided a definitive method for assisting change facilitators, offered a framework for the design of process that addressed the concerns and needs of the individuals involved with the change, and provided tools to assess the effects of the change on the individual (Hord, Rutherford, Hurling-Austin, and Hall 1987).

CBAM was initially developed in the 1970s as a model to analyze implementation and change (Hall, Wallace, & Dossett, 1973). It "evolved out of the work of Frances Fuller (1969) and others in response to the innovation focus approach to educational change" (George, Hall, Stiegelbauer, 2006, p. 1; Newhouse, 2001).

Within the realm of educational research and application, CBAM has become a "widely applied theory and methodology for studying the process of implementing educational change by teachers and by persons acting in change-facilitating roles" (Anderson, 1997, p. 331). It has helped teachers, administrators, researchers, and planners alike to better understand the processes of change occurring within classrooms, organizations, and schools. This ultimately allows for better decision-making and more accurate expectations about the process of implementing change. Hall and Hord (2006) state that CBAM research supports seven assumptions:

1. Understanding the point of view of the participants in the change process is critical.
2. Change is a process not an event.
3. It is possible to anticipate much that will occur during a change process.

4. Innovations come in all shapes and sizes.
5. Innovations and implementation are two sides of the change process coin.
6. To change something, someone has to change first.
7. Everyone can be a change facilitator.

One of the premises of the CBAM is that change can be more successful if the concerns of teachers are taken into account (Hall & Hord, 1987). Hall, George, and Rutherford (as cited in Hall, & Hord, 2001) found the initial step in investigating concerns was to operationalize the construct:

> The composite representation of the feelings, preoccupation, thought, and consideration given to a particular issue or task is called a concern. Depending on our personal make-up, knowledge, and experiences, each person conceives and mentally contends with a given issue differently; thus there are different kinds of concerns. (p. 201)

CBAM research has developed and validated three diagnostic dimensions: Stages of Concern (SoC), Levels of Use (LoU), and Innovation Configurations (IC). The CBAM dimensions – SoC, LoU, and IC – give evaluators, researchers, and administrators' flexible tools that they can use to begin to assess, monitor, and better understand aspects of the implementation process. The SoC and the LoU both focus on the individual, while the IC dimension helps everyone evaluating or involved in the change process to understand what constitutes the ideal in terms of the new innovation, strategy, or program and to anticipate the variety and diversity of how individuals may implement it (Hord, Stiegelbauer, Hall, & George, 2006). These are further described in the subsections that follow.

1. Innovation configurations (IC)

Berman and McLaughlin (1978) suggested that adaptation was essential in the change process. In order to evaluate the implementation of an innovation, change agents needed a clear picture of what implementation looked like in practice. Hall and Louks (1981) called the tool for communicating this picture of implementation *innovation configurations*. Hall and Louks stated that providing ICs increased the possibility of successful implementation of the innovation by (a) focusing on the key components of the innovation; (b) describing a clear picture of what teachers and students would be doing; and (c) what behaviors, actions, and artifacts would be observed in the room.

The CBAM innovation configuration is the documentation of the processes involved when undergoing change and implementing an innovation. The documentation becomes a component of an organization's institutional memory, providing evidence of what worked and what did not in the strategy-implementation process (Heck, Steigelbauer, Hall, & Louck, 1981).

2. Stages of concern (SoC)

Stages of Concern form the basis for this study. The SoC deals with the users' concerns related to their perception of or experience with the innovation. The SoC provides an instrument for the measurement and analysis of individuals' concerns, issues, perceptions, and attitudes toward the adoption process when implementing an innovation (George, Hall, & Stiegelbauer, 2006). CBAM describes seven stages of concern that teachers experience as they adopt a new innovation, whether a program

or practice (Hall & Loucks, 1981). The focus of the CBAM model is the viewpoint of the individual and his or her concern statements relating to implementation of the innovation.

The seven stages of concern that users have when they implement change are segmented into three categories: self, management, and impact. The SoC are not designed to be progressive, and teachers can have multiple concerns within the various stages (George et al., 2006).

i. ***Self***: The first three stages within the *self* category, usually occur prior to actual implementation, and include awareness, informational, and personal stages. At the awareness stage, teachers have little concern or involvement with the innovation. At the information stage, teachers have knowledge that the innovation exists, but see it as someone else's program. At the personal stage, teachers want to learn about the personal ramifications of the innovation. They question how the innovation will affect them.

ii. ***Management***: The second category, management, relates to the tasks of the innovation. Teachers learn the processes and tasks of the innovation (Hord et al., 1987). Teachers focus on gaining an understanding of the information, increasing personal knowledge and skills, and acquiring resources to support the implementation. Knowing teachers concerns at this stage, guides leaders to the resources teachers need for successful implementation.

iii. ***Impact:*** The final category, impact, includes the last three stages of concern: consequence, collaboration, and refocusing (Hord et al., 1987). As teachers focus on the innovation's impact on students, they begin to reflect on their practices and on changes in student learning. Teachers begin to collaborate and cooperate with each other in the implementation of the innovation. Teachers

share lesson plans, classroom strategies, and ways they are responding to the implementation issues and problems. As teachers extend their knowledge and skills, they become leaders that consider the benefits of the innovation and think of additional alternatives that may work better. They have become proactive rather than reactive in relation to the innovation.

An important aspect of the concerns-based approach is that an "effective change facilitator understands how…clients perceive change and adjusts…. accordingly" (Hall & Hord, 1987, p. 5). Table 1 lists the seven stages of concerns about an innovation, groups the stages of concerns into components, defines each stage of concern, and identifies each stage by its expression of concern.

Table 1: The stages of concern

Stages of Concerns			***Expressions of Concern***
0.	Self	Awareness	I am not concerned about it. What is it?
1.	Self	Informational	I would like to know more about it. How does it work?
2.	Self	Personal	How will using it affect me? How does this impact me? What's my role in it?
3.	Task	Management	How can I master this? How can I fit it all in? What's the minimum I must do?
4.	Impact	Consequence	How is my use affecting the students? Is it worth it?
5.	Impact	Collaboration	I am concerned about relating what I am doing with what other instructors are doing. How do others do this? What's the maximum potential of this?
6.	Impact	Refocusing	I have some ideas about something that would work even better. Is there a better way?

Note. Adapted from *Measuring Stages of Concern about the Innovation: A Manual for use of the SoC Questionnaire*. By Hall, G. E., George, A. A., and Rutherford, W. L. (1986). Austin, Texas: Research and Development Center for Teacher Education

3. **Levels of use (LoU).**

In contrast to the SoC, the LoU does not focus on the concerns or attitudes of individuals, but focuses on the actual use of an introduced innovation in an organization and the rate of adoption, as related to employee behaviors (Loucks et al., 1998). As related to SoC, the individuals' LoU are identified in eight categories: non-use, orientation, preparation, mechanical use, routine, refinement, integration, and renewal (Loucks et al., 1975). The individuals' SoC are described as awareness, informational, personal management, consequences, collaboration, and refocusing, as described by Loucks et al. The SoC model suggests that, as individuals' concerns are addressed, the individuals' LoU will increase accordingly.

In summary, CBAM consists of three tools, SoC, LoU, and innovation configuration, designed to monitor the effects of change and to collect information required to facilitate change.

Although CBAM has been used in a multitude of educational research studies in the recent past, the Stages of Concern aspect has been the common focus of a majority of these studies (Chamblee & Slough, 2004). The Stages of Concern Questionnaire, licensed by SEDL, is one of the most widely used instruments to measure educational concern over change (George, Hall, & Stiegelbauer, 2006). Only Stages of Concern was investigated in this study.

— ***The Change Process***

The school education system is experiencing significant pressure to change (Beare, 2001). As schools change, the work of teachers and others in schools is also changing. Like most people working in schools, the role and work of schoolteachers have undergone significant change over the last decade (Hallinger, 1992; Gurr, 1996a, 1997; Webb & Vulliamy, 1996; Wylie, 1997; Wee, 1999; Day, Harris, Hadfield, Tolley & Beresford, 2000).

Change is something that cannot be mandated (Fullan, 1993). The understanding of the change process involves participants engendering ownership of the changes necessary to adopt an innovation (Ertmer, 1999; Fullan, 2005; Hall & Hord, 1987; Horsley & Loucks-Horsley, 1998; Rogers, 1995; Marzano, Waters, & McNulty (2005). Fullan (2004) believed that for change to work you need the energy, ideas, commitment and "ownership" of all those involved in implementing the improvements.

As noted by Fullan (2007), change is a complex, multidimensional process. He argues that change can be clarified and understood by identifying and describing the dimensions of change. These change dimensions typically involve three areas:

(1) the use of new or revised materials, such as curriculum or programs;

(2) possible new teaching approaches or strategies; and

(3) potential adjustments or alternations of beliefs.

Ignoring those dimensions may explain why some people are more or less likely to accept certain changes and factors associated with change.

Through investigating the change process of teachers involved in educational reform, Hall and Hord (2001) identified "six functions of interventions" (p. 107). The

interventions which make the up the supportive context in teachers' change process are: (a) developing, articulating, and communicating a shared vision of the intended change; (b) planning and providing resources; (c) investing in professional learning; (d) checking on progress; (e) providing continuous assistance; and (f) creating a context supportive of change.

Hargreaves and Fullan (1992) explain the critical role teachers play in the change process: "Teachers don't merely deliver the curriculum. They develop, define it and reinterpret it too. It is what teachers think, what teachers believe and what teachers do at the level of the classroom that ultimately shapes the kind of learning that young people get." (p. ix)

— ***Teacher's Concerns***

As implementation of a revised curriculum content and revised instructional delivery system is encountered, teachers' concerns may be expanded and intensified (Hall, George, and Rutherford, 1986). Hall, Wallace, and Dossett (1973) suggest that the concerns of the individual are a critical factor to consider during the implementation of an innovation. Because teachers are conventionally thought to resist change (Duke, 2004), it is essential to understand the individual characteristics of teachers and how these affect their concerns. Concerns are the thoughts, feelings, worries, and reactions that an individual develops because of his or her involvement with a new program or an innovation (Hall & Hord, 2001).

Sparks (1997) interviewed Loucks-Horsley on teachers' concerns about change. Some of Loucks-Horsley's major points indicate teachers must

(a) understand the content they are teaching so they can provide students leadership to learn concepts,

(b) use an instructional approach that assists students in constructing their own understanding for how various things occur,

(c) provide opportunities for students to learn at sites where subject matter is being utilized, and

(d) have the opportunities themselves to learn together through networks of teachers, schools, and possibly businesses (pages 20-21).

Bridges (1993) suggests the teachers' concerns created by an implementation of a change have a better chance of being addressed if the implementers of the change (teachers) are not made scapegoats for past failures and are not seen as the reasons for the change.

Chapter 3: Research Design

This chapter explains the research methods and procedures that were used to evaluate teachers' concerns about the implementation of Continuous Assessment Component (CAC) of Secondary Entrance Assessment (SEA). It discusses the purpose statement, research questions, setting, and participants. It also explains the research design, instrumentation, procedures, and data analysis.

Design of the Study

Research design is the logical sequence that links the empirical data to a study's initial research questions; that is, the design discourages the situation in which the evidence is disconnected from the initial research questions (Yin, 2003). This study utilized a mixed methods design.

In a mixed methods approach, the researcher employs strategies of inquiry that involve collecting quantitative and qualitative data (Creswell, 2003). Quantitative research is often defined by values and statistical outcomes that are definitive, and results are often given in numerical form before they are defined in the text. Qualitative research often provides data that are descriptive and explanatory in nature and results are often given in narrative form (Creswell, 2003).

According to Creswell and Plano, Clark (2011), mixed method can be defined as: "A research design with philosophical assumptions as well as methods of inquiry. As a methodology, it involves philosophical assumptions that guide the direction of the collection and analysis and the mixture of qualitative and quantitative approaches in many phases of the research process. As a method, it focuses on collection,

analysing, and mixing both quantitative and qualitative data in a single study or series of studies. Its central premise is that the use of quantitative and qualitative approaches, in combination, provides a better understanding of research problems than either approach alone." (p. 5).

Lodico et al. (2010) stated that a great advantage of a mixed methods research design is that it provides an in-depth look at context, processes, and interactions and precise measurement of attitudes and outcomes (p. 282).

The mixed methods approach used in this study is a convergent parallel design (Creswell & Plano Clark, 2011). A convergent parallel mixed methods design is used "to obtain different but complementary data on the same topic" (Morse, 1991, p. 122). Creswell and Plano Clark (2011) explained:

> The convergent parallel mixed methods occurs when a researcher uses concurrent timing to implement the quantitative and qualitative strand during the same phase of the research process, prioritizes the methods equally, and keeps the strands independent during analysis and then mixes the results during the overall interpretation. pp. 70-7

The rationale for using convergent parallel approach is that greater validity is needed to address the research problem. A convergent parallel approach offset weaknesses by drawing on the strengths of both quantitative and qualitative methods, and helped to obtain different but complementary data on the same topic to best understand the research problem (Bryman, 2006; Creswell & Plano Clark, 2011). This type of design increased validity of constructs and results by maximizing the heterogeneity of sources (Greene, Caracelli, & Graham, 1989).

