THE UNIVERSITY OF THE WEST INDIES

FACULTY OF HUMANITIES AND EDUCATION

SCHOOL OF EDUCATION

ST AUGUSTINE, TRINIDAD

EDRS 6900 – RESEARCH REPORT

MASTERS IN EDUCATION – SCIENCE

Research Title: Teachers' attitudes and the implementation of a curriculum innovation during its early stages at a primary school in Central Trinidad: A Case Study

STUDENT NAME: EATHRA STEPHEN

STUDENT ID#: 03738844

SUPERVISOR: DR. DORIAN BARROW

Due Date: June 30, 2014.

Abstract

This qualitative case study approach investigated the attitudes of teachers as they implement the new primary curriculum during its early stages. Data was sourced from three teachers at the lower levels of Peasdorm Primary School. It was found that the teachers attitude were consistent with their knowledge of the curriculum document.   Participants had expressed challenges such as lack of resources and non-contact time. Overall the study found that most of the teachers had a positive attitude towards the new primary curriculum but requires more information on its contents and suggested use.

Acknowledgements

I would like to express my deepest gratitude to Dr. Dorian Barrow and Dr. Winford James for their support and guidance during the preparation of this report. Appreciation also goes to all the case contacts and the University of the West Indies lecturers and staff that helped in this research; your input was invaluable. I would finally like to thank Rajdai Ganga for her valuable feedback as well as my friends and family for their positive support and encouragement.

Table of Contents

Chapter 1

Background to the Study

1.   Introduction

      Curricula are a fundamental part of all education systems and serve as a critical link between what is and what should be. Hence, they shape and are shaped by the professionals who teach them (National Research Council (NRC), 2004). The NRC further states that curricula determines the content of all subjects being taught and decisions about curricula are typically made at the local level. Thus, the Government of Trinidad and Tobago took the initiative to rewrite the primary curriculum documents during the period 2012 to 2013. This new curriculum document is being implemented at the lower levels of primary schools (Infant One to Standard One) in Trinidad. Before its implementation, public attitude and opinion were being expressed through numerous press releases. For example in the Express Newspaper dated January 2, 2013, article headline read, "In education? Oh, the shame of it!" In this article Professor Spence (2013), expressed his shame that after fifty years of independence and the University of the West Indies being in existence for sixty years, Trinidad and Tobago sought a Canadian university for "Developing, Revising and Implementing Primary Curriculum." He further added that in an assessment, Mount St Vincent University is ranked forty out of sixty Canadian universities. And that a school syllabus should be developed in relation to local norms, which is very important for the primary level; as we could go wrong in educating our children for successive generations (Spence, 2013). Such articles had a compelling impact on teachers' attitude towards the new primary curriculum documents; in that attitude often determines what we do (Aronson, Wilson and Akert, 2010).

1.2 Teachers' Attitude towards a Curriculum Innovation

1.2.1 International Perspective

Akin and Black (1997) point out, "In a late 20th century marked by a distrustful and even an angry electorate in many countries, educational change is advocated and supported in considerable measure to correct perceived ills. Each country is fighting its own demons" (p. 23). Education systems internationally, have been implementing various innovations in their aim to improve the level of student learning and by extension a better life for their citizenry. As such numerous studies that incorporated teachers' attitudes towards curriculum innovation have been conducted. Nespor (1987) posits that the formation of our belief systems tends to be based on affective and evaluative aspects of an individual. However, Anderson (2005); Atkinson and Shiffrin (1968) relay this from a cognitive perspective as they base emotions and feelings since they relate to personal experiences that are stored in our memory. For example if a teacher recalls a memory of learning mathematics as enjoyable, this will foster a positive attitude which is likely to influence their instructional beliefs (Nespor, 1987). Nespor further adds that if a teacher had positive or negative experiences in spite of the level of success they have achieved, they will associate these experiences with practices and form beliefs about the effectiveness or ineffectiveness of the method. As such, beliefs serve as the mediator between attitude and practice (Wilkins, 2008).

It can be implied that teachers have great influence on the curriculum implementation process. Therefore, it is imperative that teachers approach this task with an attitude that is conducive to generating optimal learning in their classrooms. Connelly and Ben-Peretz (1980) point out that if enough were known about the curriculum implementation process and how teachers influence the process, research findings and developments would more likely be used by

practitioners to improve their classroom practice. From a cognitive perspective, a person's attitude includes his or her thoughts and beliefs about an attitude object (Aronson, Wilson and Akert, 2010). Hashweh (1996) conducted a study involving thirty five Palestinian science teachers, to find out the relationship between teacher beliefs and practice. Data was gathered through a three part questionnaire which comprised critical incidents, direct questions about teacher strategies for conceptual change, and ratings of the use and importance of specific teaching strategies. Findings from this study indicated that teachers who hold learning constructivist and knowledge constructivist beliefs are more likely to detect student alternative conceptions, have a richer repertoire of teaching strategies, use potentially more effective teaching strategies for inducing student conceptual change and report more frequent of effective teaching strategies compared with teachers having empiricist beliefs.

1.2.2 Regional Perspective

Caribbean education researchers and policy makers could have been justifiably accused of force-fitting results of educational research from developed countries into Caribbean schools (Fraser-Abder, 1988a). In response to such comment, George (1988) argued that, failure to develop context specific curriculum that Caribbean students could identify with hinders students' attempts to "link school science with everyday experiences." In light of this concern Barbados Ministry of Education, Youth Affairs and Culture (1998; 1999), took the initiative with the Barbados' Education Sector Enhancement Programme (EduTech 2000) which is considered "one of the most ambitious and comprehensive plans exemplified by a Caribbean nation (Sweeney, 2003). This programme's main objective is to ensure "all children leave school with the basic skills and abilities that are required to participate productively in the skill and information-

intensive job market." Sweeney (2003) provides an analysis of science education in the Caribbean. In his paper he had reviewed the Barbadian, Bahamian and Jamaican science education policy. He cogently stated that as at 2003 EduTech is achieving a creditable measure of success. However, in 1997, Bermuda took a radical overhaul of its primary and secondary system and introduced a new set of national curricula. He had pointed out that Bermuda Science Performance Standards, (2001) was distinct from the other Caribbean countries as it provided specific performance descriptors, sample activities and examples of student work. Furthermore, Sweeney stated that both Barbados and Bermuda had incorporated a strong focus on technology and competence in their programme.

Sweeney (2003) provides cross-case analyses and comparative studies involving different Caribbean countries. These included the Science Learning Centre and the Science Matters in Life Everyday (SMILE) programme in Jamaica and Bermuda's School Science Enrichment Program that are geared to improve scientific literacy of all sectors of the Caribbean population. He also argued that well prepared science teachers are essential to the successful attainment of vaunted goals of developing critical thinking skills in students who are proficient in the use of technology and are able to function productively in the "Information Age".

1.2.3 Local Perspective

Recommendations from 1994 Task Force on Education including other studies and reports that had diagnosed the ills in the education system and had suggested solutions gave birth to The Secondary Education Modernisation Programme (SEMP). As it aligns itself with the Government's policy on education, the White Paper on Education (1993-2003), places a premium on high-quality universal secondary education. The implementation of SEMP began in

October 1999 and among its objectives are to: establish a cadre of teachers capable of delivering high-quality education; enhance curriculum development at secondary level and; produce well-rounded graduates who are equipped to move on to further education or who are sufficiently trainable to enter the world of work (SEMPCU, 2002).   In an effort to improve the quality of education, a new curriculum based on eight core subject areas from Forms one through three were re-written.   Systems for reporting and monitoring were set up to facilitate timely intervention; which included analysis of actual achievements as compared to planned activities and; a Programme effectiveness report of the SEMPCU (SEMPCU, 2002). (A study was done to monitor the effectiveness of SEMP. where is this sentence going?

A qualitative evaluation of the Lower Secondary SEMP Science Curriculum of Trinidad and Tobago (Barrow and De Lisle, 2009) had postulated that although teachers felt that the SEMP science curriculum was significantly superior to the general science curriculum it had replaced, it posed the problem that they had to extend their science content knowledge. Thus, many of the twenty four science teachers from the study attitudes towards this challenge were: this topic is not a part of their subject area, so I don't know much about. Whilst, there were others who had expressed feeling uncomfortable with teaching a subject that was not a part of their field. As a result, they taught in a disjointed manner thereby presenting science as inquiry and science as telling. Consequently, students received mixed messages about the nature of science and how scientific knowledge was constructed. This finding from the study demonstrated the impact of teachers' attitude on the delivery of curriculum content. As such, a study on teachers' attitude toward implementing a curriculum innovation could provide further insight into how attitudes are formed and how they can influence practice.

These studies further suggest that teacher attitude, whether affective, cognitive or behavioural is fundamental in the curriculum implementation process. They affirm that the attitudes displayed can either hinder or support the effectiveness of the curriculum. Fullan (1982) asserts that each teacher has his or her own subjective view, and teachers are not generally receptive to the implementation of new curricula, especially to one that does not support his or her ideology.

1.3   Challenges of Implementing a Curriculum Innovation

1.3.1   International Perspective

In 2008, Waters and Vilches produced a paper entitled "Factors affecting ELT reforms: The case of the Philippines Basic Education Curriculum." The main purpose of this paper was to report on findings of research into the implementation, in both general and ELT related terms, of another similar recent initiative, the Philippines 'Basic Education Curriculum'. It also served to complement the picture provided by accounts of various studies located within the East Asian region, by reporting on research into the implementation of the recently introduced Basic Education Curriculum in the Philippines. This curriculum was developed in response to dissatisfaction with student achievement as the basic education level, a problem attributed to the 'overcrowded' nature and 'one-size-fits-all approach' of the previous curriculum (Dep Ed Undated: 5-7). This curriculum promoted more mutual interaction between students and teachers, and between students themselves as it encouraged collaborative learning and collaborative teaching.