Rationale for Multi-Site Case Study Approach

A case study design was chosen to best meet the goals of this study. Yin (2003) indicated that a case study is "an empirical inquiry that investigates a contemporary phenomenon within its real life context, especially when the boundaries between phenomenon and context are not clearly evident" (p.13).

The study revolved around three (3) school systems involved in the implementation of CAC, which led the researcher to use a multi-site case study approach.

The case study design would facilitate the exploration of the experiences of the subjects in their own setting in a quest for the disclosure of all possible meanings to them. Each case would focus on how the teachers in the schools under study perceived the problem. Multiple case studies would be used because they can provide greater insights into the issue than one case. Johnson and Christensen (2004) add that one is more likely to be able to generalize the results from multiple cases than from a single one.

Multiple case studies provide a purposive sample and the potential for generalizability of findings (Miles & Huberman 1994, Patton 1990). Additionally, including multiple sites increases the scope of the investigation and the degrees of freedom (Bonoma 1985; Eisenhardt 1989; Miles & Huberman 1984; Parkhe 1993; Patton 1990). Multiple case studies provide a more rigorous and complete approach than single case study research due to the triangulation of evidence (Bonoma 1985; Eisenhardt 1989; Herriott & Firestone 1983; Neuman 1994; Stake 1994; Yin 1994). Additionally, triangulation of data in the context of multiple case studies provides

differing research sites and data sources to satisfy theory generation and verification (Denzin 1978; Deshpande 1983; Patton 1990).

Sampling and Selection of Participants

In selecting the sample for this study, I followed Merriam's (1998) guidelines. She maintained the first task is to identify the case, the bounded system or unit of analysis, to be studied. Because this study focused on the implementation of CAC of the SEA in one (1) educational district in Trinidad and Tobago, the unit of analysis was defined as teachers participating in this implementation. Consequently, the technique described by Creswell (2005) and Patton (2002) as purposeful sampling was utilized to select participants of this study.

Merriam (2009) explained that the aim of purposeful sampling is a non-random method of sampling that allows the researcher to discover and understand in order to learn about issues of paramount importance (p. 77). According to McMillan and Schumacher, 2001; purposive sampling is a strategy to choose small groups or individuals likely to be knowledgeable and informative about the phenomenon of interest was used in selecting teachers for the interviews. Teachers from the standard five level of each of the three (3) primary school were selected to participate in the study. A total of six (6) teachers, two (2) per school was chosen. Participants profile showing gender, age range, level of education and years of teaching experience can be seen in Table 2 below.

Table 2: Participants profile

DESCRIPTION OF PARTICIPANTS				
Participants	**Gender**	**Age Range**	**Level of education**	**Years of teaching experience**
A	Male	40-49	Master	19
B	Female	30-39	Master	11
C	Female	30-39	Master	15
D	Female	30-39	Master	19
E	Female	40-49	Bachelor	21
F	Female	30-39	Bachelor	13

All schools were selected prior to data collection. Three (3) primary schools in the Caroni Educational District in Trinidad were chosen for this study: a Presbyterian School (School 1), a Roman Catholic (School 2) and a Government school (School 3). These schools were selected based on the area of schooling (rural, semi-rural and urban). I deliberately selected three schools because I wanted to utilize a multi-case, mixed-methods design and because I wanted to obtain a rich variety of information from more than one source to improve the robustness of my findings (Herriott & Firestone, 1998; Merriam, 1998; Miles & Huberman, 1994; Yin, 2003). Teachers in each school stood alone as a case, or unit of analysis, in and of itself. The criterion for participation was that the teachers must have undergone some formal training in CAC of the SEA.

The School Context

- ***School 1*** is located in a semi-rural village along the Southern Main Road. School 1 has a population of five hundred (500) students and nineteen (17) teachers. The majority of classes range from 30 to 35 students. The students perform quite well at the Secondary Entrance Examinations as well as the National Test. The API Interpretation of this School indicates mostly effective. This means adequate to high proportions of students meeting or exceeding standards in both classes and areas of learning. Some students also excel in sporting competitions reaching the national finals in certain competitions. Most of the students belong to single-type families and their parents have more than one job. Therefore, quite often they are left in the care of grandparents or aunts and uncles. There is some discipline issues present at the school. This school has very limited space for outdoor activities and all classes are separated by blackboards.

- ***School 2*** is the smallest of the three (3) schools and is located in a small rural village in central Trinidad. The student population is one hundred and sixteen (116) and a staff of eight (8) trained teachers. Staff members describe the academic performance as average, adding that an average of three (3) students score below thirty (30) percent at the S.E.A. in 2012. A large percentage of students score below thirty (30) percent at the S.E.A. and National Tests every year. The API Interpretation of this School indicates underperforming. This has captured the attention of the Ministry of Education which has adopted the school under the Performance Enhancement Program. Parental involvement is

lacking in this school. This is evident since there is no PTA. Most of the families in this village are employed with the Unemployment Relief Programme and CEPEP.

- ***School 3*** is located in the borough of Chaguanas. It houses a total of nine hundred and thirty four (934) students with thirty (30) staff members including the principal. There is some form of specialised teaching done at this school. The students perform extremely well at the Secondary Entrance Examinations as well as the National Test. Every year at least three (3) students are placed in the top one hundred in the SEA. The API Interpretation of this School indicates excelling band. This is the high band in the API rating. The school's database of parents reveals a wide range of occupations which include business entrepreneurs, doctors, teachers and lawyers. There are several striving businesses in the area which supports and has established links with the school over the years. Parental involvement is very high. There are also specialised teachers for areas such as Physical Education, Art & Craft and Computer Literacy. The demand for entry into this school is extremely high.

Procedures for Convergent Parallel Design

This study would utilize a type of concurrent design called the convergent parallel design of mixed methods. In this convergent parallel design, both quantitative (data from SoCQ) and qualitative data (data from interviews) would be collected and independently analysed, then integrated and interpreted (Creswell & Plano Clark, 2011). Following the separate analysis of all quantitative and qualitative

instruments, in a mixed methods study, the results would then be merged and integrated to form inferences. Inferences in mixed methods research are conclusions or interpretations drawn from the separate quantitative and qualitative strands of the study as well as across the quantitative and qualitative strands (Creswell & Plano Clark, 2011). Figure 1 shows this study's procedural diagram.

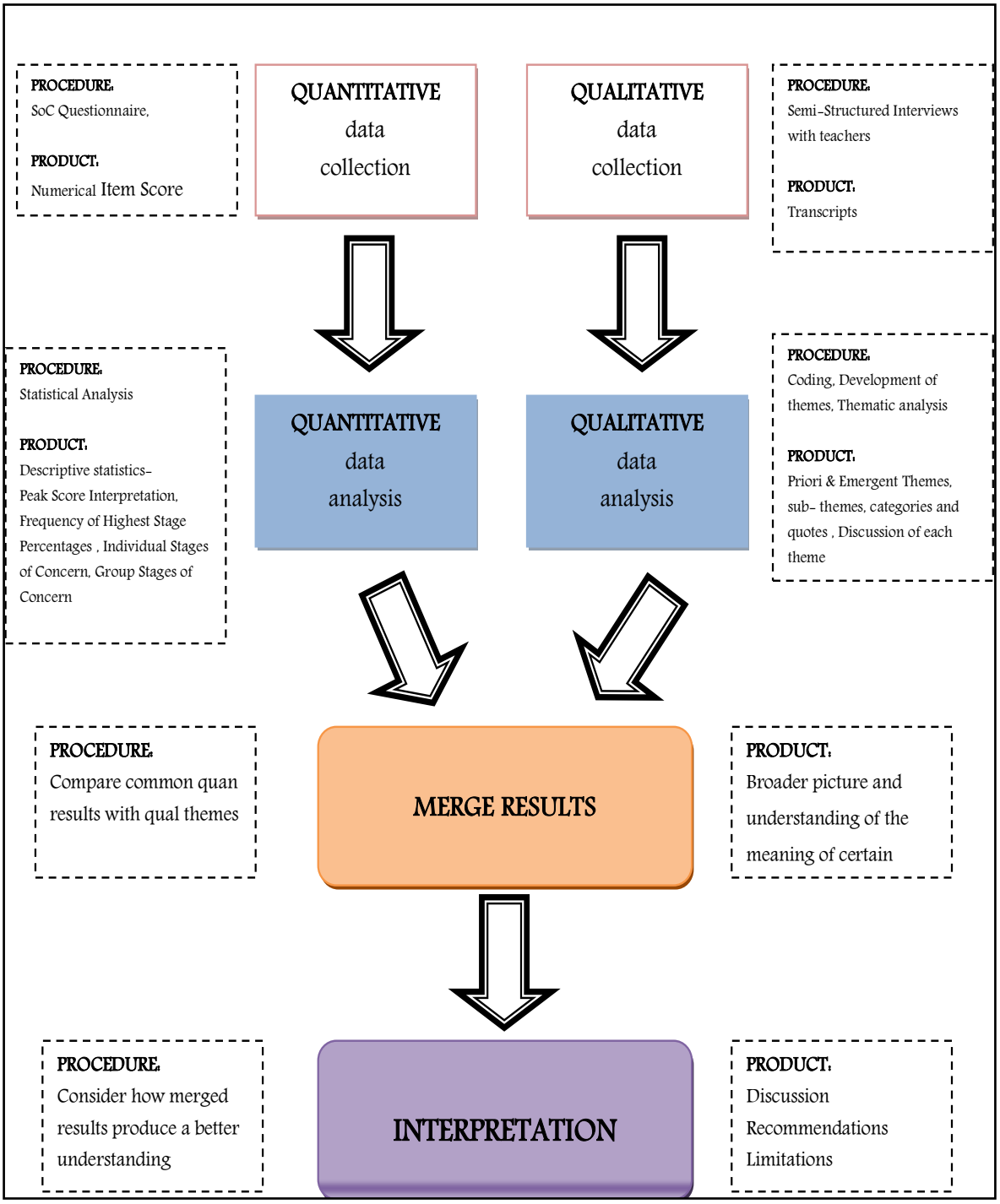

Figure 1: Visual diagram of the procedures in the convergent parallel type of design

Data Collection Procedure

Instrumentation

Two (2) types of instruments were used in this study. The Concerns Based Adoption Model (CBAM) Stages of Concern Questionnaire (SoCQ) (see Appendix C) was the quantitative survey instrument together with a demographic survey (see Appendix C-Part II) was utilized to collect descriptive information about the sample. The Qualitative data was collected from the teachers through semi-structured interview (see Appendix D).

Quantitative Instrument: *Stages of Concern Questionnaire*

The Stages of Concern Questionnaire (see Appendix C) from the Concerns Based Adoption Model (CBAM) was used to measure teacher concerns. Six (6) teachers were purposively selected to be part of this exercise. The SoCQ is a 35 question, 8-point Likert scale. A rating of 0 means "irrelevant;" a rating of 1 or 2 means "not true of me now." A rating of 3, 4, or 5 means "somewhat true of me now," and a rating of 6 or 7 means "very true of me now."

When implementing an educational innovation, the SoCQ is used as it focuses on the stages of concern (SoC). The SoC ultimately addresses the affective side of change, narrowing in on people's reactions, feelings, perceptions and attitudes. The SoC establishes seven stages or levels of concern and are grouped into three distinct sections as follows: Impact, Task and Self. Within these sections, there are also subdivisions. The Impact section breaks further down into the Refocusing,

Collaboration and Consequence stages. Task, however, is generalized into a Management stage while Self is sub-divided into a Personal and Informational Stage. A final stage that has not been categorized is Awareness.

Each of the seven stages of concern (awareness, information, personal, management, consequence, collaboration, and refocusing) has five items on the survey that relate back to that stage (see Appendix C). The raw score at each stage of concern was found by totalling the scores for each of the five questions related to that stage and could range from 0 to 35 points. Each administration of the survey took about 15 minutes to administer and was scored by excel using the Stages of Concern Quick Scoring Device (George et al., 2006).

Demographic Survey

The demographic survey (see Appendix C) contained general questions about gender, age, years of experience, area of schooling (rural, semi-rural and urban), total years teaching and training in CAC.

Qualitative Instrument: *Interviews*

Patton (2002) stated the purpose of interviewing is to enable the researcher to enter the perspective of the person being interviewed. Interviews are basic fact-finding interactions where one individual asks questions while another responds. By conducting interviews, researchers obtain a clearer understanding of an individual's background and experience. Knowledge of this experience helps the researcher better

understand the context for an individual's behaviour and decision-making rationale (Seidman, 1998).