Teachers implementing this programme believed in the importance of contextualizing the curriculum (Dep Ed 2005: 3). The document also had purported that the teachers had a positive

attitude toward the integrative, interactive, brain-based approaches endorsed by the Basic Education Curriculum (Dep Ed, 2005: 3-4). Waters and Vilches also found that teachers had been motivated to apply the Basic Education Curriculum approach, but their attempts had been severely constrained by resources and logistical problems. There had been an overall failure in implementing the Basic Education Curriculum at the classroom level due to inadequate teacher orientation and impracticable curriculum design (Waters and Vilches, 2008). In their analysis, data had shown that a lack of funding appeared to have been a primary factor determining sparse provision of training. They further reiterated, the need for resources echoed in many parts of the teachers' data had been followed by the lack of fit between the Basic Education Curriculum design and the logistical realities of many teaching situations (Waters and Vilches, 2008).

Bundy and Boyer (1994), in a study of teachers in the rural areas of British Columbia, had found that both in-service and pre-service education had inadequately prepared teachers for the realities of inclusion. These teachers had reported a high percentage of the children in their classrooms had special needs with a wide range of disabilities. They had further revealed, there was a severe concern pertaining to the lack of support services that was made available to themselves and their students. These teachers had divulged a perceived inability to provide optimal educational programs to children with special needs because of inadequate teacher preparation and lack of resources. These findings are supported in a study involving two hundred and thirty one teachers in Northern Ireland and Scotland. Ninety six percent of these teachers had revealed that their professional training had not prepared them for the challenges associated with inclusive education (Wishart and Manning, 1996).

1.3.2   Regional Perspective

In their review of public education in Bermuda; Hopkins, Matthews, Matthews, Woods-Smith, Olajide and Smith (2007) had identified some major challenges in implementing the Bermuda Performance Standards, (2001). The report advocated for closer links on curriculum implementation between schools or groups of schools; since inconsistencies in implementation between schools cause problems when pupils from different schools move up to the next school and lose momentum. Furthermore, the Bermudian curriculum and the accompanying standards, which are from the years 1997, 1999 and 2001, cover a wealth of content. This content is not sufficiently clear, coherent or demanding and is unable to make much contribution to raising student achievement (Hopkins et.al., 2007).

The curriculum lacks coherence because of inconsistencies that exist in both content and presentation. Therefore, there was constant revision and it became unclear which version is being used by educators in different schools. Another contributing factor is clear numbering system that can assist educators in distinguishing between the previous and new versions of the curriculum document. There are instances where the performance standards fail to sufficiently align with the curriculum objectives (Hopkins et.al., 2007). Additionally, the report had stated, the curriculum lacks clarity and relevance because of its presentation and has led to   confusing messages. Many principals had indicated that they find the documents unwieldy and inaccessible. Some schools are in possession of the Performance Standards Summary document and not the newly revised curriculum documents. This has led to the belief that the performance standards and the curriculum are synonymous, adding further confusion to understanding and implementation.

Griffiths-Watson (2001) had presented a brief report on the challenges in implementing Barbados EduTech 2000. Although this report had been presented during the early stages of its implementation, she reiterated that schools must be cognizant of the role they play in implementing a curriculum reform. She had advocated that the Ministry of Education should ensure that all school principals and teachers should participate in orientation sessions that are aimed at sensitizing them to the curricula. The main challenge that confronted the implementation process had been the need for retraining of teachers and especially in the use of methodologies with which they were not proficient.

1.3.3 Local Perspective

The idea of education reform came in response to growing concerns about issues of quality, equality and the overall development of an education system capable of responding to the changing demands of society (Education Policy Paper, 1993-2003). The Ministry of Education, in its efforts to strengthen the education system took a robust approach to reform the secondary education system. The reform exercise had been an intricate and unclear task (Joseph, 2010).

The aim of SEMP had been to provide quality secondary education by quality teachers who are equipped with state-of-the art teaching methods and support-equipment in quality schools (Arévalo, Fryer, Leister, Loterszpil, Omaña and Rogers (2011). However, in implementing the SEMP science curriculum some teachers had been confronted with a variety of challenges. In their study, Barrow and De Lisle (2009) found that these teachers had experienced problems with integrating the various topics to produce teachable units. It must be noted that these teachers had not viewed the curriculum as integrated. Instead, they saw it as a

combination of science subjects made up of topics from chemistry, physics and biology. This, according to Glasgow (1997) is a result of science teachers' non-exposure to teaching science as multidisciplinary, interdisciplinary or integrated. As a result, the levels of integration varied within and among schools (Barrow and De Lisle, 2009).   Furthermore, the sequencing of the topics in the document had created additional challenges as teachers had experienced problems in creating coherent teachable science units. Moreover, most of the teachers in their study were at the mechanical level of use. This posed challenges in the implementation of the curriculum as the innovation was not being fully implemented by these teachers (Barrow and De Lisle, 2009).

Although the SEMP science curriculum had not been dense, teachers were cautious about achievement of its outcomes which they had claimed is highly dependent on the school's student intake. Also highlighted in this study is the impact of administrative bureaucracy on the level at which the curriculum had been implemented. There were schools with efficient administrators who were able to secure the resources required to implement the programme and those with less efficient administrators lacked the necessities for implementation. Additionally, some science teachers did not know how to use the resources provides and the lack of out-of-class time for planning also hindered the implementation of the curriculum. This posed a problem in schools that had the necessary physical infrastructure and resources that are necessary for its implementation. Consequently, teachers, students and subject matter of the curriculum were identified as factors inhibiting the implementation of the SEMP science curriculum (Barrow and De Lisle, 2009).

1.4   The Issue

"In primary schools across the country, approximately forty to fifty percent of students are underperforming" (De Souza, 2013). To address this issue the Government of Trinidad and Tobago made the decision to rewrite the primary curricula. The aim of the new primary curriculum is to improve poor levels of comprehension in students as it caters for the gifted, the normal child and the challenged (Kemchand cited in Bagoo, 2013). This new curriculum is being implemented in stages which commenced in September 2013; with teachers at the lower levels in primary schools (Infant One to Standard One). This curriculum comprises three documents, a Curriculum Guide, Teachers' Guide and Instructional Toolkit. These three documents are geared at improving the level of student competencies in all subject areas with emphasis being placed on five areas of consideration: numeracy, literacy, differentiated instruction, information and communication technology and assessment for learning. These areas are infused in learning units and learning plans presented in the Instructional Toolkit.

However, there is the question: "Why the hasty implement? of the curriculum?" In her article entitled "Principals object to curriculum changes" Cecily Asson expresses the view of the president of the primary schools principal association, who states, principals are trying to manage as teachers are being called to attend Ministry of Education training for the new curriculum. This statement came following concerns expressed by parents whose children had to stay at home during these training exercises. Additionally, teachers at various primary schools throughout Trinidad are expressing various attitudes about implementing this new curriculum. There are schools where teachers are implementing the new curriculum using methodologies of the former documents, and there are those who are still using the former curriculum, whilst others are trying to implement the current document using the prescribed methodologies. This

research intends to realize the attitude of the teachers at Peasdorm Primary School as they implement the new curriculum.

1.5 School Context

Peasdorm Primary School is a co-educational school in a sub-urban development in the Caroni Educational District in Trinidad. This school comprises a staff of twenty seven trained teachers including a Vice Principal, a Principal and two Heads of Department. The new primary curriculum is being implemented by eleven teachers in the lower levels of this school.

As a teacher of the said school, I have heard teachers expressing various views on the new primary curriculum.   Some of these include, "I still don't understand what we are suppose to do," "This curriculum come in such a rush," and "I am comfortable with what we had (the previous curriculum documents)." These comments represent deep seated beliefs of these teachers, according to Nespor (1987) and Pajares (1992), teacher beliefs play a major role in teachers' decision making about curriculum implementation.

1.6 Justification for the study

This study focuses on the attitudes teachers possess as they implement the new primary curriculum document during the early stages. As a primary school teacher, the researcher hopes to gain insight into the impact of these attitudes on students, teachers as well as the entire education system. Additionally, as part of the curriculum writing team and training coach, the researcher will be able to bring to the awareness of teachers the importance of having an attitude that will generate an atmosphere where students are inspired to become life-long learners.

The participants in this study will become aware of the extensive impact their attitudes have on the implementation of this curriculum document. They develop an understanding that this new primary curriculum is educationally focused and is geared towards improving the overall performance of all students. Teachers will also be encouraged to embrace this curriculum with a high level of enthusiasm that will help promote the development of students' general knowledge.

This study will also prove beneficial to students as they will be functioning in an atmosphere where their teachers possess an attitude that is conducive to learning. This type of atmosphere will ensure students full engagement in activities. Hence, their development in learning will enhance and improve their self esteem, academic achievement, and class participation; thereby sustaining learning.

The main focus of the education system is geared to improving students overall performance. The results of this study will benefit the education system of Trinidad and Tobago as it provides information on teachers' attitude during the early stages of implementing the new primary curriculum document which can be utilized by technocrats to guide future planning. Curriculum evaluators can use this information to influence their report and in so doing adjustments can be made to the current draft document that includes input generated from teachers through this study. This can result in an improvement in the success of the education system, achievement in the country's global academic performance and improved teacher performance in curriculum delivery.

The literature has revealed that there is limited research in the area of teachers' attitude towards a curriculum innovation during the early stages of its implementation. Locally, there is no such research in the area under study. As such this study will provide useful information to

the research community that will assist in future implementation as they become aware of prevailing teachers' attitudes. Furthermore, this study can act as a catalyst for additional research in the area under study as they can conduct studies that can satisfy the need for implementers to use user friendly mechanisms in curriculum documents.

1.7   Statement of the Problem

The Ministry of Education has implemented a new primary curriculum document at the lower levels of the primary schools. This new curriculum has given arise to various attitudes, and in some cases cause for concern. Stakeholders are questioning the "hasty implementation" (Asson, 2013) of the curriculum. Teachers are also complaining about the "rush in implementing" the curriculum. Although, some of them are of the belief that the existing curriculum was in need of review and they are questioning the manner in which it is being implemented. Research has shown that teachers' attitude affects their practice. Thus it is imperative that teachers' attitude on the new curriculum in the early stages of its implementation be understood as it indicates the level of teaching that will occur in classrooms (Wilkins, 2008).