For this study, I conducted semi structured interviews with the six (6) teachers in the three selected schools in order to gain insight into their concerns when implementing CAC. Corbetta (2003 p. 270) explains semi-structured interviews as follows:

> "The order in which the various topics are dealt with and the wording of the questions are left to the interviewer's discretion. Within each topic, the interviewer is free to conduct the conversation as he thinks fit, to ask the questions he deems appropriate in the words he considers best, to give explanation and ask for clarification if the answer is not clear, to prompt the respondent to elucidate further if necessary, and to establish his own style of conversation".

An interview guide was used for the interview which enables the researcher to ask the written questions, but the exact sequence and wording does not have to be followed with each participant. Bernard (1995) contends the value of using an interview guide. He writes, "The interviewer still maintains discretion to follow leads, but the interview guide is a set of clear instructions" (p.210). The questions in the section, concerns about CAC, were constructed based on suggestions by Hall & Hord (1987), who insist on that the use of the interview helps to "get at" the respondents' attitudes, feelings, reactions and concerns. The interview emphasized on the concern-based approach whereas the participants were given the opportunity to describe his/her concerns and express his/her perceptions about CAC. Prompts and probes were used in the interview to clarify topics or questions and provide detail for clarifying or qualifying the respondents' response (Cohen, Manion & Morrison, 2000; Morrison, 1993).

The interview protocol (see appendix D) was characterized by open ended questions and was organized from the research questions. All interviews were conducted with the written consent of the person being interviewed (see Appendix B). One interview occurred with each participant. Appointments were made with teachers to interview them at a convenient time. It was usually on a lunch time and/or after school hours. Confidentiality was assured to all participants, both verbally and in writing. Interviews were recorded using a digital voice recorder and were later transcribed and analyzed. Pseudo name for both participants as well as their schools were given. The interviews were conducted over a period of one month (Mid February –Mid March 2013).

The interviews I conducted for this study allowed me to gain in-depth responses from participants, check for clarification of responses, and establish rapport with the participants (Fraenkel & Wallen, 2006; Morgan, 1998) and also helped me to "construct as complete a picture as possible from the words and experiences of the participant" (Marrais, 2004, p. 52).

Data Analysis Procedure

Qualitative and quantitative data analyses occurred using a convergent, parallel design. A convergent, parallel mixed methods design required me to collect quantitative and qualitative data at the same time, which allowed me to compare the data to determine if there were similarities, differences, or a combination of both (Creswell, 2009, p. 213).

Qualitative Analyses

According to Miles and Huberman (1994), the multiplicity of data generated by a case study can be quite overwhelming. In order to analyze the data gathered in this study, the method that was described by Merriam (1998) as the *constant comparative* method was adopted. Since this study consisted of a multi-site case study comprising of six (6) teachers attached to three primary schools concerned with implementing CAC, the *constant comparative* method catered for comparison across various cases (schools in general) as well as within cases (from a school to school basis).

Responses from the semi-structured interviews concerning teachers' concerns when implementing CAC were transcribed and the method of analysis chosen for this study was a hybrid approach of qualitative methods of thematic analysis. Thematic analysis is considered by the researcher to be an appropriate methodological tool and is regarded as a foundational method for qualitative analysis as it is a flexible tool which has the potential to provide a rich, detailed and complex account of the data (Braun & Clarke, 2006). It is a method for identifying, analysing and reporting pattern (themes) within data that provides an organisation of data, followed by an interpretation was used. It combines a data driven inductive analysis (Boyatzis, 1998) with a predetermined deductive approach stemming from an a priori template of codes (Crabtree and Miller, 1999). According to Braun & Clarke, 2006, p. 80), the deductive thematic analysis type captures something important about the data in relation to the research question and represents some level of patterned response or meaning with the data set. This approach is recommended, when specific information about something important is explored (King, 2004). Care was taken to avoid suppression of new themes. Rigour was introduced through inductive method,

which allowed the exploration of other pertinent issues (Fereday & Muir-Cochrane, 2006).

The analysis was conducted manually in two stages. The first stage was theory driven (CBAM) and involved the identification and coding of the a priori themes, namely self, task and impact concerns. The second stage was data-driven and involved the identification and coding of emergent themes.

Following the thematic analysis steps outlined by Braun and Clarke (2006), initially, the interview transcriptions were repeatedly read to gain familiarity with the data set and to search meaning and patterns. Ideas based on the a priori themes were noted down and codes were developed. These were identified and data was collated relevant to each code. The second stage involved searching across the data set to identify other repeated coherent patterns of meaning.

The data were constantly compared to each other using the constant comparative method. In addition, analysis of the themes was filtered through the SoC theoretical framework. This data analysis process was utilized so as to analyze the similarities and differences based on the SoC framework.

Quantitative Analyses

In an effort to determine the stage of teachers' concern with reference to the implementation of CAC, descriptive analysis was utilized. A total of six (6) SoC questionnaires, two (2) per school were distributed retrieved and the data analysed.

An excel application to score each of the responses were utilized in the scoring of the SoCQ. The seven stages aforementioned each had five (5) corresponding items on the questionnaire. To determine the raw score for each of the constructs, the

responses gathered from the five questions were all added together. The raw score, in order to obtain the percentile scores which represented the relative intensity of the scores, was then compared to a percentile table.

The data was then interpreted by different methods. They are as follows:-

1. *Peak Stage Score Interpretation*- This is basically identifying the highest stage score. The interpretation of the peak score was determined by looking at the frequency of the highest percentile score, which indicates the relative intensity of each stage (George et al., 2006), of each respondent.
2. *Profile Analysis Interpretation* - This profile analysis provides a rich clinical picture of both individual and group data by examining and interpreting high and low percentile scores for all seven stages of concerns. It also indicates the level of intensity of concerns in each stage. This was analysed in two (2) forms-Individual SoC Profile Analysis and Group Profile Analysis. Examining the percentile scores for all seven stages results in (a) a rich clinical picture and (b) interpreting the meanings of the highs and lows of the stages and their interrelationships (George, Hall, & Steigelbauer, 2006).

The subsequent results of the statistical analysis conducted were utilized in the enhancement of the qualitative data produced in this mixed-methods case study. This basis of information was another locale for triangulation and offered a frame of reference for qualitative analysis. I was in a position to produce an in-depth background for the results of the selected sample used for participation in this case study by providing statistical analysis of the concerns of the six (6) teachers regarding the implementation of CAC through the use of the SoCQ. I strongly believe that the information gathered above assisted immensely in further clarifying

and expanding the results gathered from interviews, analysis of artifacts, observation through the process of demonstrating whether the degree of concerns expressed by the teachers varied notable with experience and familiarity with CAC. The purpose of utilizing the quantitative data was to accomplish the following: (i) gives insight and deeper and clearer understanding regarding the population sample that would have been an oversight if only a qualitative research method was utilized, (ii) utilize numbers in order to append accuracy to narrative and words and, (iii) supply more efficient and persuasive evidence from conclusions that would have been arrived at from this study through convergence and confirmation. A complete presentation of the scoring results is discussed in Chapter IV.

Merging of Data and Interpretation

When there is an explicit interrelation of the study of both quantitative and qualitative strands, meshing of the two naturally occurs during the interpretation or analysis phase of the particular research. This process is known as merging or mixing. This process of mixing or merging is achieved when the researcher, based on the information gathered and observed from the quantitative and qualitative strand, produces certain conclusions or inferences reflecting what was learnt from coalescing the results. Quantitative statistical results and qualitative findings are directly compared and contrasted when the research design merges data, for the purposes of corroboration and validation.

At the interpretation phase subsequent to the results attained, the researchers embarked on interpreting the ways in which the qualitative and quantitative results joined, deviated from each other, connected to each other and/or combined in order

to produce a superior understanding and interpretation. Using a joint display of congruent and discrepant findings, the quantitative and qualitative strands of data were initially compared and contrasted. This was then followed by an ultimate matrix connecting the qualitative themes to the quantitative finds.

Ethical Considerations

The researcher in light of this took the necessary precautions to ensure that confidentiality was promised and ensured to the participants. Whatever is shared must be held in confidence and participants must have a say in what they would like to share or not.

For this study, the researcher explained the nature of the research to the principal of each selected school, and sought their permission to conduct the study at their school (See Appendix A). Letters providing information were given to the participants enlightening them on the nature and purpose of the research project (See Appendix B). Letters of informed consent were also given to participants and the researcher to sign agreeing to confidentiality. Participants were guaranteed anonymity and confidentiality of responses. They were also given the option to withdraw at any point during the collection of data if they so preferred. All questions of confidentiality were answered before any interviews were recorded and participants were made totally comfortable with having their views taken before the actual recording process. They were assured that information given could have been retracted from the interview if they were so desired.

The use of Triangulation was also a strategy used for trustworthiness in this study. Lincoln and Guba (1985) states that "trustworthiness is the researchers'

ability to persuade the consumer of the research that the findings are worthy." One such way trustworthiness was incorporated in this study was through member checks. The researcher allowed participants to review the findings to determine if they view the outcomes as accurate (Creswell, 2009; Seidman, 1998). Trustworthiness was also enhanced by the use of "rich, thick descriptions" (Creswell, 2010, p. 191) and the use of direct quotes; both efforts to persuade the reader that the findings are worthy.

Limitations of the Study

Limitations are constraints upon the study that are acknowledged in order to avoid misrepresentation. Best and Kahn (1993) defined limitations as "those conditions beyond the control of the researcher that may place restrictions on the conclusion of the study and their application to other situations" (p. 40). Possible limitations associated with this study were as follows:

- limited to one (1) educational district only;
- participants voluntarily and independently complete the questionnaires;
- the results of the study will be affected by whether the teachers' responses represent true reflections of their present concerns
- There may possibly have been a biased response from participants who are reluctant to change.
- There may possibly have been a biased response from participants who favour change.
- Replication may not be possible

Delimitations of the Study

Best and Kahn (1993) defined delimitations as "the boundaries of the study"(p.40). While exploring the factors influencing the implementation of Continuous Assessment Component (CAC) of the Secondary Entrance Assessment (SEA), the study was subject to the following delimitations:

- Within the topic of educational change, the study primarily focused on the CBAM; one of the many models of educational change. The study is not intended to validate the CBAM or the Stages of Concern Questionnaire.
- The Concerns-Based Adoption Model of curricula implementation has three dimensions. These are the Stages of Concerns which look at the various concerns teachers express in their attempt to implement a new curricula; Level of Use which deals with what teachers actually do in the implementation process; and Innovation Configuration which is used to assess whether the operational use of a new curricula is consistent with developers' intentions. The study centred on the Stages of Concerns dimension of the CBAM only.
- The population of students and teachers in this study was limited to three (3) schools in the Caroni Educational District. Teacher participation in the investigation was on a volunteer basis.

Chapter 4: Presentations and Findings

Introduction

This chapter presents the findings derived from the data analyses based on the research question of the study. The intent of this study was to evaluate teachers' concerns in three (3) schools in the Caroni Educational District about the implementation CAC of SEA using CBAM's stages of concerns. Two (2) teachers were selected from each of the three primary schools. A total of six (6) teachers from three (3) primary schools in the Caroni Educational District participated in the study.

Research Question:-

What are the concerns of teachers when implementing the Continuous Assessment Component (CAC) of the Secondary Entrance Assessment (SEA)?

The findings of this study are organized into four (4) sections:-

a) Analysis of Data (quantitative and Qualitative) for School 1

b) Analysis of Data (quantitative and Qualitative) for School 2

c) Analysis of Data (quantitative and Qualitative) for School 3

d) Merging Data and Interpretation

The results for each of these sections are discussed in details below.

a) ANALYSIS OF DATA FOR SCHOOL 1

— ***Peak Stage Score Interpretation for School*** - Table 3 shows the peak stage scores (highlighted) for each of the two (2) teachers in School 1 and their composite group peak stage score. The result of the group peak score revealed that the Stage 0 (Awareness) was the most significant stage of concern. It recorded the highest percentile score up to the 97th. The profile revealed almost similar secondary peaks at informational (90%), personal (89%) and management (90%). The profile also indicated that these teachers had low concerns related to refocusing (57%).

Table 3 : Stages of concern percentile scores for School 1

Participants	Stage 0 Awareness	Stage 1 Informational	Stage 2 Personal	Stage 3 Management	Stage 4 Consequence	Stage 5 Collaboration	Stage 6 Refocusing
A	98	91	92	92	86	68	60
B	95	84	85	88	63	64	52
Average (Group)	**0**	**1**	**2**	**3**	**4**	**5**	**6**
	97	90	89	90	76	68	57

— ***Individual SoC Profile Analysis for Teacher A*** - Figure 2 shows the Stages of Concern profile for teacher A, a male teacher who has been teaching for 19 years. Participant B holds a Master's degree. The highest stage of concern, with a relative intensity score of 98 % was *stage 0-awareness*. The second highest stages of

concern, with a relative intensity score of 92 %, were *stage 2-personal* and *stage 3-management*. Participant's A lowest stage of concern, with a relative intensity score of 60%, was *stage 6-refocusing.*

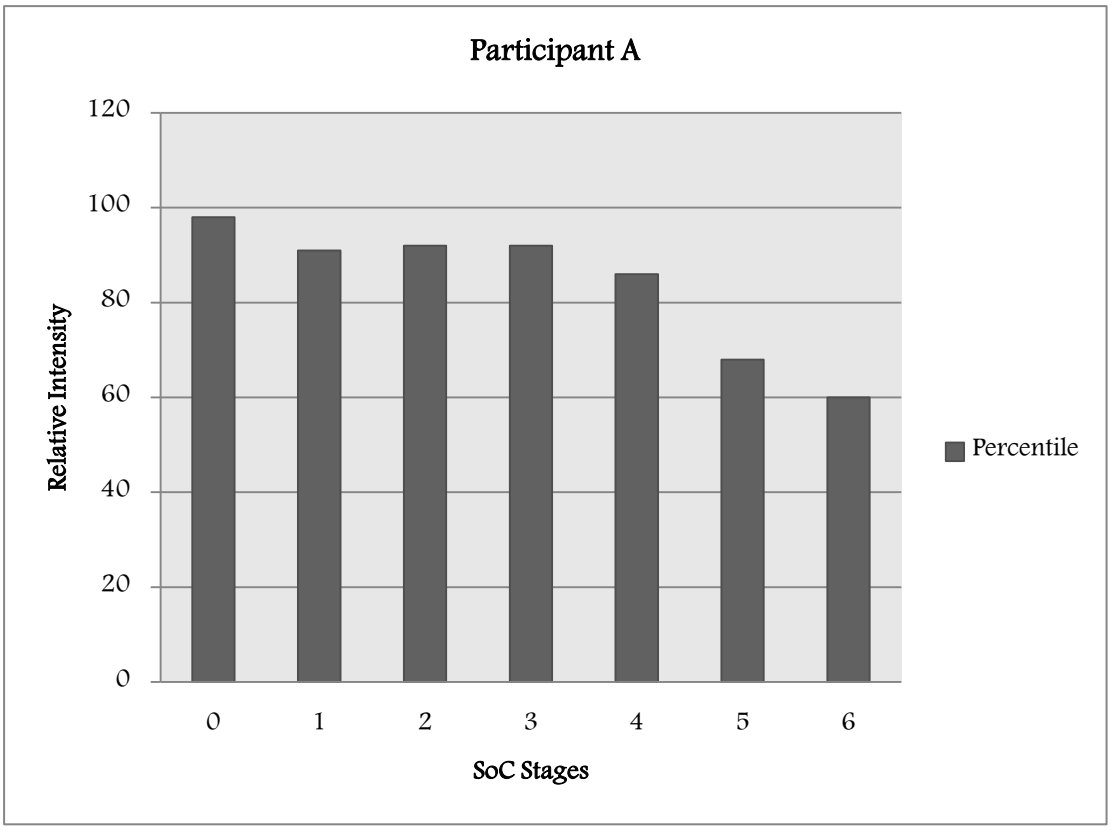

Figure 2: Stages of concerns profile for participant A

— ***Individual SoC Profile Analysis for Teacher B-*** Figure 3 shows the profile score for Participant B, a female teacher who has been teaching for 11 years. Participant B holds a master's degree. The highest stage of concern, with a relative intensity score of 95 % was *stage 0-awareness*. The second highest stage of concern, with a relative intensity score of 88 %, was *stage 3-management*. Participant's B lowest stage of concern, with a relative intensity score of 52 %, was stage *6-Refocusing.*

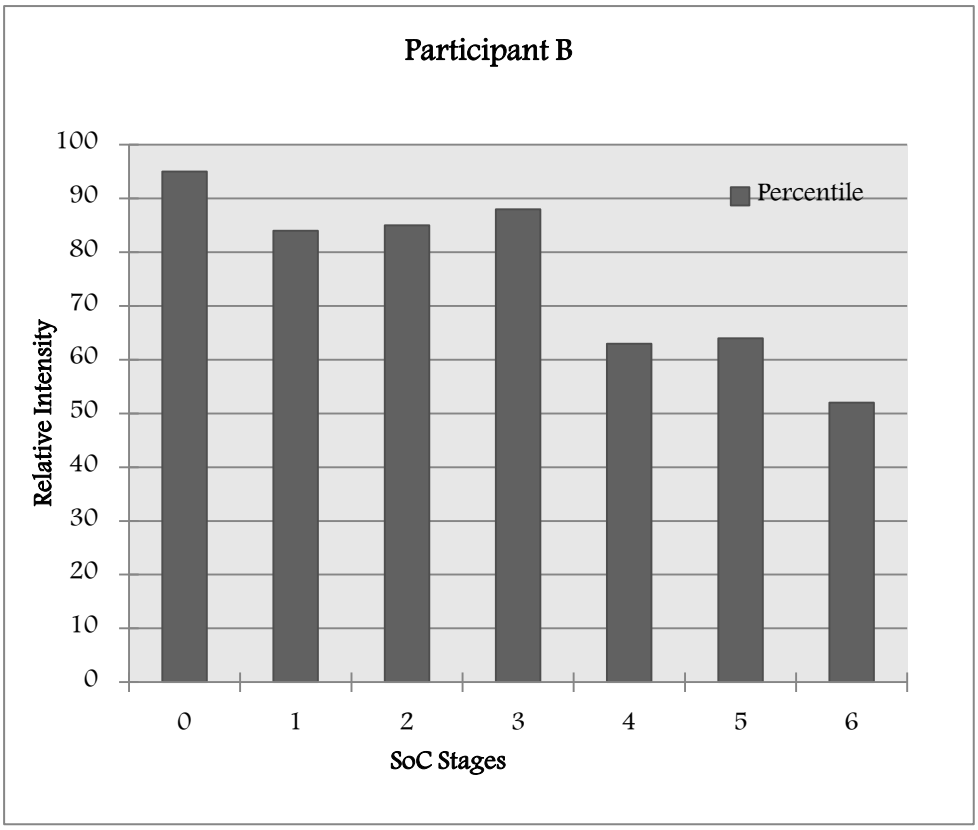

Figure 3: Stages of concerns profile for participant B

— ***Group SoC Profile Analysis of School 1-*** In the group profile of the teachers at School 1, it showed that Stage 0-Awareness (97%), Stage 1-Informational(90%), State 2-Personal (89 %) and Stage 3-Management (90%) were relatively intense than other concerns. This means that teachers' concerns were mainly self-related and task-related. The lowest group stage of concern was stage 6-Refocusing (57%) (See Figure 4)

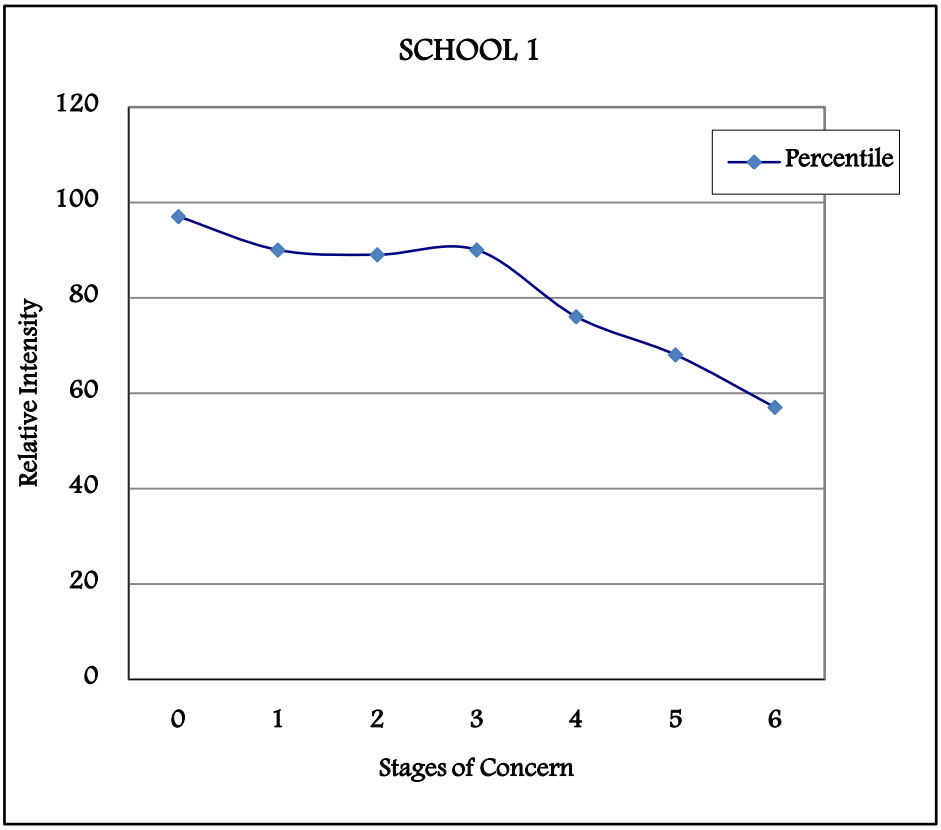

Figure 4: School 1 group stages of concern percentile scores (n=2)

— ***Qualitative findings for School 1***

The teachers at School 1, self-concerns (informational and personal) and task: management concerns were very high. Impact concerns were less evident. Self Concerns are the concerns that teachers have based on their relation to an innovation. This is comprised of awareness, personal and informational concerns about how an innovation might affect them and their ability to fully implement it. Task Concerns are the concerns teachers have based on the processes and tasks of using the innovation.

Self: Personal Concerns: Generally teachers when are introduced to a new innovation, they are more focused on the self-stage. The concerns expressed were need for further training and knowledge about CAC and their uncertainties about themselves about aspects of CAC.

1. *Teachers' uncertainties about aspects of CAC*- Both teachers at this school site were concerned that they might not be able to administer the CAC innovation adequately; bearing in mind that they only participated in a two (2) week. They had doubts about using CAC in the reality because they were not sure how they should deal with it. They expressed their concern in their ability in comprehending and meeting the demands embedded in CAC. Concerns included: the accurate use of the rubric and lack of skills such as dance and drama to name a few.

> *One teacher noted: "I require more training in formative assessment and the use of the rubric. At the training session although we were all using the rubric, some teachers and the curriculum personnel were giving different markings based on the same piece of work. This training I think should be ongoing and not a one time, quick training that we were provided with. (Teacher A)*

> *Teachers don't normally use rubric for assessment it's all about paper and pencil therefore teachers have to re-evaluate themselves and what they know about assessment. (Teacher B)*

2. *Support Systems for CAC*- With everything new, comes instructions and assistance. Therefore, it is expected that teachers would have concerns about the need for support systems. They would like to know about avenues to address their concerns and how these concerns can be alleviated so as to achievement success with new initiative.

3. *Need for Further Training*- The teachers lack clarity of innovation since not much prior consultation was done. They were simply told that this innovation needs to be implemented in September 2012. They voiced their concerns about training for CAC on a daily basis.

> *Teacher A exclaimed that retraining of teachers is needed to understand the content and assessment task, time table accommodation and resources for the CAC.*

> *Teacher B argued that "it is being done in a rushed manner and for those new to Continuous Assessment it does not provide enough training opportunities. Teachers need to be included in the process of change as they have the best idea of what students need and what the everyday realities of the classroom are".*

Task: Management Concerns

1. *Time*-A major concern about the implementation of CAC was the need for adequate time to understand the innovation and make changes to professional practice. Since the innovation is new, participants need time to gain better understanding to implement the new ideas in the innovation, time to identify gaps in knowledge about CAC and the present curriculum, and time to assess student accurately and fairly.

> *Teachers already spend evening and weekends on traditional forms of assessment, this format means even more time has to be devoted to preparation. (Teacher A)*

> *This form of assessment is very time consuming, therefore I had to take time from other subject areas to do composition writing. Also, students came in during their lunch periods to do editing, revising and publishing. (Teacher B)*

b) ANALYSIS OF DATA FOR SCHOOL 2

— ***Peak Stage Score Interpretation for School 2***- Table 4 shows the peak stage scores (highlighted) for each of the two (2) teachers in the sample and their composite group peak stage score. The result of the group peak score revealed that the Stage 0 (Awareness) was the most significant stage of concern. It recorded the highest percentile score up to the 98th. The profile revealed that the secondary peak was at management (97%). The profile also indicated that these teachers had low concerns related to collaboration (84%).