1.8   Purpose of the Study

The purpose of this qualitative case study is to describe the attitude of three lower primary school teachers at Peasdorm Primary School during the early stages of implementing a curriculum innovation. In this study teachers' attitude is viewed through three components identified by social psychologists: cognitive, affective and behavioural. At this stage in the research, curriculum innovation will be generally defined as new subjects, the combination of

old subjects or cross-cutting learning objectives. It can also take the form of new content, concepts, sequencing, time allocation or pedagogy (Kärkkäinen, 2012).

Thus, the purpose of this qualitative case study is to gain an understanding of teachers' attitude during the early stages of implementing the new curriculum innovation. 1. Their roles and responsibilities. 2. Implication of their attitude to student learning.

1.9 Research questions

- **Overarching Question**

1. What are the attitudes of teachers during the early stages of implementing a curriculum innovation?

Sub-questions

- o What do teachers know or believe they know about the curriculum innovation being implemented?

- o What are teachers' perceptions of their role in the curriculum implementation process?

- o What are some of the challenges teachers face in implementing a new curriculum innovation?

- o How do teachers feel about this particular curriculum innovation?

- o What are the levels of use of the curriculum innovation in the primary school classroom?

1.10 Theoretical Framework

Theory of Planned Behaviour

This theory states, that the best predictors of a person's planned, deliberate behaviours are their behavioural intentions. The best predictors of their intentions are their attitudes toward

the specific behaviours, their subjective norms, and their perceived behavioural control of the behaviour (Aronson, Wilson and Akert, 2010).

```
┌──────────────────────────────┐
│ Attitude toward the behaviour:│
│ People's specific attitude toward│
│ the behaviour, not their general│
└──────────────────────────────┘
                                  ╲
┌──────────────────────────────┐  ╲
│ Subjective norms: People's    │   ┌────────────────────────┐      ┌──────────────┐
│ beliefs about how other people they│──→│ Behavioural intention  │ ──→ │  Behaviour   │
│ care about will view the behaviour│   └────────────────────────┘      └──────────────┘
│ in question                   │   ╱
└──────────────────────────────┘  ╱
                                  ╱
┌──────────────────────────────┐
│ Perceived behavioural control:│
│ The ease with which people believe│
│ they can perform the behaviour │
└──────────────────────────────┘
```
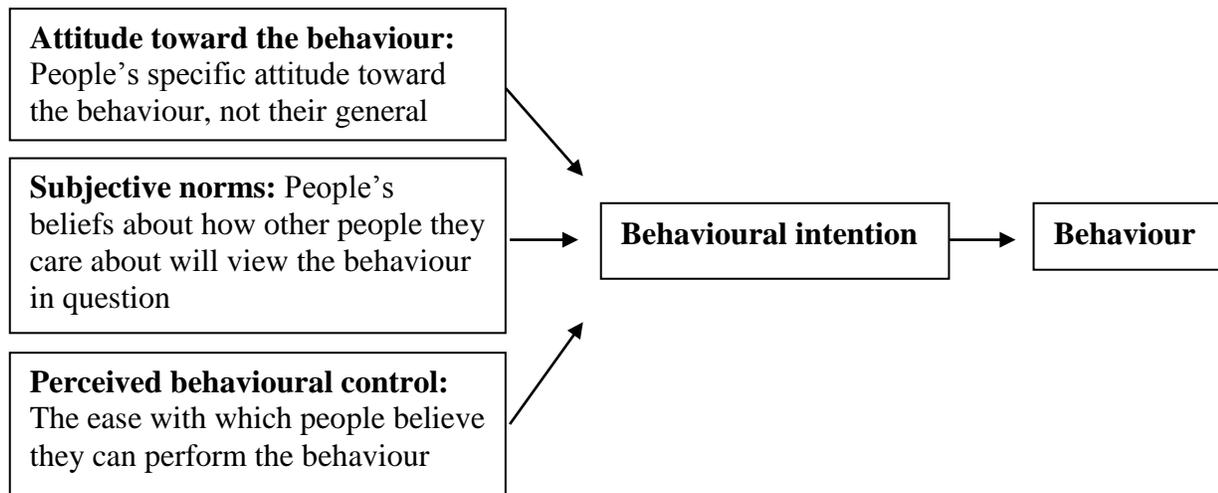
1.11 Operational Definitions of Key Terms

Attitude: the evaluation of people, objects or ideas (Eagly and

Chaiken, 2007)

Cognitive based attitude: is the thoughts and beliefs that people form about the attitude

object

Affective based attitude: focuses on people's feelings and values about the nature of

an attitude object

Behavioural based attitude: how people act toward the attitude object

1.11   Significance of the Study

It is expected that the information gathered by this study will be used to motivate teachers at Peasdorm Primary School to make the necessary adjustments that are required to ensure the successful implementation of the new primary curriculum. This information will provide teachers with an understanding of the effect of their attitude on student learning. Hence, they will be able to adopt attitudes that will promote the most favorable learning of all students. It is also anticipated that the results of this study will inform curriculum leaders on how to improve the design of instructions and instructional activities so that it is easily accommodated by teachers. The results can be used to gather additional training and support to teachers in implementing the curriculum.

Additionally, this research will identify the levels of teachers functioning with the new curriculum, in so doing they will develop a better understanding of this curriculum innovation. It is hoped that the results of the study can provide the Ministry of Education with information on how teachers are responding to the new curriculum innovation, thereby, inspiring further research in the same area.   This study will also add to literature on teachers' attitude and the implementation of curriculum innovation during the early stages. The results of this study can also lead to the development of a proposal to conduct similar studies in additional schools.

1.12   Organisation of the Report

The next four chapters comprise the execution of this research. Chapter two focuses on the review of literature. Presented in this chapter are information about the construct of teachers' attitudes toward the curriculum innovation, the challenges teachers encounter when

implementing a new curriculum, and the contextual application of the literature, and finally some gaps in the literature that this study fills as they pertain to teachers and curriculum change. The methodology is presented in chapter three. This chapter provides information on the overall design of the study, sampling procedures, instrumentation, data collection, and data analysis. Chapter four provides information about data analysis and the findings obtained as they pertain to the research questions. The results of the qualitative analysis are presented as narratives. The fifth chapter discusses, provides recommendations and concludes the study.

<p style="text-align:center">**Chapter 2**</p>

Literature Review

2.1 Introduction

A positive attitude towards the implementation of a curriculum innovation is the key ingredient to its success. However, it must be noted that human beings are resistant to change that are not in line with ideologies. Roberts (1982) found that teachers have difficulty implementing curricular that do not emphasise values customarily held by those teachers. In the last decade, curriculum change has come to the forefront in many countries. Each country focuses on producing a citizenry that is equip with knowledge, skills and dispositions that will enable them to function successfully in the global economy. For this to be achieved, teachers, the frontline players in the education system are endowed with the responsibility of implementing these curriculum innovations in their respective classrooms. Conversely, these innovations are confronted with various attitudes, as each teacher has his or own subjective view and they are not commonly receptive to implement new curricula (Fullan, 1982).

This chapter focuses on the theoretical perspectives of teachers' attitude towards curriculum change and challenges they encounter when implementing a new curriculum. It also provides information on other studies within the context of the research questions and highlights some gaps that this study has filled.

2.2 Part 1. Theoretical Overview – Teachers' Attitude

The new primary curriculum has impacted on the attitudes of teachers through out Trinidad and Tobago. This innovation requires of teachers a favourable attitude that will bring about the required changes in the nations' classrooms. An understanding of the theory of planned behaviour which states, attitudes are the best predictor of deliberate behaviours (Ajzen and Albarracín 2007; Ajzin and Fishbein, 1980, 2005), is of paramount importance for this curriculum to be successfully implemented.

In their study entitled "Using schematic model to represent influences on, and relationships between, teachers' problem-solving beliefs and practices," that involved K-6 teachers' beliefs and practices, Anderson, White and Sullivan (2005). They interviewed nine teachers, a representative of the spread of problem solving beliefs. One was very traditional, three were traditional, three appeared to hold mixed beliefs, and two were very contemporary. From this group they went on further to interview two teachers who were classified as holding a 'contemporary' view of teaching, a view that is consistent with an inquiry-based approach to teaching, found that these teachers' beliefs had been influenced by their negative experiences in learning and their desire not to teach as they were taught.

Consequently, a sample of four hundred and eighty one in-service teachers was used in a study aimed at investigating the relationship between elementary teachers' knowledge, attitudes, beliefs, and practices, Wilkins (2008). This study found that teachers' with more positive attitudes towards mathematics were more likely to believe that inquiry based instructions will be effective. Hence, they used it more frequently. Furthermore, teachers with more positive attitudes were more likely to believe in the effectiveness of inquiry-based instruction and use it habitually in their classrooms. They also found that teachers' beliefs had the strongest effect on teachers' practice. The study also postulates that teachers' attitude affects their practice. This

study that was done by Wilkins also confirms that teachers' attitudes positively affect teachers' beliefs, ultimately adding to the total effect of attitudes on instructional practices. It can be inferred, the success of this curriculum innovation gravely lies in the attitudes of the teachers who are responsible for its implementation.

Carroll, Forlin and Jobling (2003), did a study that was geared at investigating "The impact of teacher training in special education on the attitudes of Australian pre-service general educators towards people with disabilities." The purpose of this study was the resulted from the identification of inadequate or inappropriate field-based experiences and lack of exposure to persons with disabilities in many pre-service programs (Buck, Morsink, griffin, Hines and Lenk, 1992, as cited in Carroll, et al, 2003). They found that pre-service teacher education should ensure that teachers are adequately prepared for the task of educating all students. Hence, this statement was put forward in light of the philosophical orientation of today's education system that every classroom will include a student with diverse needs and every teacher will be required to meet those needs. This research was conducted at The University of Queensland and the University of Southern Queensland, where they reconfigured their pre-service special education courses to address concerns that existing pre-service programs were not adequately preparing teachers for inclusive education. As a result, they incorporated a number of innovative practices to help improve students' attitudes towards people with disabilities.

Findings from their study show, "a positive attitude change towards people with disabilities was noted on completion of a mandatory disability course component". In addition, they found that attitude formation and change were also linked to contact with people with disabilities (Carroll, et al, 2003). They concluded that teachers play a pivotal role in shaping the overall attitudes towards students with disabilities; therefore, continued professional

26

development is essential to maintaining high-quality education in all schools. With this in mind, it is necessary for teachers to foster positive attitudes towards this curriculum innovation. However, this can be made possible through continued support through professional development programmes and training exercises.

In their study, comprising a sample of two hundred and three teachers Beck, Czerniak and Lumpe, (2000), focused on identifying factors that influence K-12 science teachers' implementation of constructivism in their classrooms. They found that teachers' positive attitudes toward teaching were congruent with their level of academic qualification. As teachers with Bachelor's and Master's degrees had a more positive attitude toward teaching than teacher with Doctoral degrees. And primary teachers had the most positive attitude about teaching. As such, students in these classrooms were highly motivated as teachers helped them understand the limitations and imperfections in science.

Haney, Czerniak and Lumpe (1996), identify teacher beliefs and intentions regarding the implementation of science education strands. To conduct this study, they use a sample of thirteen teachers. Findings indicate that some teachers were more likely to intend to implement reforms strand than others. They also found primary teachers held more favourable beliefs toward the implementation of science education reform strands than did the middle-level or high school teachers. They found teachers in this study did not believe that they had the ability to bring about educational change. These teachers believed that barriers such as lack of effective staff development opportunities, available resources and administrative support impeded their ability to implement educational reform.

A study done by Roehrig and Kruse (2005) that was geared to understand the impact of a reform-based chemistry curriculum on teachers' classroom practices and to identify the effects of

teacher beliefs and knowledge on their implementation of the curriculum. Twelve high school chemistry teachers participated in the study. Data was collected through interviews, classroom observations which were done during the field test of the curriculum prior to full implementation.   The findings from the study revealed that the presence of the new curriculum caused teachers' classroom practices became more reform-based. This study is also consistent with the idea that teacher beliefs have a significant influence on classroom practices (Cronin-Jones, 1991; Haney and McArthur, 2002; Haney, Czerniak and Lumpe, 1996; Hashweh, 1996; and Levitt, 2002). They also found that experienced, out-of-discipline teachers with transitional or student-centered teaching beliefs exhibited the most growth in reform-based teaching practices.

A mixed-method study conducted by Cresdee (2002) describing circumstances that affect the manner in which primary school teachers in Western Australia perceive recent curriculum changes, types of support they access, and relative usefulness of that support. The latter was significant teachers responses to change were described along with the exploration of future changes. Findings from this study were carefully drawn (Cresdee, 2002) among them are: most teachers had attitudes positive towards curriculum change, although the irresistible workload forms a tough barrier to any initiative; most of them would alter initiatives to meet their students' needs and adjust to their current orientations; the way teachers perceive and cope with curriculum change differed on their self-efficacy but not on their age and teaching experience; school context also had an effect on their attitudes and responses to curriculum change as well as the type of professional development accessed; as it pertains to professional development, interaction among teachers was the very useful since action research was rarely used as a means of professional development at schools.

An investigation was conducted with middle and high school English language arts teachers' efforts to merge technology into the learning environment (McGrail, 2005). Findings indicated, teachers' description of their attitudes toward technology was based on whether they gained from or faced problems with their own or their students' computer practices. Additionally, teachers' willingness to accept change depends on whether it would let them or students benefit much from instructional practices into which technology is integrated.

2.2 Part 2. Theoretical Overview – Challenges in Implementation

The successful implementation of a curriculum innovation is dependent on the utilization and sustenance of many factors; however, challenges to any of these leads to its demise. The inevitable was experienced in the United States of America in the early 1970s, as inadequate teacher preparation and administrative support led to the failure of science education. These factors resulted in a lack of teachers' confidence in their abilities to teach the new curriculum (Welch, 1979)

In 1988, the Education Reform Act brought about changes in education in England and Wales, which resulted in the introduction of the National Curriculum. Unfortunately, there were many challenges in implementing this document, namely, little public consultation. Consequently, teachers felt as though they were not part of the process as they had not been sufficiently consulted. Other aspects of this document that caused constrained in its implementation include its restrictive structure as it contained highly prescribed directives. The philosophical base was unclear and the document lacks coherence; thus, integrated topics seem arbitrary and it progressed vaguely. Additionally, the implementation of this document was seen as top-down. Although the National Curriculum was geared at addressing real problems in

England and Wales education system as it proposed to reverse the number of under-educated students leaving school at the age of sixteen (Berry, Poonwassie, and Berry1999).

A shift from dependency on a natural resource based economy towards a knowledge based economy (Best, 2006) supported by technological advancement has evoked the desire of most countries to reform their curricula. The Caribbean is no exception to this influence. However, in implementing these documents, these countries have experienced many challenges; among them are the lack or resources and the need for additional training for implementers (Berry, et.al., 1999). They also state the approaches to strengthen local culture is not without dangers as racial or ethnic diversity as in the case of Trinidad and Tobago, this became a major issue when the music of one racial group was not included in the curriculum.

Although many Caribbean nations had taken the opportunity to review their curriculum in light of global economic changes; they found that teachers lack the necessary tools to realise these changes. In Dominica, the implementation of the new mathematics curriculum for primary grades was hindered because there had been no significant resources to disseminate the curriculum proactively and as at 1998, it was only being implemented by teachers who had served on the drafting committees. Additionally, "the buy-in and sense of ownership of teachers and principals had not been developed" (Berry, et.al., 1999, p. 17).

There are also the aspects of cost and training. Potashnik and Adkins (1996) in their World Bank study they utilised Jamaican data and estimated the recurrent cost of maintaining computerized classrooms to be approximately twice the hardware investment cost. In spite of this Jamaica and Barbados took the lead in implementing information and communication technologies in their classrooms. They further state that returns on investment are not realized and added that training is "the hardest of all areas to get right" (Potashnik and Adkins, 1996). It

can be noted that computer assisted instruction can only be as effective as the level of trained and skilled professionals that are involved in its dissemination.

Berry, et.al. (1999) conclude, for a curriculum to be successfully implemented its content and methodology must bear relevance to best international practice while being profoundly rooted in local needs and realities. There is also the need for infrastructure and resources that supports and strengthens the curriculum. As regular consultation with curriculum units and other education officers will assist in alleviating many deficiencies in the implementation process (Berry, et.al., 1999).

A case study to investigate factors that hindered the implementation of the English language secondary school curriculum innovation in Greece was conducted by Karavas-Doukas (1998). The study utilised Likert-type attitude scale, a questionnaire, and interviews. Findings revealed that the shift towards the Communicative Approach did not have any effect on teachers' beliefs. Furthermore, teachers did not comply with the changes occurred in instructional techniques and they used their former instructional techniques in carrying out new activities that necessitated communicative teaching techniques.

2.3 Use of Literature and Context

The literature had played an important role as it applies to answering the questions in this research. This study had examined the initial attitude of teachers as they implement the new primary curriculum. In this research, five questions had been generated to fulfil the requirements of this study. The research questions examined:

- o What are teachers' perceptions of their role in the curriculum implementation process?

o What are some of the challenges teachers face in implementing a new curriculum innovation?

o What do teachers know or believe they know about the curriculum being implemented?

o How do teachers feel about this particular curriculum innovation?

o What are the levels of use of the curriculum innovation in the primary school classroom?

As the frontline runners in the curriculum implementation process, teachers' role determines the level of success or failure of any curriculum innovation. In their study Carroll, Forlin and Jobling (2003), examined the impact of special education training on of pre-service educators' attitudes towards people with disabilities. Their study had suggested that teachers have a fundamental role in shaping attitudes towards students with disabilities.

In her report on the challenges Barbados had experienced in implementing EduTech 2000, Griffiths-Watson (2001) had unequivocally stated that schools play a vital role in implementing a curriculum reform. Teachers, play a key role in schools in the curriculum implementation process, since this is level where the curriculum is enacted. Griffiths-Watson (2001) had emphasized the importance of having all school principals and teachers participate in curriculum orientation sessions that are aimed at sensitizing them to the curricula. As teachers are viewed as the deciding factor in the process curriculum enactment; therefore, it is necessary they become aware of their roles which is an important facet in this process. It must also be noted that the future of any curriculum innovation is highly dependent on teachers' roles in its implementation.

Curriculum, as with any innovation experience challenges in being implemented. The Bermuda Performance Standards 2001 had been reviewed by Hopkins, Matthews, Matthews,

Woods-Smith, Olajide and Smith (2007); they found that inconsistencies in the implementation of the curriculum between schools were the source of a major challenge for students when they move up to the next school. In addition, challenges this innovation presented was its lack of coherence as there had been inconsistencies in context and presentation. The document had undergone numerous revisions which also posed some challenges in its implementation; as a result teachers also experienced problems in differentiating between current and previous versions. They also found the presentation of curriculum lacked clarity and relevance which propelled confusing messages. Many principals had indicated that they find the documents unwieldy and inaccessible.

The English and Welsh the Education Reform Act 1988, was not exempted from challenges to its implementation as educators experienced many challenges during its implementation. To the forefront, was, there was little public consultation during the initial phases of the document; thus, teachers felt exempted from the process. In their report, Berry, et. al. (1999), posit that the document's restrictive structure and highly prescriptive directives presented challenges to its implementation. Additionally, its unclear philosophical base and lack of coherence; hence the document progressed vaguely as integrated topics seemed arbitrary

Caribbean countries are not spared from challenges in implementing curricula reforms. Among these challenges are lack or resources and the need for additional training for implementers (Berry, et.al., 1999). The implementation of new mathematics curriculum for primary grades in Dominica was deferred because of a lack of resources and the absence of "the buy-in and sense of ownership" (Berry, et.al., 1999, p. 17) by its implementers.

The implementation of the SEMP science curriculum encountered some challenges. Barrow and De Lisle (2009) highlighted some of them in their evaluation of the lower secondary

SEMP curriculum. The manner in which teachers viewed the curriculum was not in line with that of the developers of the document. Thus, teachers experienced difficulties in implementing the curriculum in integrated teachable units. This challenge was compounded by the manner in which the document was laid out as it was not sequenced to achieve optimal participation of all students. Additionally, although some schools were able to gather the physical infrastructure and resources that are required for successful implementation, this was inhibited by teachers' inability to use the resources and lack of time to plan learning activities. From this study, some teachers expressed their lack of content knowledge in other science subjects that were not part of their field; this also posed problem in the manner in which the curriculum had been implemented. As they resorted to teaching science as telling, this is not in the manner in which it was intended.