Table 4 : Stages of concern percentile scores for School 2

Participants	Stage 0 Awareness	Stage 1 Informational	Stage 2 Personal	Stage 3 Management	Stage 4 Consequence	Stage 5 Collaboration	Stage 6 Refocusing
C	99	97	78	88	76	88	77
D	93	75	97	99	90	80	99
Average (Group)	**0**	**1**	**2**	**3**	**4**	**5**	**6**
	98	91	91	97	86	84	92

— ***Individual SoC Profile Analysis for Teacher C***-Figure 5 shows the Stages of Concern profile for Participant C, a female teacher who has been teaching for 15 years. Participant C holds a Master's degree. The highest stage of concern, with a relative intensity score of 99 % was *stage 0-awareness*. The second highest stage of concern, with a relative intensity score of 97 %, was *stage 1- Informational*.

Participant's C lowest stage of concern, with a relative intensity score of 76%, was stage *4-consequence.* Participant C is a teacher at School 2.

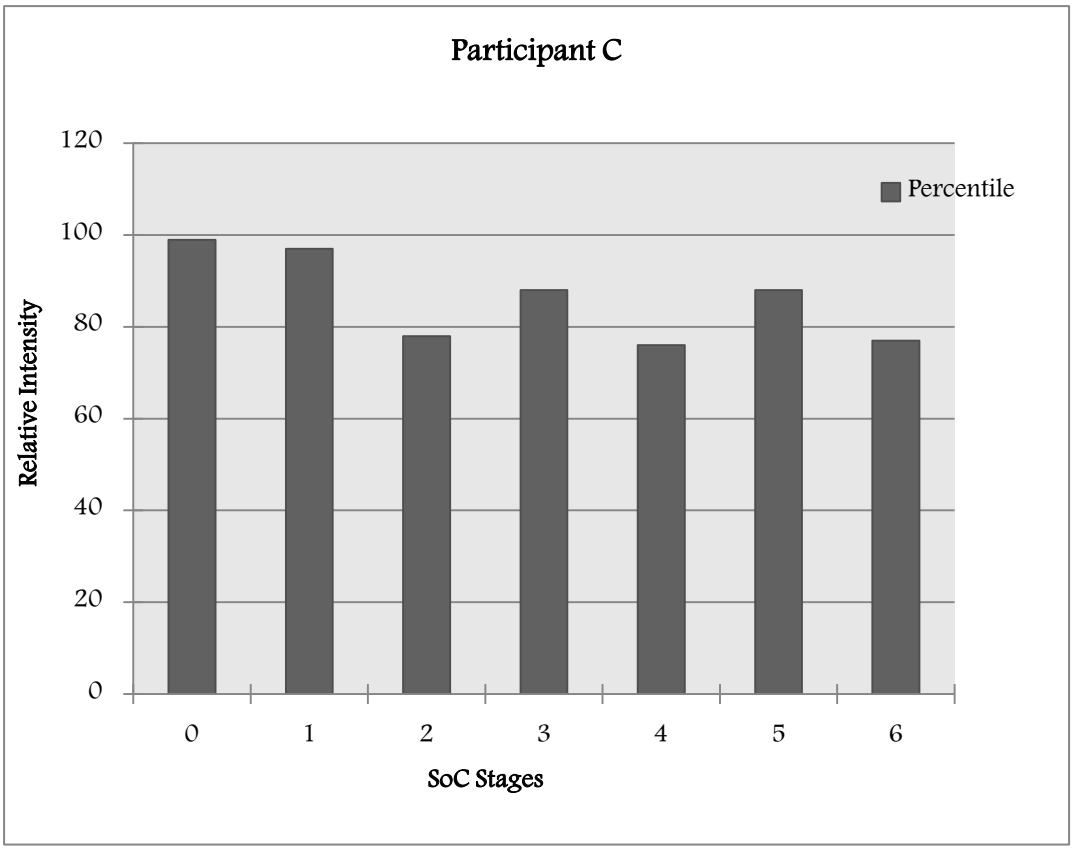

Figure 5: Stages of concerns profile for participant C

— ***Individual SoC Profile Analysis for Teacher D-*** Figure 6 Stages of Concern profile for Participant D, a female teacher who has been teaching for 19 years. Participant D holds a Master's degree. The highest stages of concern, with a relative intensity score of 99 % were *stage 3-management* and *stage 6-refocusing*. The second highest stage of concern, with a relative intensity score of 93 %, was *stage 0-awareness*. Participant's D lowest stage of concern, with a relative intensity score of 75 %, was stage *1-infomational.* Participant D is a teacher at School 2.

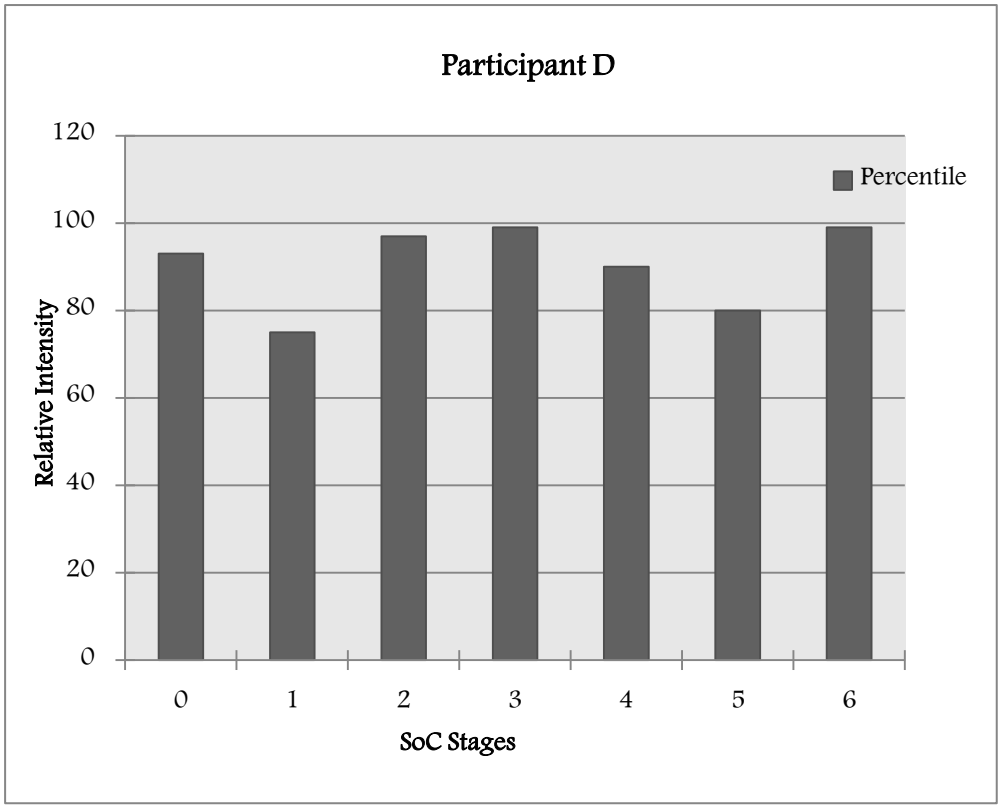

Figure 6: Stages of concerns profile for participant D

— ***Group SoC Profile Analysis for School 2-*** In the group profile of the teachers at School 2, it showed that Stage 0-Awareness (98%), Stage 1-Informational (91%), State 2-Personal (91%), Stage 3-Management (97%) and stage 6-Refocusing (92%) were relatively intense than other concerns. This means that teachers' concerns were self-related, task-related and impact-refocusing related. The lowest group stage of concern was stage 5-Collaboration (84%) (See Figure 7)

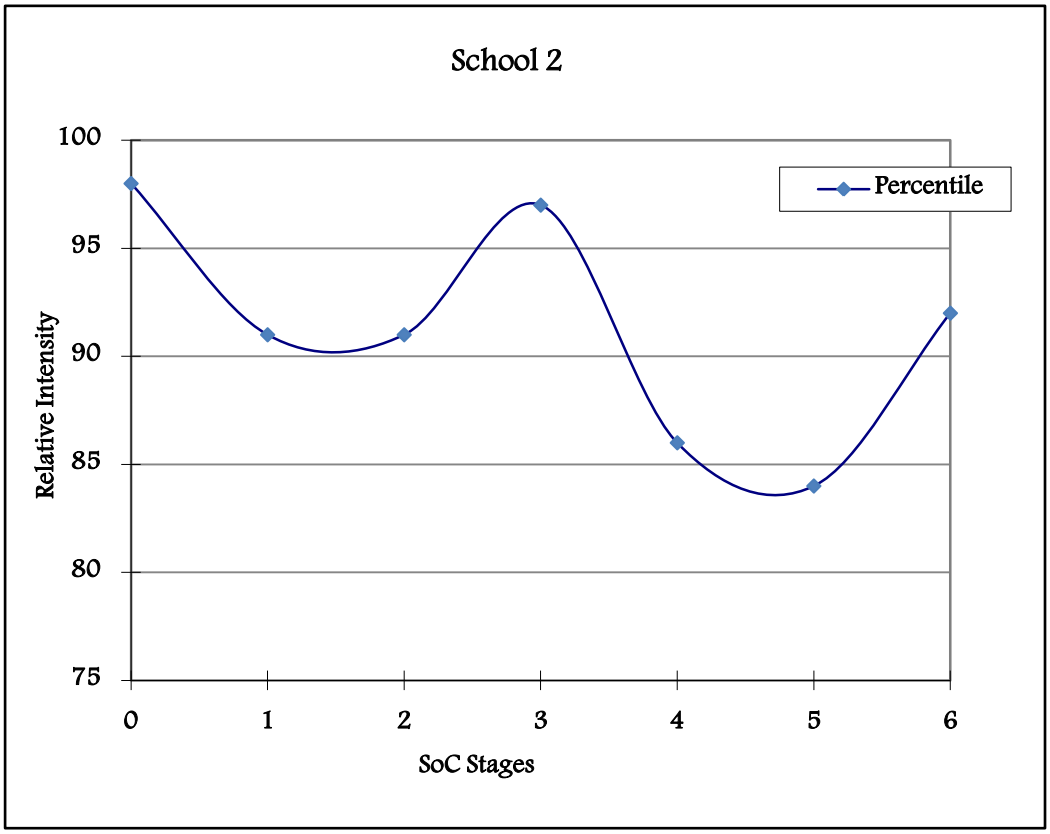

Figure 7: School 2 group stages of concern percentile scores (n=2)

— ***Qualitative Findings for School 2***

The teachers at school site 2 had concerns in all areas of CBAM stages of concerns but were more intense at task: management, impact: consequence and impact: refocusing. They were as follows:

Task: Management- Three (3) main sub-concerns were recognised under this theme- provision of resources/ materials, logistics, and time management of CAC in the classroom.

1. *Provision of resources/ material*- School site 2 is located in a rural village in central Trinidad. Accessibility can be a bit difficult. It can be probable reason

as to why the necessary resource wasn't readily available however teacher C concern is justified.

> *CAC is being implanted in schools and still some of the required materials have not been made available to schools. My concern is that teaching materials should be made available to schools to help teaching and learning process since it is a requirement.*

2. *Logistics*- The public at large was first introduced to the innovation CAC in April, 2012 .Teacher in standard four (4) and five (5) were shortly then instructed to attend two (2) training sessions about the innovation. They were told that this innovation would be implemented in these from September, 2012. They had to abandon their classes to attend these training workshops. The workshops were haphazardly organised with no clear direction in terms of implementation. Teachers were then told that the Creative Writing aspect of SEA would be omitted and implemented as part of the CAC. Teacher D shared similar sentiments:

> *The time frame for the CAC Narrative Descriptive Writing was too short. It was too rushed down for the students as well as the teacher. It became very frustrating due to the time frame.*
>
> *…changes are not communicated quickly enough to teachers and this results in a lot of confusion among schools and this in turn negatively affects delivery of curriculum.(Teacher C)*

Impact concerns- Consequence- It is evident through the results of the National test, and SEA for this school site that the academic performance of the students is poor or considered "below the standard" based on the API rating for that school. Therefore teachers concerns would be high in terms of how this form of assessment system would impact on their students. Teacher D noted:

> *It is a well-established fact that children mature at their own rate. Consequently, I am not certain how fair it is to use assessment marks of students over extended period of time for SEA as this does not make allowance for growth. For example: It is highly possible that a student that has attained a lower mark from assessments made over a 2 or 3-year period could actually attain a much greater mark from an exam at the end of the period due to growth.*

Whereas, the other teacher believes that this form of assessment would cause more pressure on students since they may lack certain skills and abilities to engage in such activities due to child's exposure and this in term would further placed these children at a disadvantage. When questioned further for clarity, the teacher indicated that these students belong to low-income homes therefore; their parents are not able to afford to enrol them in extra leisure activities such as dance and the arts to boost their performance in those areas that require such.

Task: Refocusing- These are the concerns teachers have on how to improve the innovation itself. These include exploring the merit and effectiveness of the innovation by reconceptualising and possibly replacing it with a modified alternative. Teachers are ones who are really able to give a clear understanding of their students' strengths and weaknesses. Also, they are able to suggest to parents and stakeholders what they think might be beneficial to their charges. This was indeed true for the teachers at this schools site. They are aware that their students are not performing well academically and Teacher C suggests another type curriculum to suit their students learning styles and abilities.