Teachers' knowledge and beliefs about what they think they know regarding a curriculum innovation plays a major role in shaping their attitude towards its implementation. As such, Nespor (1987) affirms, the basis of belief system is both affective and evaluative. He went on to explain, beliefs is what links our attitude to our practice. A study which focused on the relationship between teachers' knowledge, attitudes, beliefs and practice was done by Wilkins (2008). This study found that what teachers believed had an ultimate effect on their attitude and instructional practices. The study further purports, teachers who believed in the effectiveness of inquiry based instructions were more likely to have a positive attitude and will implement it in their classrooms. In a study that was done by Hashweh (1996) examined the relationship between teacher beliefs and practice. Results from the study confirm that teachers with strong learning constructivist and knowledge constructivist beliefs use potentially more effective teaching strategies.

A new curriculum has the ability to conjure within its implementers various feelings. Research by Akin and Black (1997) suggests, teachers negative and positive feelings about a curriculum innovation impact on its implementation. Moreover, they drew attention to the level of distrust and anger of the citizenry. These gave rise to many ill perceived notions about how teachers' feelings impact on the implementation process. As a teacher's deep seated emotions and feelings are related to his or her personal experiences; which in turn affects how they implement a curriculum innovation.

Although schools receive a new curriculum document, this document on its own is of no effect until it is enacted. The levels at which this enactment occurs varies from one teacher to the other. Barrow and De Lisle (2009) pointed out that the teachers in their study focused their efforts on the short-term, day-to-day use of the curriculum with little or no focus on long-term strategizing and reflection. This resulted in the innovation being implemented in a disjointed and superficial (Hall and Hord, 2001) manner. They further added, "…teachers are varying the innovation to increase its impact on students within their immediate environment" (Barrow and De Lisle, 2009, p. 83). From their study most of the teachers are at the mechanical level. At this level the full enactment of the curriculum is compromised and the barriers to its implementation are mainly contextual.

The review of literature had identified studies on teachers' attitude towards a curriculum innovation and the challenges they face during the implementation process. These studies employed various paradigms and approaches as well as data collection instruments.

Wilkins (2008) conducted a quantitative study that utilised Ernest's modes as the theoretical framework to investigate relationships among elementary teachers' content knowledge, attitudes, beliefs and practices. The survey was employed for collecting data on four

hundred and eighty one in-service elementary teachers and analysis was done using descriptive statistics. Carroll, Frolin and Jobling (2003), conducted a quantitative action research where a questionnaires were administered at pre and post exposure of the study. They utilised modified versions of Interaction with Disabled Persons Scale (IDP) (Gething, 1994; Frolin, Jobling and Carrol, 2001).

In her study, Cresdee (2002) utilised a mixed method approach which she executed in two parts. The qualitative aspect made use of semi-structured interviews, informal observations and analysis of websites and school documents. However, the questionnaire was constructed and distributed to the defined population for the second phase of this study. The qualitative evaluation of the lower secondary SEMP science curriculum of Trinidad and Tobago which was done by Barrow and De Lisle (2009) utilised the CBAM conceptual and grounded frameworks. Data for their study was collected through focus group interviews, Stages of Concern and Levels of Use questionnaires.

Although there are numerous studies on teachers' attitudes towards curriculum reform, this study is relevant as it had examined the attitudes of lower primary school teachers as they implement a new curriculum during its early stages. Additionally, the study differs from the other studies as it triangulates the CBAM with interview data, observation and field notes. Other studies had triangulated CBAM with focus group interviews (Barrow and De Lisle, 2009), and Cresdee (2002) used semi-structured interviews, informal observations, analysis of websites and school documents and questionnaire.

Studies done by Wilkins (2008) and Carroll, Frolin and Jobling (2003) on teachers' attitude were done in the quantitative paradigm; whereas this study utilises the qualitative

paradigm. Hence, it will be able to add to the literature on teachers' attitudes during the early stages of implementing a curriculum innovation for a qualitative perspective.

2.4 Summary

This chapter had focused on teachers' attitudes towards a new curriculum and the challenges they encountered while implementing the innovation. The aforementioned studies used different paradigms and methods; however, they found that teachers' attitude and beliefs were consistent with their classroom practice. Additionally, the application of the literature within the context of this study had been done to answer the questions put forward in this research. In doing so, gaps in the literature were identified which this study had sought to fill.

Chapter 3

Methodology

3.1 Introduction

This research had been conducted to gain an understanding of teachers' attitudes during the early stages of implementing a curriculum innovation. To answer the questions that will achieve the purpose of this study it is imperative that links are made between the data that had been collected and the conclusion that will be drawn. Therefore, this research had employed the qualitative approach in the case study tradition.

3.2 Qualitative Design

The nature of the research questions warrants a qualitative design. As the research questions seek to understand teachers' attitudes as they implement the new primary curriculum in the natural setting of their classrooms. In this study the researcher had sought to derive an understanding of what exists as oppose to making comparison through cause and effect relationships which is typical of a quantitative design.

Qualitative research is the process of understanding based on distinct methodological traditions of inquiry that explores a social or human problem. In this study the researcher had

attempted to build a holistic picture, analyse words, report detailed views of teachers and conduct the study in a natural setting (Creswell, 2008) of the school.

There were similarities and differences in these teachers' attitudes which are valid within this context. Hence, the qualitative approach was suitable as it focused on each teacher's subjective response as applied to generalised objective reality which allowed the researcher to explore the teacher's attitude in some depth, to produce rich thick data. Creswell (2007) purports, a qualitative study should be used because of the need to provide a detailed view of the topic.

3.2.1   Rationale for a case study design

This qualitative case study is guided by the view that teachers involved in the implementation process have attitudes, feelings and beliefs that affect their contribution (Elbaz, 1981) in the classroom. A case study design was chosen for this study as it caters for the provision of a rich, in-depth analysis of the implementation process in context of the case or setting in which the case presents itself (Merrian, 1988) to determine the distinctiveness of those processes. As such, teachers' attitude will be examined to gain an understanding of their attitude towards implementing a curriculum innovation during its early stages within the boundaries of Peasdorm Primary School. To avoid controlling the environment multiple sources of data and multiple methods for gathering data had been used to guard against bias; thereby, improving the trustworthiness of the study (Merrian, 1988).

3.2.2 The case study design

A case study is an empirical inquiry that investigates a contemporary phenomenon (Merriam, 1988). This study focused on process, meaning and understanding of the phenomenon of the attitudes of three primary school teachers as they implement the new primary curriculum. In this study the researcher had assumed the role as participant observer because she is a teacher at the school under study. She had served as one of the writers of the new primary curriculum in the area of science. Additionally, she was involved in conducting training workshops that were geared at sensitising teachers on the requirements for implementing this curriculum and their roles in the new curriculum. In this naturalistic inquiry, the researcher assumes the presence of multiple realities and had sought to represent these realities adequately.

Four standards for strengthening the trustworthiness as identified by Lincoln and Guba (1985) will be employed in this study, they are: credibility, transferability, dependability and confirmability.

Credibility relies on the richness of the information gathered as well as on the researcher's analytical abilities (Patton, 1990). This had been addressed through prolonged engagement, observation, peer debriefing and member checks. This study took places over a period of six months. During this period the researcher visited the classrooms regularly to become familiar with the classroom setting and the students. This served as a means of getting the students familiar with her presence in the classroom; thereby, eliminating the Hawthorne or observer effect (Franke and Kaul, 1978) during the actual classroom observation sessions. The use of multiple data collection methods and "member checks" by returning transcripts of interviews to participants for clarification and further insights adds to the reliability of the study (Lincoln and Guba, 1985). They advocate that, "member checks" can be further strengthened by making segments of the raw data available for others to analyse.

Although the researcher cannot specify the transferability of the findings of this study; she will provide sufficient information that can then be used by other researchers to determine whether the findings are applicable to another situation. Eisner (1991) postulates it as a form of "retrospective generalization" that can allow us to understand our past (and future) experiences in a new way (p.205).   Thus, the researcher dealt with transferability by providing rich, thick descriptions of participants, the setting and the use of purposeful random sampling.

There is no credibility without dependability as a demonstration of the former is sufficient to establish the latter. Therefore, dependability was established as the researcher reported the process of the study in full details, thereby enabling future researchers to repeat the work and compare results.   An "inquiry audit" had been done, as the researcher had allowed other researchers to examine both the process and the product of the research for consistency (Lincoln and Guba, 1985, p. 317).

Confirmability refers to the degree to which the researcher can demonstrate the neutrality of the research interpretations. Thus, a "confirmability audit" had been used during this study raw data, analysis notes, reconstruction and synthesised products and observation checklists as are provided (see Appendix 1) (Lincoln and Guba, 1985, p.320-321). Additionally, the researcher's admittance of her own predispositions during the study and the inclusion of field notes help to maintain confirmability of this study.

3.3 Sampling Procedures

Random purposeful sampling had been utilised for this study. The procedure is purposeful as the researcher chose cases at random from a purposefully selected sample

(Onwuegbuzie and Leech, 2007). As such, the researcher identified and selected individuals who are believed to be typical of the population being studied (Davies, 2007). The researcher chose three cases at random from a purposefully selected sample of eleven teachers. These teachers were selected from the lower department of the school. There are four Infant One teachers, three Infant Two teachers and four Standard One teachers. From this population of eleven, a sample of one teacher from each of these levels had been selected. These individuals had provided the most information that is required for the study. This approach, according to Miles and Huberman (1994), adds credibility to the sample.

Additionally, the selection of participants had been done randomly as it acts as a means of quality control checks as it provides each teacher an equal chance of being included in the sample (Davies, 2007), thereby eliminating bias. The procedure for selecting participants for the study was done by writing the room number for each level on a piece of paper, folding them and selecting one from each level group. Participants were then contacted and given a full description of the study as well as their role in the study. All participants with the exception of one agreed to participate in the study. As a result another participant was randomly selected from the remaining teachers at the class level of the teacher who declined.

3.4 Instruments for Data Collection

3.4.1 The Concerns-Based Adoption Model (CBAM)

Hall and Hord (2001) developed CBAM to help clarify the failure of classroom innovations. The purpose of this questionnaire is to determine the concerns of people who are using the curriculum innovation. It is also used to examine the extent to which the curriculum

has been implemented (James, 1981). The items in the questionnaire were developed from typical responses of teachers, who ranged from no knowledge about various programs to many years of experience using them (Hall and Hord, 2001). Seven Stages of Concern (SoC) about any innovation that appeared to be developmental were identified, and confirmed to exist (Hall and Hord, 2001).

The CBAM Stages of Concern Questionnaire (SoCQ) comprises a thirty five item questionnaire, and a 7-point Likert-type scale. This questionnaire (see Appendix II) is a reliable and valid instrument for measuring stages of concern about an innovation (Kelly and Staver, 2005). Its purpose can be to identify and characterize various concerns of teachers who are involved with an innovation (Hall, George and Rutherford, 1979; 1998). The reliability and validity were originally established for the SoC Questionnaire in the late 1970s and reviewed (Hall et al., 1998). To guarantee high internal consistency reliability responses to items in the questionnaire were correlated with responses to other items measuring the same stage than with responses to items on other scales.

However, establishing validity posed problems as there were no other instruments measuring concerns that were available for comparison. As a result, a series of validity studies were conducted (Hall, et al., 1979/1998). These studies included tests "…intercorrelation matrices, judgments of concerns based on interview data, and confirmation of expected group differences and changes over time…to investigate the validity of the SoCQ scores" (p. 12). They found that these tests provided increased confidence in the SoC Questionnaire. CBAM has become a trustworthy model for examining change following its development and validation.

3.4.2 Participant Observation

The researcher assumed the role of participant observer throughout the study. As a teacher of the school the researcher was able to gain access to the classrooms. As such, she was able to gain a close and intimate familiarity with both teachers and students (Jorgensen, 1989). Normal teaching activities were observed and recorded on an observation checklist (see Appendix III). Furthermore, through observation, the researcher had been able to gather more accurate information on the behaviour of these teachers as opposed to the information provided on the questionnaire and gathered through the interview.

3.4.3 Interview Protocol

Semi-structured interviews had been conducted at a scheduled time in which the researcher was the instrument. These interviews were based on Paton's (1990) model which includes questions pertaining to background, experience, opinion, knowledge and feelings. This protocol was designed to gain valuable insights to create a vivid picture of these teachers' attitude towards the curriculum innovation. Some of the examples of questions included a knowledge question: "What are some of the aims, goals, and objectives of this new primary curriculum document?"; an opinion question: "How do you assist students in extending relevant learning beyond the classroom into real-life situations?"; a feeling question: "How did you feel about this new primary curriculum upon its implementation in September 2013?" The interview questions (see Appendix IV) were designed to gather information to create a thick, rich, in-depth description (Bogdan and Biklen, 1998) of teachers' attitudes towards the innovation. Participants were asked the same questions in the same order, with follow up questions being asked to generate further clarification.

3.4.4 Field Notes

Field notes refer to notes created by the researcher during the act of qualitative fieldwork. This is done to remember and record the behaviours, activities, events, and other features of an observation setting. These field notes (see Appendix V) were read by the researcher to produce meaning and an understanding of the attitudes of teachers as they implement the new primary curriculum. These notes constitute factual description of the settings, actions, behaviours and conversations the researcher observed.

3.5 Data Collection Procedures

A variety of data gathering procedures were designed to produce a rich picture of teachers' attitude during the implementation process. The CBAM Stages of Concern was administered in February, 2014. These questionnaires were completed and returned to the researcher the following day. Data generated from the CBAM questionnaires were used to gauge teachers concerns and direct the next step of the data gathering exercise. This data was analyzed and the information served to provide information on how the teachers were thinking about the innovation after implementing it for almost five months.

Interviews are valuable source of data collection procedure. Semi-structured interviews which were not limited to the interview protocol as probes were utilised to generate a deeper understanding of participants' responses which enriched the collated data. This data collection procedure was used to develop the study as it provides deeper insights into teachers' attitudes in an in-depth manner that is not achieved in the other data collection methods (Knobel and Lankshear, 1999). The use of interviews allowed the researcher to focus directly on the case

study topic, the attitude of teachers towards the new primary curriculum during the early stages of its implementation.

The interviews were conducted during March, 2014. The interviews focused on teachers' role, the challenges, their knowledge and feelings about the innovation. These interviews were recorded and transcribed. The length of the interviews ranged from seven minutes and twenty seven seconds to twenty four minutes and fifteen seconds. One interview was done during school hours and the other two occurred after the dismissal of school.

The final stage in the data collection process was classroom observation, which occurred in April, 2014. These observations were conducted as they provide more detailed information on participants within the context of their natural setting. This stage had to be postponed from March to April because of unforeseen activities that caused the classrooms to be inaccessible. Two observation sessions were done of each teacher over a period of two weeks. The researcher was not intrusive during classroom observations as she assumed the role of participant observer with limited interaction with participants and students.   Additionally, an observation checklist was completed together with field notes during each visit.

3.6 Data Analysis

The process of data analysis is where the researcher had attempted to make meaning out of the data by going through consolidation, reduction and interpretation of what participants stated and what was observed (De Wever, Schellens, Valcke and Van Keer, 2006). The meaning and understanding or insights generated had formed the basis of the research findings. These research findings were then had been utilised to answer the research questions that will achieve the purpose of this study.

Stages-of-Concern (SoC) profiles had been guided by the recommendations of Hall and Hord 2001 in its administration. This SoC Questionnaire comprises seven SoC that an individual transits through sequentially during the process of adopting and implementing an innovation. Therefore, these stages have serious implications for successful implementation of an innovation. The SoC model identifies and provides guidelines to assess the seven stages. It points out the significance of individuals' levels of concern. The SoC is important in this study as the researcher attempts to understand teachers' attitudes which include their concerns. The SoC goes beyond and assessment of pedagogical practices as it addresses individual concerns. It also shows the level of comfort teachers are experiencing with the new primary curriculum. The model, however, indicates whether additional professional development or additional monitoring is required.

The initial Stage of Concern is awareness. At this level teachers demonstrate little or no interest in the innovation. Stage one, the informational level; teachers express an interest in achieving greater depth as they require more information on the innovation. At the personal stage; teachers feel uncertain about the demands of the innovation and ask, "How will this affect me?" The management level is where teachers focus on the processes and task of using the innovation. They are concerned with how to get the best use of information and resources available. The following stage is where teachers focus on the impact of the innovation on their students. They ask. "How is my use of this innovation affecting my students and how can that impact be refined?" The need to collaborate is required at this stage as teachers coordinate and cooperate with others regarding use of the innovation. The final stage is refocusing. At this stage, teachers generate ideas on how they can improve the innovation through more powerful alternatives.

It must be noted that the nature of teachers' concern can be considered barriers to implementing the new primary curriculum. It is for this reason a listing of all teachers' stages of concerns will be generated. This data will be used as the basis for developing questions for interviews with teachers.

LeCompte (2000) proposes a method for unbiased analysis of qualitative data. This technique will be used to analyze the interviews. The phases of LeCompte are as follows: Step one: tidying up, during this phase copies will be made of all data, they will then be placed in order of their dates. Files will be created based on the interviews and field notes, these files will be placed into a catalogue and a table of contents will be created for easy access. The research questions will be compared against the data collected; thereby identifying any holes of missing data chunks by determining if data were collected to answer each research question. If gaps do exist, the researcher will return to the field to collect additional data.

Step two: finding items, data are sifted by repeated readings through field notes and interviews relevant to the research questions. During this process the researcher bears in mind the frequency at which an item occurs, items that were omitted and items of declaration, that is, those that are identified as significant to the study by participants who tell the researcher of their existence.

Step three: creating stable sets of items, once the initial items have been identified will be organized into groups or categories by comparing and contrasting items (Glaser and Strauss, 1967), or mixing and matching them; thereby, clumping together similar items. These items will be assembled according to a taxonomy or group name for example teachers' knowledge, opinion or sensory.

Step four: creating patterns, taxonomies that fit together or related to one another in a meaningful way will be created and patterns will be identified. Patterns will be assembled based on frequency of occurrence, omission and declaration as well as similarity and analogy, co-occurrence, sequence or groups of things that occur in a series, hypothesize reasonableness or patterns the researcher think should exist based on experience or hunches, corroboration or patterns whose existence is confirmed by other pieces of data.

Step five: Partial and Meta-matrices will be used in assembling structures, patterns will be assembled into structures or groups of related or linked patterns that, when taken together builds an overall description of teachers' attitude and the implementation of curriculum innovation in its early stages.

Classroom observations had been recorded on an observation checklist that was compiled from a review of various sources. Observations were recorded on activities that occurred at the beginning, during and at the end of the lesson; and further observations of during the lesson activities were recorded on separate checklists. These include; classroom discussions, the use of information and communication technologies as well as problem solving ant higher-level thinking skills. Data had been analysed and values were given to each category and a mean score was calculated. This mean score is used to show the level at which the behaviour had been displayed in the classroom. Additionally, general comments had been analysed using LaCompe method for unbiased analysis of qualitative data.

The analysis of field notes had followed LaCompe method for unbiased analysis of qualitative data.

Analysed data from transcribed interviews, field notes and the CBAM questionnaire will be fed into the Theory of Planned Behaviour Model to account for the teachers' level of use of

the innovation. The classroom observation instrument had been used as a form of triangulation

of the results. This had established trustworthiness of the study as credibility, transferability,

confirmability and dependability add rigor in this qualitative case study.   A thorough reading of

all interview transcripts and field notes will be done to help the researcher derive meaning from

the data to answer the research questions.

3.7   Challenges to conducting the study

3.7.1   Limitations

Participant disclosed what they were able to recall and may have excluded information

they did not consider important.   These participants may also give information that they deemed

to be of interest to the researcher. Therefore, the level of accuracy of the information given was

totally dependent on them. During observation, participants may have modified aspects of their

behaviour in response of the fact that they were being observed which is referred to Hawthorne

or observer effect (Franke and Kaul, 1978)). Researcher bias is also a limitation; however, this

was kept at a minimum by making them explicit.