> *I wish at the primary level from standard 4at least, students were exposed to vocational skills training especially for the non-academically inclined students. (Teacher C)*

c) ANALYSIS OF DATA FOR SCHOOL 3

— ***Peak Stage Score Interpretation for School 3*** -Table 5 shows the peak stage scores (highlighted) for each of the two (2) teachers in the sample and their composite group peak stage score. The result of the group peak score revealed that the Stage 0 (Awareness) was the most significant stage of concern. It recorded the highest percentile score up to the 99th. The profile revealed that the secondary peaks at management (97%). The profile also indicated that these teachers had low concerns related to consequence (33%).

Table 5: Stages of concern percentile scores for School 3

Participants	Stage 0 Awareness	Stage 1 Informational	Stage 2 Personal	Stage 3 Management	Stage 4 Consequence	Stage 5 Collaboration	Stage 6 Refocusing
F	99	96	94	98	21	93	34
E	99	91	91	97	54	68	60
Average (Group)	**0**	**1**	**2**	**3**	**4**	**5**	**6**
	99	95	92	97	33	84	47

— ***Individual SoC Profile Analysis for Teacher F***-Figure 8 shows the Stages of Concern Profile score for Participant F, a female teacher who has been teaching for 13 years. Participant F holds a Bachelor's degree. The highest stage of concern, with a relative intensity score of 99 % was *stage 0-awareness*. The second highest stage of concern, with a relative intensity score of 98 %, was *stage 3-management*. Participant's F lowest stage of concern, with a relative intensity score of 21 %, was

consequence.

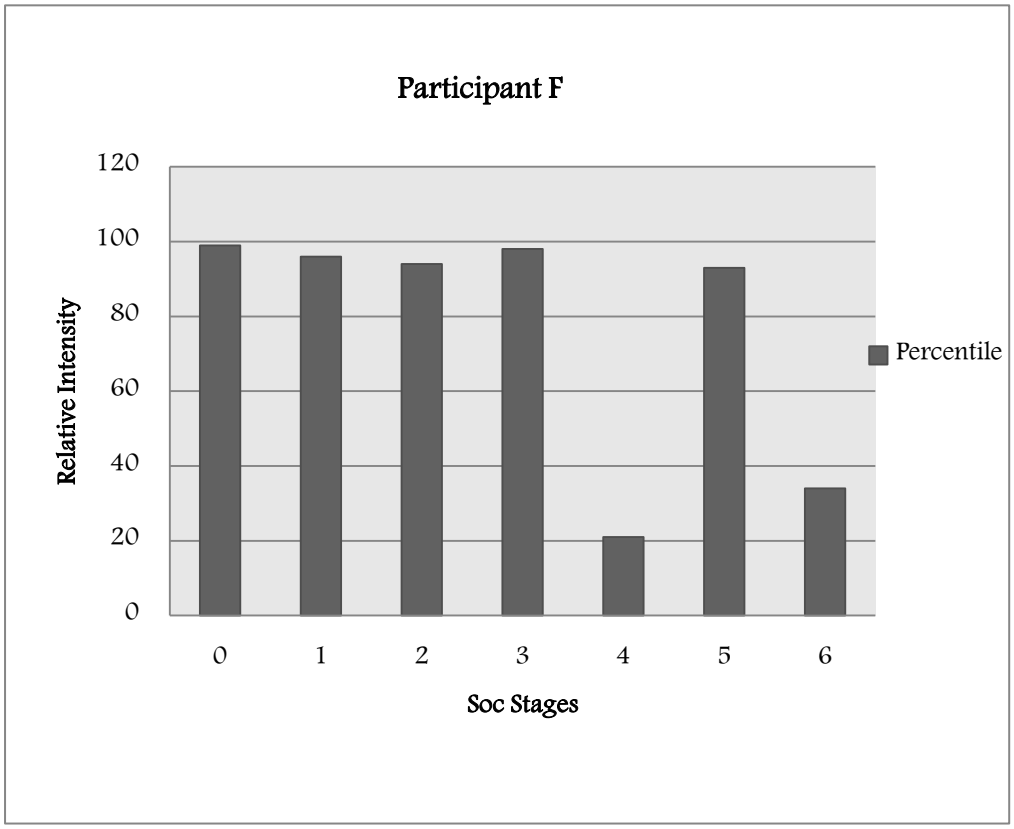

Figure 8: Stages of concerns profile for participant F

— ***Individual SoC Profile Analysis for Teacher E-*** Figure 9 shows the profile score for Participant E, a female teacher who has been teaching for 21 years. Participant E holds a bachelor's degree. The highest stage of concern, with a relative intensity score of 99 % was *stage 0- awareness*. The second highest stages of concern, with a relative intensity score of 97 %, were *stage 3-management*. Participant's E lowest stage of concern, with a relative intensity score of 54 %, was stage *4-consequence.*

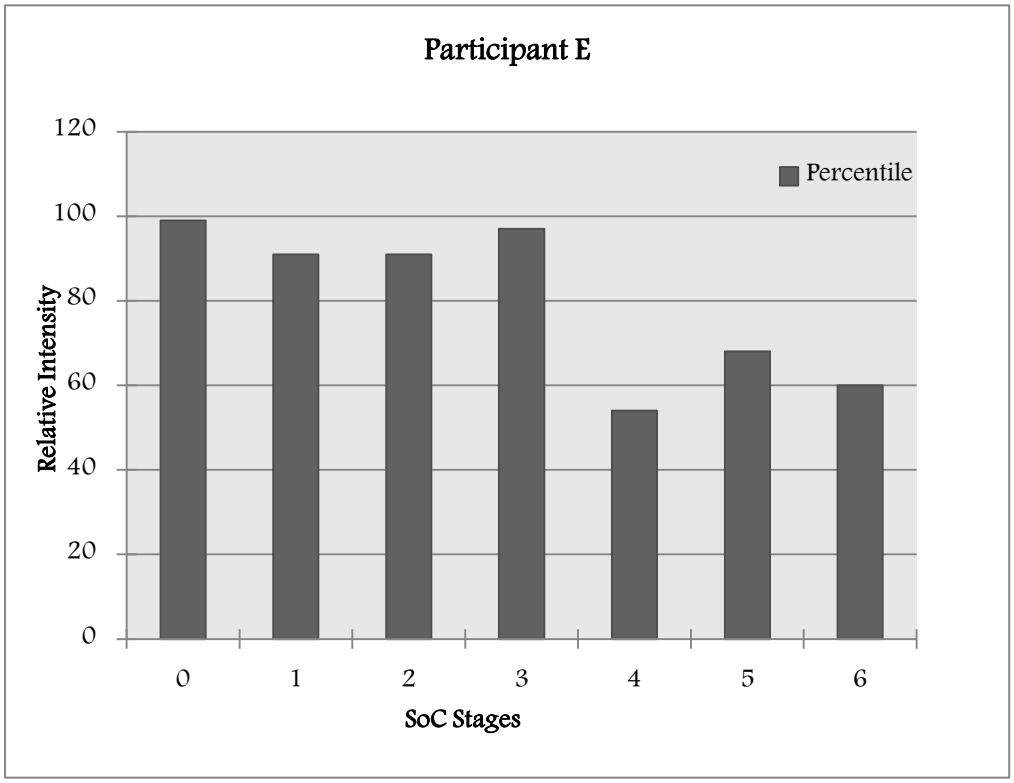

Figure 9: Stages of concerns profile for participant E

— ***Group SoC Profile Analysis for School 3***-In the group profile of the teachers, it showed that Stage 0-Awareness (99%), Stage 1-Informational(95%), State 2-Personal (92%) and Stage 3-Management (97%) were relatively intense than other concerns. This means that teachers' concerns were mainly self-related and task-related. The lowest group stage of concern was stage 6-Recofusing (47%) (See Figure 10)

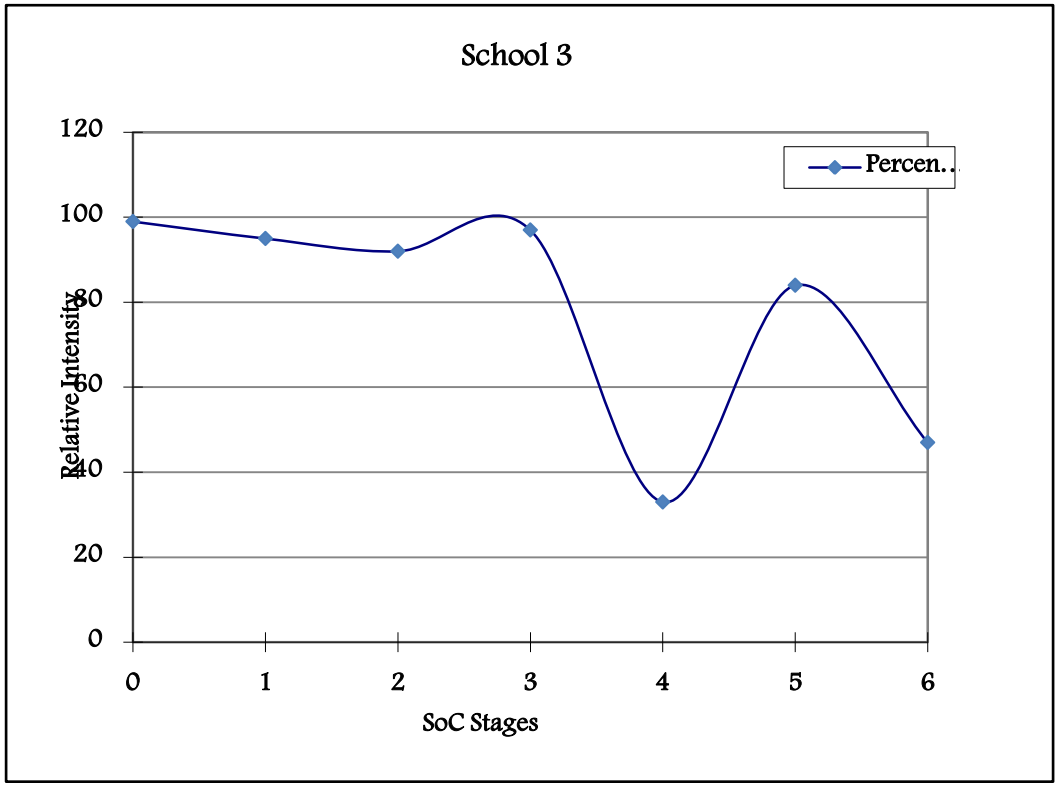

Figure10: School 3 group stages of concern percentile scores (n=2)

— ***Qualitative Findings for School 3***

The teachers at School 3 also had similar concerns like the other teachers at the other sites in terms of self: informational and self: personal. They basically shared similar self concerns such as information, teacher training and support systems for the implementation of CAC innovation. However, their concerns were more intense at Task: Management and Impact: Refocusing.

Task: Management- Three (3) sub-categories were identified under task concerns for the teachers at this school. They were time constraints and workload and class

size.

Time constraint and workload- Given the already high demands of this school's high academic achievement and present curriculum, the teachers were concerned about the multiple challenges of maintaining the school's API, completing the syllabus and now having to implement CAC in their already tight curriculum time frame.

> *Teacher F shared her concern: This form of assessment is very time consuming, therefore I had to take time from other subject areas to do composition writing. Also, students came in during their lunch periods to do editing, revising and publishing.*
>
> *The innovation is time-consuming and overwhelming. It needs to be spread out at all levels so as to over-burden any one particular area. It is also causing a back log of incomplete work other subject areas.(Teacher E)*

Class size- The typical class size in this is about 40 to 45 students since it is considered a "high performing school" judging from the National test and SEA results. The teachers indicated that due to the large number of students per class, managing tasks related to CAC is quite challenging.

> *"Managing forty two (42) students on a daily is already quite challenging and now having to implement CAC with areas such as VAPA (Visual and Performing Arts),it would even be more difficult since the students tend to become very loud and out of control when engaging in these types of activities. Also we do not have individual classrooms so the noise will filter into other classes, causing more confusion. .(Teacher E)*

Impact: Collaboration- These are concerns that teachers have on how to improve their use of the innovation through collaboration, coordination and cooperation of other stakeholders such as teachers, administrators, and/or community members/parents.

Based on the school's population, the teacher to student ratio is 1:40. This was probable due to two factors: demand for entry into school since it is considered "high performing" and staff shortage. However, based on the findings, it was very interesting to find that the two (2) teachers from this held extremely diverse views on 'collaboration'. Teacher F expressed her impact concerns regarding collaboration amongst the teachers towards CAC, due to shortage of teachers.