3.7.2   Delimitations

Best and Khan (2006) define delimitations as the boundaries of a study. This qualitative

case study is restricted to one school and the data would only be gathered from three of the

eleven teachers in the lower primary department. As such, the findings of this study are limited

in transferability beyond Peasdorm Primary School; and would not be applicable to other

contexts. There were time limitations to conduct the study, since the second term is broken up

with public holidays, term tests, other celebrations and school activities as well as workshops that are conducted by the Ministry of Education that teachers attend.

3.7.3 Ethical Considerations

Ethics is of great concern in conducting a qualitative study. Therefore, permission was sought from the Ministry of Education, under flying seal, the principal of Peasdorm Primary School. Permission was also sought from participants who will be assured of their anonymity and confidentiality as well as the option to withdraw from the study at any time. Participants were also informed of the nature of the study and guaranteed access to the information gathered. Additionally, pseudonyms were used for participants and the school; thereby, maintaining anonymity.

Four standards for strengthening the trustworthiness of this study as identified by Lincoln and Guba (1985) are: credibility, transferability, dependability and confirmability. Credibility will be addressed through prolonged engagement, observation, peer debriefing and member checks. The use of multiple data collection methods and member checks by returning transcripts of interviews to participants for clarification and further insights adds to the reliability of the study (Lincoln and Guba, 1985). Transferability will be dealt with by providing rich, thick descriptions of participants, the setting and the use of purposeful random sampling. Dependability will be established as the researcher reports the process of the study in full details, thereby enabling future researchers to repeat the work if not necessarily to gain the same results. Confirmability will be achieved when the researcher admits her own predispositions during the

study. Additionally, to reduce bias detailed field notes that include reflections will be reviewed by colleagues.

3.8   Summary

This study had been conducted to gain an understanding of teachers' attitudes during the early stages of implementing a curriculum innovation. In an attempt to answer the research questions the researcher utilised the qualitative case study design as the study had focused on gaining an in-depth understanding of the attitudes of three primary school teachers as they implement the new primary curriculum. Selection of participants had been done through purposeful random sampling. Data had been collected using the CBAM questionnaire, observation, interviews and field notes. An analysis of data collected from interviews and field notes had been conducted using LeCompe method for unbiased analysis of qualitative data. Stages-of-Concern profiles had been guided by the recommendations of Hall and Hord 2001 and observations had been rated and placed within a category. The issue of rigor in this qualitative study had been addressed by establishing trustworthiness in the study.   However, during the process of conducting this qualitative research ethics had been taken into consideration. Table 1 presents a summary of the research questions, the data collection method and the analytical procedure that had been used during this study.

Research Questions	Method of data collection	Analytical procedure
What are teachers' perceptions of their role in the curriculum implementation process?	Interview	Cataloging, classifying, creating patterns, assembling

What are some of the challenges teachers face in implementing a new curriculum innovation?	Interview	Cataloging, classifying, creating patterns, assembling
What do teachers know or believe they know about the curriculum innovation?	Interview	Cataloging, classifying, creating patterns, assembling
How do teachers feel about this particular curriculum innovation?	Interview	Cataloging, classifying, creating patterns, assembling
What are the levels of use of the curriculum innovation?	Observation, Field Notes, CBAM Questionnaire	Behavioural checklist Creswell 3Cs to data analysis CBAM Analysis Framework

Table 1: Data collection and analytical procedure to answer the research questions

Chapter 4

Data Analysis and Presentation of Findings

4.1 Introduction

      Analysed data and findings from this research are presented in this chapter. Analysed

data are presented in tabular and graphic forms and the findings are reported in a narrative

manner. As a result each research question is analysed and presented with the use of supporting

information from the participants.

4.2 Data Analysis

      This qualitative case study had described teachers' attitude during the early stages of

implementing the new primary curriculum at Peasdorm Primary School. This chapter presents

the data that had been collected and the findings obtained from interviews, CBAM questionnaire,

observations and field notes. As part of the researcher's adherence to ethical considerations,

pseudonym had been assigned to the school and participants are referred to as Teacher 1,

Teacher 2 and Teacher 3 respectively. Data had been analysed and structures assembled to

answer each research question.

Research Question One

What do teachers know or believe they know about the curriculum being implemented?

Teacher knowledge/belief about the new primary curriculum document Meta-Matrix				
Sub-questions	RQ 1: What do teachers know or believe about the curriculum being implemented?			Variable interpretation: Representational Themes
	Teacher 1	Teacher 2	Teacher 3	
SQ 1.1: What are some of the aims, goals and objectives of this new primary curriculum document?	"I don't know any of them."	"I haven't read the (*whole*) document. What I have done is look at the lessons that were set out in the Instructional Toolkit."	"Yes. The overarching aim … of the document is to foster holistic development in our children, whereby children see learning more meaningfully."	**IGNORANCE** Most teachers have either incomplete or no knowledge of the N.P.C.D.
SQ 1.2: How do you create a learning environment that will facilitate the attainment of the aims, goals and objectives of the N.P.C.D.?	Teacher has no knowledge of how to create the appropriate learning environment to support the N.P.C.D.	Teacher has no knowledge of how to create the appropriate learning environment to support the N.P.C.D.	Teacher has partial knowledge of how to create the appropriate learning environment. "I have always seen teaching as a hands-on strategy … in fact I will incorporate that (*aspect of the N.P.C.D.*) in my lessons	**IGNORANCE** Most teaches have no knowledge of how to create the appropriate learning environment. One teacher appears to have partial knowledge.
	"You make the classroom child-centered … (You put in the classroom environment) child-centered activities."	"When I use resources in infants, I prefer to have enough for small groups to work in or for individual students."	"… they can go to different corners … children can interact with manipulatives, things that have been used in teaching the lesson."	**CHILD-CENTEREDNESS** All the teachers believe that the N.P.C.D. is an activity-based, child-centered curriculum.

SQ 1.3: Are the concepts in this new document powerful enough by itself to jump-start the learning process and help students learn more quickly and comprehensively so knowledge is generalized and transferred?	"No." This teacher believes that the N.P.C. lacks the power to help students learn more quickly and comprehensively. Theoretical	"I do think so (that the N.P.C. has the potential to help students learn quickly and comprehensively) … however what is hampering us is the lack of resources."	"Yes … I would believe so (since theoretically) what holistic does (is to make those) children who are seeing meaningful learning … pick up the work … more quickly."	**THEORETICAL** All the teachers see the N.P.C. as more a theoretical than a practical curriculum document.
SQ 1.4: Does learning activities in this new primary curriculum increase student capacity to create them into responsible citizens?	"Not anymore than *(the curriculum before* [it]). As I said before, it doesn't have anything in addition to what was done before."	"I think it does … I look at some areas that have been included, citizenship, and citizenship education. To me I always thought that have been lacking."	"Yes, unlike the old curriculum, there are subjects which to me were needed, much, much, needed, in particular the values and character education subject (VCCE)."	**EXPANDED** Most teachers see the N.P.C., as an expansion of the old one in at least one area, that of values, character and citizenship education.
Cross-case interpretation: Representational Themes	Though this teacher (T1) has very little real knowledge of the N.P.C., she believes that is not different from the curriculum it replaced and so lacks any real power to help students learn more quickly and comprehensively.	This teacher (T2) has limited knowledge of N.P.C. and believes that it has the potential to help students learn more comprehensively if the MOE provides the resources. She also welcomes values, character and citizenship education expansion.	T3 is the most knowledgeable of the three of the N.P.C. and believes or at least, theoretically the N.P.C. is an improved curriculum document over the old and has the potential to make learning more 'meaningful' to students.	Most of the teachers have limited or no knowledge of the N.P.C. document but perceives it to be an expanded activity based child-centered document that remains highly theoretical.

Table 2: An analysis of Research Question 1

Analysed data to answer question one had indicated that the teachers at Peasdorm Primary School have limited or no knowledge about the new primary curriculum. .

Research Question 2

What are teachers' perceptions of their role in the curriculum implementation process?

Teachers- Role in curriculum implementation Meta-Matrix				
Sub-questions	RQ 2: What are teachers' perceptions of their role in the curriculum implementation process?			Variable interpretation: Representational Themes
	Teacher 1	Teacher 2	Teacher 3	
SQ 2.1: This curriculum encourages active participation of all students. How do you monitor student engagement in all activities?	"You give them one-on-one attention. You move around and the just look at the different children."	"… walk around and monitor. Monitoring for me is very important in order to provide feedback to children. … to know where they are, how much they understand, how much they are learning."	"…be a facilitator of knowledge … allowing students to interact with the material … give them parameters but giving them that room to explore, ask questions. Sometimes group work helps … (*build*) rapport…"	**FACILITATOR** All the teachers believe that individual attention is needed for effective monitoring.
SQ 2.2: Assessment for learning is one of the pillars in this new primary curriculum. What rubrics do you use for student assignments, products and projects?	"…infant children. They can't really complete a big project, they can't write."	"I go online and I source rubrics … sometimes, I make up. (*Rubrics are*) Sometimes (*used*)"	"I see the need for assessment for learning … I have developed my own rubric, (*to*) assess where each … student is in the learning process so that I can tailor, make my material, my content to suit those particular, … needs in the classroom."	**AWARENESS** Most of the teachers agree that assessment for learning is an integral part of learning and use rubrics for this process.

SQ 2.3: How do you assist students in extending relevant learning beyond the classroom into real-life situations?	"real-life situations. … field trips and expose them to other things and see how they react in different situations."	"role play, storytelling … real-life situations, so eventually they (*will*) start doing it on their own.	"the new curriculum it engenders that. … real-life situations, scenarios and bringing it to a question, a problem and letting them see (*what learning*) is really about, practical learning … they (*will*) take it back out in their own environment."	**RELEVANCE** All teachers believe that real-life situations assist students in extending their learning beyond the classroom.
SQ 2.4: Does the new primary curriculum afford students the opportunity to get necessary practice to attain mastery?	"No. It doesn't. … one-on-one contact remains, … very important."	"I am not sure. I don't think I have interacted with the document so much, in terms of using it with the children. I started it and I stopped because I found that resources were a problem."	"I would say yes. I'm hopeful, … I believe the best can happen out of this curriculum. We just need teachers who are fully committed. I believe this curriculum can take students to the highest form of mastery."	**IGNORANCE** Most of the teachers have no or limited knowledge on how to assist students in attaining mastery.
Cross-case interpretation: Representational Themes	T1 sees the teacher's role as one who provides individual attention to students and extends their learning by exposing them to different real-life situation.	T2 sees the teacher as facilitator of learning, who uses resources that are available or designs material for classroom use and uses various strategies to extend students learning but is unsure of how to assist students in	T3 sees the teacher as facilitator of knowledge; one who adapts material for classroom use and places students in situations to extend their learning; and believes the N.P.C. can take students to the	Most of the teachers believe the teacher's role in implementing the N.P.C. is that of facilitator, and are aware that rubrics presenting student with real-life situations are integral parts of this document, but have no knowledge on

		obtaining mastery.	highest level of mastery.	how to make learning relevant so that students can obtain mastery.