> *CAC needs a lot of work before it can be of any merit to students, it must be done in proper collaboration with teachers so that it can fully benefit students but that is lacking in our school. Teachers are not willing to sit and work together much less share ideas (Teacher E)*

> *Since CAC was literally imposed on us, we basically have limited information and knowledge about its process and what is required by us. Therefore, I believed they we need to work together (teachers) to identify one's strengths and weaknesses so as to better assist our students but this not so. We have a serious staff shortage. (Teacher F)*

d) MERGING OF DATA AND INTERPRETATION

Qualitative themes were developed and discussed, along with quantitative data findings, for each school to answer the research question as stated previously. Across case analysis of the three (3) schools were discussed as indicated below:-

- ***Stages of Concern Profile for school sites***- The graph below shows the stages of concern profile for the three (3) schools in the sample.

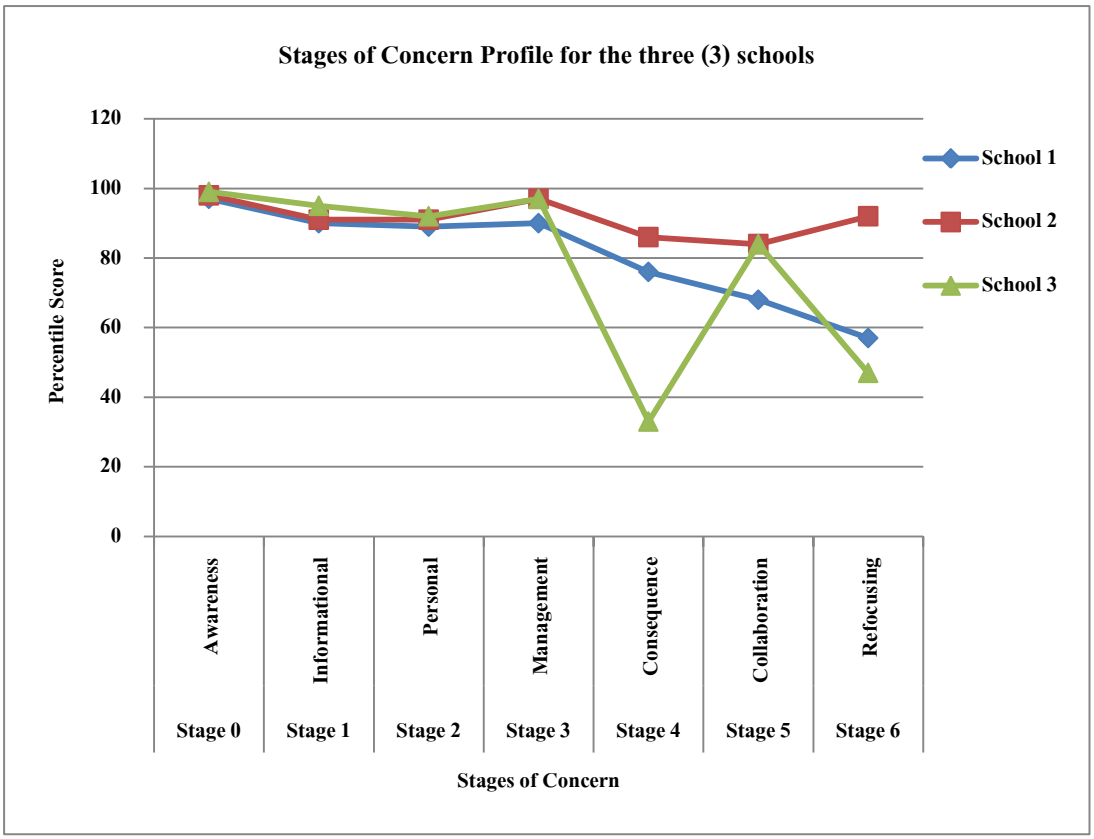

Figure 11: Stages of Concern Profile for the three (3) schools.

Based on the findings, it indicates that the teachers at the three (3) schools sites all had intense concerns in Stage 0, 1, 2 and 3. These teachers' concerns were mainly self and task -related. The teachers were just beginners in learning about CAC. They can thus be regarded as nonusers because it was the first time they were informed about this new form of assessment system during the workshops held in May/June, 2012. The high percentile score at Stage 0-Awareness across the school sites may reflect that they had much concerns about the implementation of CAC.

In stage 1 and 2, the teachers were interested in aspects of the innovation in a general way and how this change would affect them. The high percentile score in Management concerns indicated that teachers focused on knowing what to do with the CAC innovation and were concerned about how to get the task done more

efficiently and to know the logistic aspects of the innovation.

At school site 2 and 3, stage 5 was intense. These are concerns that teachers have on how to improve their use of the innovation through collaboration, coordination and cooperation of other stakeholders such as teachers, administrators, and/or community members/parents.

School site 2, the teachers had high concerns at Stage 4 (Consequence) but this was particularly low in comparison to school site 3. The high intensity of Stage 4 (Consequence) might reflect the fact that teachers paid more attention to either the impact of CAC use on students' learning outcomes or their own coordination and cooperation with others in the use of CAC innovation. In addition, school site 2 also had high concerns at the stage 6 (Refocusing). Both concerns may be related to the fact that the students at this school are not performing well based on both the National test and Secondary Entrance Assessment results.

- ***Comparison of qualitative themes with quantitative data***-The table below provide a comparison of the qualitative themes developed for each of the three schools and statistical data generated from the Stages of Concern Questionnaire (SoCQ) in order to obtain a synopsis of the teachers concerns of the three schools participating in this mixed-methods case study as they implement CAC. All the teacher participants had similar intensity concerns in the self and task related areas-stage 0 (awareness), stage 1 (informational), stage 2 (personal) and stage 3 (management). In the table below the stages of concern that are not bold indicate the similar concerns expressed by all at the three (3) school site. The stages of concern that are bold indicate a greater intensity of concerns expressed by those participants at that school site.

Table 6: Analysis of Themes for CAC by School and SoC

SCHOOL	THEME	STAGES OF CONCERN
SCHOOL 1		Stage 0-Awareness,
	Information Concerns:- - Knowledge & Understanding of CAC -Teacher training	Stage 1-Informational,
	Personal Concerns:- - Uncertainties about innovation - Support systems - Need for further training	Stage 2-Personal
	Task Concerns:- -Time -Provision of resources/materials -Logistics	Stage 3-Management
SCHOOL 2		Stage 0-Awareness,
	Same as School 1	Stage 1-Informational
	Same as School 1	Stage 2-Personal
	Management Concerns: -provision of materials/resources -logistics	Stage 3-Management
	-impact on students achievement	Stage 6-Consequence
	-Vocational Training	Stage 6-Refocusing
SCHOOL 3		Stage 0-Awareness,
	Same as School 1	Stage 1-Informational
	Same as School 1	Stage 2-Personal
	Management -time constraint -workload,	Stage 3-Task
	Collaboration -staff shortage	Stage 6-Impact

Summary of findings

In this chapter, the findings for both the quantitative and qualitative data for each of the schools sites were structured based on the research question I sought to answer in this study. It was analysed based on Stages of Concern (SoC) component of the Concerns-Based Adoption Model (CBAM). The intent of this study was to evaluate teachers concerns based on CBAM SoC theory in three (3) schools in the Caroni Educational District through the use of a mixed-method multi-site case study. Teachers had concerns at all seven stages of concern, but were of varying degrees and also the individuals' stages of concerns were found to be generally aligned to each other across the three (3) sites.

Comparisons of the quantitative and qualitative data for each of the three (3) schools were also presented. Findings indicated that all the teachers across the three (3) school sites had very high self and task related concerns. Teachers concerns were very high at the awareness, informational, personal and management areas. This finding is a common characteristic of the CBAM concern theory of new users in an innovation and indicates that the teachers have intense interest about the innovation and therefore need to have a better understanding and knowledge (informational) of how the innovation impacts (personal) upon them. Task-related concerns are related to duties, materials, methods, classroom management, number of students, and assessment strategies, which need to be properly handled in any teaching situation (Boz, 2009; Fuller, 1969)

Chapter 5: Discussions and Recommendations

This chapter provides a summary of the research, presents conclusions based on the findings reported in Chapter 4, and provides recommendations for additional research. The purpose of this multi-site case study was to evaluate teachers' concerns when implementing Continuous Assessment Component of the Secondary Entrance of the Assessment using a convergent parallel mixed-methods design in three (3) primary schools in the Caroni Educational District. These were measured within the framework of the Stages of Concern Model developed by Hall, Wallace and Dossett in 1973. Data were collected from six (6) primary school teachers.

Summary of the Findings

Research Question:-

What are the concerns of teachers when implementing the Continuous Assessment Component (CAC) of the Secondary Entrance Assessment (SEA)?

Overall, the study revealed that the teachers were concerned about the innovation and their concerns were very much related across the three (3) school sites. This was quite clear from the quantitative and qualitative data collected from the SoCQ and the qualitative data from the interviews.The highest stage of concern is in Stage 0: Awareness and the second highest were in Stage 3: Management. The lowest group stage of concern was at the Stage 4: Consequence. Teachers concerns were more intense at self-information, self-personal and task concerns. Teachers also expressed similar concerns such as the need for knowledge and training, resources,

time scheduling to prepare work and support personnel to assist in the implementation of CAC.

In a synopsis, the teachers' primary concerns across the three (3) sites were: to gain more knowledge and receive training sessions (Stage 1- Information). Teachers also reflected a high level of concerns at the Management Stage. They were concerned about the processes and tasks of implementing CAC and issues regarding efficiency, scheduling, task, processes, time demands, workload of teachers, organizational support (such as technical, financial, class size, resources allocation). Teachers were anxious about the impact of CAC on the pupils and teachers.

Although the teachers had numerous concerns with regards to CAC, they all indicated that CAC is a good idea in the way forward in terms of raising students' achievement but its implementation process is still unclear to teachers and it was rushed.

Discussion of the Findings

In this study, the researcher's intent was to evaluate teachers concerns in the implementation of CAC based on a constant/comparative method involving three (3) schools in the Caroni Educational District.. The findings presented in chapter 4 were obtained from two (2) sources- Stages of Concern Questionnaire (SoCQ) and interviews. The interpretation of Stages of Concern Questionnaire data included: peak score interpretation, individual stage of concern profile and group stages of concern profile for each teacher and school site in this study's sample. A hybrid approach of qualitative methods of thematic analysis was used to analyse the interviews. Teachers concerns were highest at Self: Informational Concerns; followed by Task: Management and then Self: Personal Concerns.

- All the teachers in this study across the three (3) school sites had a general awareness of the CAC innovation. According to Hall, George, and Rutherford (1986), there is a great interest in learning more detail, knowing available resources, and understanding necessary requirements for using the innovation.

- Generally, the teacher participants in the three (3) schools have intense self: Informational and personal concerns. Hall and Hord, 2011 suggest that a teacher may be uncertain about the demands of the innovation in relation to his or her self (professional status, role, and teaching). McLaughlin (1978) states professional development is not a one-time event but is instead ongoing and immersed in a strong support group of other learners who help and learn from each other.

- It was evident that although the teachers were aware of CAC, they were very much uncertain about their role its implementation process. This concern can be address through trainings and hands-on workshops about the innovation in terms of job specifications. As Cheng (2009, p. 113) puts it,

> "teacher knowledge is the result of teacher learning, and teacher learning is the way to acquire and develop teacher knowledge. Any growth in knowledge will help teachers get to know the gaps in their professional competence and compel them to learn."

- Teachers expressed major concerns about lack of clarity about CAC. If teachers have such concerns, there is no doubt they will implement a different thing from what developers intended. These concur with the views of Pratt (1980) and Fullan (2007) that lack of meaning or clarity about change on the

part of its implementers hinders its effective use. “Concerns at this point have to do with feelings of potential inadequacy, self-doubts about the knowledge required, or uncertainty about the situation they are about to face.” (Hall & Hord, 1987, p. 57).

- Another area that the majority of teachers raised concerns about was their involvement in the change process. These opinions expressed by teachers are clear indications that their involvement or participation in change is of much concern to them. It has been substantiated in the literature by Armstrong (2003) that if we really want teachers to consider and think about change and make it functional in their respective classrooms, then their perspectives should be highly considered. Pratt (1980) has also established that teachers get highly motivated in a change they are made part of.

- Management concerns were more intense than informational and personal in the SoCQ and suggest that the teachers had relatively high concerns about managing time with the probable increased in workload and planning of lessons and activities for students. This may indicate that the teachers have high concerns about meeting and achieving the objectives of CAC together with the already packed school’s curriculum within the set time frame and managing and handling daily instructional practices in the classroom. Borko et al. (2000) remarked that there is a difference between what teachers what they say they know and how they act.

- Teachers expressed concerns about non availability of resources. These include curriculum materials especially for the newly introduced subjects, equipment such as television, and limited time for successful implementation of the innovation.

- The findings also indicated relatively low concerns in the areas related to the impact of the CAC innovation on students which is known as stage 4: Consequence in school site 1 and 3 but Stage 5: Collaboration was a bit high in School site 3. According to Hall and Hord (2001), an "ideal" concerns-based profile is a user with high impact-consequence and impact-collaboration concerns. School site 2 had relatively high concerns in both areas. Hall and Hord (2001) further indicates that an active, engaged user of the innovation thinks about the impact of the educational innovation on students" learning (How does this affect the students?) and works collaboratively with his peers.

According to McKinney, Sexton, and Meyerson (1999), individuals move in a developmental pattern through the stages of implementation. They begin the process with more focus on the first stages and they gradually develop more concerns about the rest of stages as they develop more interactions with these stages. This was very much evident in this study.

Conclusion

As progression occurs throughout the stages of concern, the level of acceptance and participation of teachers in the innovation will rely immensely on the extent to which they feel a sense of comfort with the innovation. In facing alterations in education, teachers tend to progress through the various stages. This said progression starts with what is known as the developmental stages of Stage 0-Awareness; Stage 1-Informational and Stage 2-Personal. Through Stage 3-Management; Stage 4-Consequences, Stage 5-Collaboration and ultimately Stage 6-Refocusing, the progression of teachers continue to occur.

As a result, in order to attain effective implementation, the concerns of teachers require identification followed by a resolve of these said concerns. The importance of having concerns resolutions is not only for the purpose of encouraging student and teacher development of more mature concerns but also to avoid having a case where less mature concerns prevail. What needs to be fully understood and appreciated by facilitators/administrators who are connected with the process of implementation of educational reform, is the concerns that now arise as a direct result of the changes in the system. Moreover, there must be sufficient provision of support for the teachers in an effort to resolve the concerns, if an effective implementation is desired.

Recommendations based on findings

The following are the recommendations based on the findings:-

- Professional Development for teachers through in-service training and workshops should be facilitated. The developers of CAC should therefore to organize workshops, seminars and forums for all stakeholders involved in education to sensitize them about innovation.
- All material/resources required by the innovation should be allocated in a timely manner at the same time change is introduced.
- Non-contact time should be given to teachers to plan and mark students' work.
- Involve teachers in discussions and decisions about CAC of the SEA and its implementation process since they are aware of the needs of the students
- Teachers need to sensitize about the various forms of assessment required by the innovation and the criteria should be transparent, reliable and valid.
- Provide supportive and/or organizational arrangements such as time, guidance, support systems, resources and monitoring and evaluation systems.

Recommendations for Further Research

It is recommended that further research can be conducted by replicating this study in the other educational districts in Trinidad and Tobago to better evaluate the concerns of teachers in implementing CAC of the SEA. This can be beneficial since it would facilitate professional development, resources and ultimately improve student achievement. In addition, the other components of CBAM-The Levels of Use (LoU) and the Innovation Configuration (IC) component can be utilized in further studies.

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APPENDICES

APPENDIX A

Letter Requesting Permission to Conduct Research Study at School

1st February, 2013

Mr./Ms._____
Principal,
ABC Primary School.

Dear Sir/Madam,

Re: Letter requesting permission to conduct research study at school

I refer to the above captioned matter.

I am currently reading for the Masters of Education (Youth Guidance) Programme at the University of the West, St. Augustine where I am required to undertake a research project and submit a written report at the completion of the said research study.

My research is centered on using the Concerns Based Adoption Model (CBAM) to evaluate Teachers' Concerns about the implementation of the Continuous Assessment Component (CAC) of the Secondary Entrance Assessment (SEA).

In order to successfully complete my research, it is essential that I obtain the feedback from the teachers at the school via questionnaires and interviews that have been prepared pertaining to the said topic of research. This process will be conducted discreetly and at times where the teachers have no scheduled classes as to not interfere with the teaching curriculum.

I am therefore kindly seeking your permission in carrying out the above said research study.

Yours respectfully,

_____

Anycia Bhawan

APPENDIX B

Invitation Letter Seeking Teachers' Participation in the Research Study

1st February, 2013

Dear Teacher,

Re: Participation in research study at school

I refer to the above captioned matter.

I am currently reading for the Masters of Education (Youth Guidance) Programme at the University of the West, St. Augustine where I am required to undertake a research project and submit a written report at the completion of the said research study.

My research is centered on using the Concerns Based Adoption Model (CBAM) to evaluate Teachers' Concerns about the implementation of the Continuous Assessment Component (CAC) of the Secondary Entrance Assessment (SEA).

In order to successfully complete my research, it is essential that I obtain your voluntary feedback via questionnaires and interviews that have been prepared with questions pertaining to the said topic of research. This process will be conducted discreetly.

I strongly believe that with your voluntary participation, I will be able to address and become acutely aware of the issues and concerns surrounding the topic of research, which will contribute in making my subsequent findings and conclusions much more accurate and in depth.

I assure you that this process will be kept confidential and anonymous if you so choose should you decide to participate. I am also available for any queries or concerns you may have about the questionnaire.

Your participation in my research study will be greatly valued.

Yours respectfully,

_____

Anycia Bhawan

APPENDIX C

Stages of Concern Questionnaire

Name (optional):_____

Part I. Concerns Questionnaire

The purpose of this questionnaire is to determine what people who are using or thinking about using various programs are concerned about at various times during the innovation adoption process. The items were developed from typical responses of school and college teachers who ranged from no knowledge at all about various program to many years experience in using them. Therefore, a good part of the items on this questionnaire may appear to be of little relevance or irrelevant to you at this time. For the completely irrelevant items, please circle "0" on the scale. Other items will represent those concerns you do have, in varying degrees of intensity, and should be marked higher on the scale.

For example:

This statement is very true of me at this time.	0	1	2	3	4	5	6	(7)
This statement is somewhat true of me now.	0	1	2	3	(4)	5	6	7
This statement is not at all true of me at this time.	0	(1)	2	3	4	5	6	7
This statement seems irrelevant to me.	(0)	1	2	3	4	5	6	7

Please respond to the items in terms of **your present concerns**, or how you feel about your involvement with **this** innovation. We do not hold to any one definition of the innovation so please think of it in terms of your perception of what it involves, Phrases such as "this approach" and "the new system" all refer to the same innovation-***the Continuous Assessment Component (CAC) of the Secondary Entrance Assessment (SEA).*** Remember to respond to each item in terms of your present concerns about your involvement or potential involvement with the innovation.

Thank you for taking time to complete this task.

0	1 2	3 4 5	6 7
Irrelevant	Not true of me now	Somewhat true of me now	Very true of me now

1.	I am concerned about students' attitudes toward the innovation	0	1	2	3	4	5	6	7
2.	I now know of some other approaches that might work better.	0	1	2	3	4	5	6	7
3.	I am more concerned about another innovation.	0	1	2	3	4	5	6	7
4.	I am concerned about not having enough time to organize myself each day.	0	1	2	3	4	5	6	7
5.	I would like to help other faculty in their use of the innovation.	0	1	2	3	4	5	6	7
6.	I have a very limited knowledge of the innovation.	0	1	2	3	4	5	6	7
7.	I would like to know the effect of reorganization on my professional status.	0	1	2	3	4	5	6	7
8.	I am concerned about conflict between my interests and my responsibilities.	0	1	2	3	4	5	6	7
9.	I am concerned about revising my use of the innovation.	0	1	2	3	4	5	6	7
10.	I would like to develop working relationships with both our faculty and outside faculty using this innovation.	0	1	2	3	4	5	6	7
11.	I am concerned about how the innovation affects students.	0	1	2	3	4	5	6	7
12.	I am not concerned about the innovation at this time.	0	1	2	3	4	5	6	7
13.	I would like to know who will make the decisions in the new system.	0	1	2	3	4	5	6	7
14.	I would like to discuss the possibility of using the innovation.	0	1	2	3	4	5	6	7
15.	I would like to know what resources are available if we decide to adopt the innovation.	0	1	2	3	4	5	6	7
16.	I am concerned about my inability to manage all that the innovation requires.	0	1	2	3	4	5	6	7
17.	I would like to know how my teaching or administration is supposed to change.	0	1	2	3	4	5	6	7
18.	I would like familiarize other departments or persons with the progress of this new approach.	0	1	2	3	4	5	6	7

19.	I am concerned about evaluating my impact on students.	0	1	2	3	4	5	6	7
20.	I would like to revise the innovation's approach.	0	1	2	3	4	5	6	7
21.	I am preoccupied with things other than the innovation.	0	1	2	3	4	5	6	7
22.	I would like to modify our use of the innovation based on the experiences of our students.	0	1	2	3	4	5	6	7
23.	I spend little time thinking about the innovation.	0	1	2	3	4	5	6	7
24.	I would like to excite my students about their part in this approach.	0	1	2	3	4	5	6	7
25.	I am concerned about time spent working with non-academic problems related to the innovation.	0	1	2	3	4	5	6	7
26.	I would like to know what the use of the innovation will require in the immediate future.	0	1	2	3	4	5	6	7
27.	I would like to coordinate my efforts with others to maximize the innovation's effects.	0	1	2	3	4	5	6	7
28.	I would like to have more information on time and energy commitments required by the innovation.	0	1	2	3	4	5	6	7
29.	I would like to know what other faculty are doing in this area.	0	1	2	3	4	5	6	7
30.	Currently, other priorities prevent me from focusing my attention on the innovation.	0	1	2	3	4	5	6	7
31.	I would like to determine how to supplement, enhance, or replace the innovation.	0	1	2	3	4	5	6	7
32.	I would like to use feedback from students to change the program.	0	1	2	3	4	5	6	7
33.	I would like to know how my role will change when I am using the innovation.	0	1	2	3	4	5	6	7
34.	Coordination of tasks and people is taking too much of my time.	0	1	2	3	4	5	6	7
35.	I would like to know how the innovation is better than what we have now.	0	1	2	3	4	5	6	7

Part II. Teacher Information

Please complete the following questions by placing a check mark in the appropriate blanks and providing the information requested.

1. **Gender:** Female _____ Male_____
2. **Age:** 20-29_____ 30-39_____
   40-49_____ 50-59_____
   60 and above_____
3. **Highest level of education completed**:
   High School _____ Associate_____ Bachelor's _____
   Master's_____ Doctorate_____
4. **Total years teaching:** _____
5. **Have you participated in professional development (workshops, courses, etc.) about the Continuous Assessment Component CAC) of the Secondary Entrance Assessment (SEA).**
   Yes _____ No _____
6. **If yes to question 5, please describe briefly:**
   _____
   _____
   _____
   _____
7. **In your use of the innovation, do you consider yourself to be a:**
   Non-user___ novice___ intermediate___
   old hand___ past user___
8. **Please share any other comments you have regarding the implementation of the Continuous Assessment Component CAC) of the Secondary Entrance Assessment (SEA) in your school.**
   _____
   _____
   _____
   _____

Thank you for your help!

APPENDIX D

Interview Protocol

1. What concerns do teachers have regarding the implementation of the Continuous Assessment Component (CAC) of the Secondary Entrance Assessment (SEA)?
2. Do you think it was essential to implement this particular form of assessment component in primary schools? Please share your thoughts.
3. How is the implementation of this type of assessment applicable to our primary schools?
4. Is this form of assessment different from the traditional assessment?
5. If yes to the above question-In what ways is this form of assessment different from the traditional form of assessment?
6. In the implementation of this form of assessment, what are some of the notable changes that have been undertaken by you?
7. In implementing this form of assessment, did any of your beliefs in the teaching system change? In what way?
8. Are there any changes in your role as a teacher? If so, can you describe this change?
9. Do you require further information on any aspects of the CAC which will assist you with its implementation? Explain.
10. Is any assistance required regarding the implementation of CAC? Provide examples.
11. With the time frame given for the implementation of CAC in primary schools, do you think it was sufficient? Give reasons.

12. Have you regarded any areas of CAC as challenging or irrelevant? Explain
13. With regards to its implementation, do you have sufficient time to prepare? Please views.
14. What types of teaching strategies have you adopted with this curriculum?
15. Can you identify the forms of evaluations in the CAC?
16. Is there a sufficient provision of resources? (material, human, financial and time)
17. Are you concerned in any way about the nature of the impact the CAC has had on the students?
18. In your opinion, do you believe that the children eagerly anticipate this kind of assessment? Explain.
19. Have you observed any change in the behaviour of the children as they engage themselves in this form of assessment? In what way?
20. Do you require support/assistance for your class with regards to the implementation of the Continuous Assessment Component? If yes, in what way.
21. Have you received any support/assistance from the school administration regarding the implementation of CAC? If so, please specify.
22. Concerning the progress of the new approach to assessment, was there any collaboration between your colleagues and yourself? Please share.
23. Do you undertake any planning with your colleagues concerning the implementation of the CAC? How? Explain.
24. In your opinion, can you identify another method that may function more adequately compared to what you are practicing now? If yes, can you share?
25. To what extent, if any would you debate that CAC is the main contributory factor in causing teachers to modify their approach to:

    a. Teaching b. Assessment