Table 3: Analysis of Research Question 2

Analysed data that had satisfied the requirements of research question two, most of the teachers believe their role in implementing this new primary curriculum is as a facilitator of learning.

Research Question 3

What are some of the challenges teachers face in implementing a new curriculum innovation?

Challenges teachers face in curriculum implementation Meta-Matrix				
Sub-questions	RQ 3: What are some of the challenges teachers face in implementing this new primary curriculum innovation?			Variable interpretation: Representational Themes
	Teacher 1	Teacher 2	Teacher 3	
SQ 3.1: What is the main challenge you experience when implementing this new primary curriculum?	"Parent participation, I suppose."	"Time to plan, resources. … if we are given time where we could meet and decide on what course we are taking. There are three of us in second year, and I think … we could meet and plan,"	"…understand to what extent certain skills or information retainal from the students to what extent it is required. … some form of assessment from the writers of the curriculum, in terms of (*the nature of*) the summative evaluation, … that could guide the extent to which I elaborate on a particular topic."	**CONSTRAINTS** All the teachers express that there are hindrances to implementing the N.P.C. viz. parental involvement, non-contact time, resources and assessment.

SQ 3.2: Have you expressed these challenges to the school administration? Have they done anything to help alleviate these challenges?	"Yes." "No.	"I have spoken about the resources. I haven't spoken about the non-contact time. No. …the principal told me that she was completing a document indicating our resource needs at the time."	"Yes." (*Teacher, uses summative tests to guide teaching*) try to avoid, teaching just a curriculum, ... want to teach the children. At the end of …, the academic year, there is a standardized test and I would need to know that my students, even the weakest one is able to comfortably pass that test." "Not to the administrators. I did it at the … PCR workshop"	**LEADERSHIP** Most of the teachers have expressed the challenges they experience in implementing the N.P.C. to the school administration and received no assistance in alleviating these challenges.
SQ 3.3: What have you done to overcome this/these challenge(s)?	"Speak to the parents individually." (*Have resulted in change*) "For some children"	"I purchase resources for my class and sometimes I make, but time is not on my side … if we have non-contact time we can make more use of it." (*Non-contact time*) "Trying to manage."	"… I have tried studying the material, …looking at the elaborations …to make sure I hit that benchmark. …at least cover what is required"	**LEADERSHIP** All the teachers have made attempts to alleviate the challenges they face in implementing the N.P.C.
SQ 3.4: In comparison to the former document, do you think this document will be able to cater for	"No. Not much different from the previous document. Same curriculum, just they change	"And I think it … also caters for the different learning styles more so than the last one (*the former*	"Yes. …the subject area is not just boxed … greater flexibility so that I can ensure that the material has	**CHILD-CENTEREDNESS** Most of the teachers believe the N.P.C. caters for their students varying learning

the varying needs of your students? Why do you think so?	around the words a little bit and say new curriculum,"	*curriculum*),"	been properly learnt, … a theme that can run through a group of subjects and in so doing, student learning is more meaningful, …covering the topics in less time."	styles.
Cross-case interpretation: Representational Themes	T1 believes that by getting parents involved she will be able to implement the N.P.C.; however she expresses that there are some differences between the former and current documents.	T2 believes resources and peer collaboration are integral in implementing the N.P.C.; however, she is being proactive in implementing the document as she sees the benefits of this document as it pertains to her students learning.	T3 is unsure of the depth of the content to be delivered and thinks an example of the national standardized test will assist in overcoming this challenge; but has opted to study the document as its structure provides greater flexibility that assists in making learning meaningful to students.	All the teachers expressed that there are constraints to implementing the N.P.C. and requires more support from the school administration. As most of them believe the current document has the ability to cater for their students diverse learning needs.

Table 4: Analysis of Research Question 3

Data analysed for research question three had illustrated that all of the teachers are experiencing challenges in implementing the new primary curriculum.

Research Question 4

How do teachers feel about this particular curriculum innovation?

| Teacher feelings about the implementation process Meta-Matrix			
Sub-questions	RQ 4: How do teachers feel about this particular primary curriculum innovation?		Variable interpretation: Representational Themes
	Teacher 1	Teacher 2	Teacher 3	
SQ 4.1: How did you feel about this new primary curriculum upon its implementation in September 2013? Do you currently have these feelings? What caused this change in your feelings about this new primary curriculum?	"It is the same curriculum." "Yes." "It is the same curriculum."	"Very annoyed." "Yes." "The document was supposed to be available online in July. … we weren't able to access it until probably the, almost the end of the first week (*of Term 1*). I am still annoyed because some of the things we were promised we are still waiting on it. … the documents came in parts, … we (*are*) trying to connect all."	"Skeptical. Not to that extent. I felt as though the material was being rushed upon us." "…still …unsure as to (*what*), … extent certain …parts of the material (*content to be covered*) is required." "Interacting with others, colleagues on the same level, standard one level, having people who were writers of the curriculum as well on my staff that I can … speak with"	**SENSITISATION** Most of the teachers felt uncomfortable with the manner in which the N.P.C. was presented to them by the Ministry of Education (MOE); however, this feeling has lessened.
SQ 4.2: What is your level of motivation as you implement this new curriculum? What motivates you to use the new primary curriculum in	"No motivation as yet." (motivated by) "the individual needs of the children."	"I was eager …I felt that it was workable and as I got deeper into it and I realized the challenges with resources." "… it hasn't daunted me in any way because	"I am very much motivated. … this is twenty first century education. … it makes a lot of sense, where learning can be holistic and not in parts. …	**INTEREST** Most of the teachers are motivated to implement the N.P.C. in spite of the challenges they are experiencing.

your classroom?		my main objective is to make sure the children learn."	students are enjoying their learning" "I like change. I believe in change."	
SQ 4.3: Can you describe one activity that you have recently used and explain what motivated you to use it?	"I (*don't*) know. …I used the story time, …I used it before and it worked."	"…germination … the way it was set in the instructional toolkit. … catered for the different learning styles. … I think its workable is just that we need everything that was promised in order for it to work."	"…nouns. …students … (*saw*) how the information from one subject transfers itself into another."	**<u>INTEREST</u>** All the teachers have implemented the N.P.C. because they believe it is beneficial to their students learning.
Cross-case interpretation: Representational Themes	This teacher (T1) is not motivated to implement the N.P.C. because she is of the firm belief that it is same as the former document.	Although this teacher (T2) expressed annoyance with the manner in which the document was dispatched and unavailability of resources she remains motivated as she implements aspects of the N.P.C.	The approach taken by the MOE to implement the N.P.C. had this teacher skeptical about the document; however, peer interaction has cause alleviated that feeling.	Most of the teachers felt uncomfortable with the manner the N.P.C. was implemented by the MOE but they found the document to be of interest to them and their students.

Table 5: Analysis of Research Question 4

Data analysed to answer research question four, had shown the initial feeling of most of the teachers at this school was discomfort which had been the result of the manner in which it was disseminated by the Ministry of Education.

Research Question 5

What are the levels of use of the curriculum innovation in the primary school classroom?
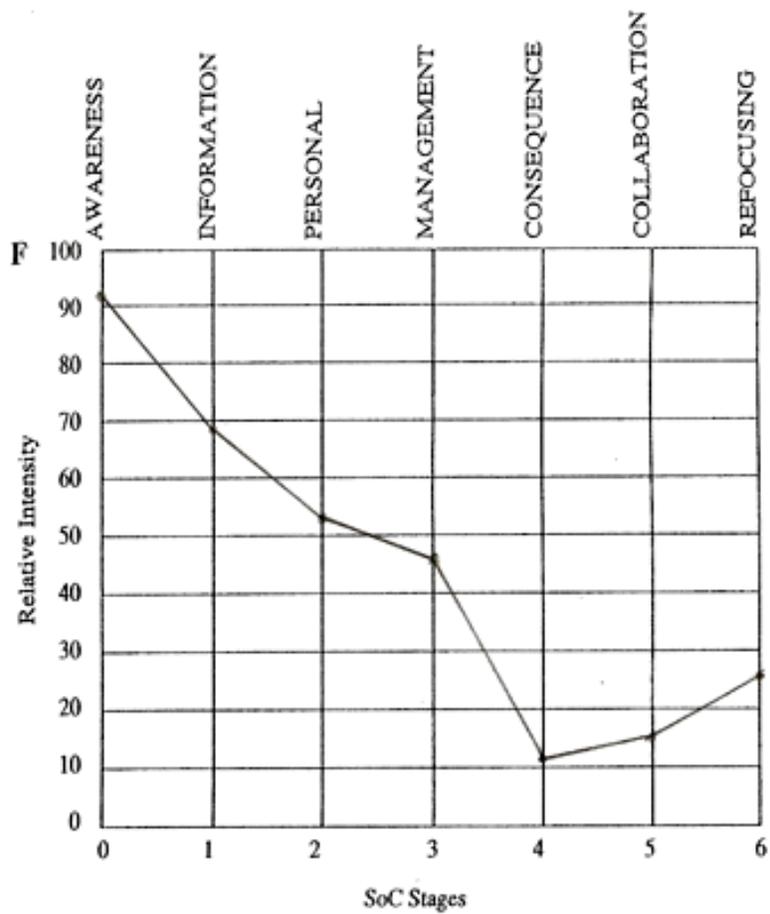
SoC Graph 1

Results for Teacher 1as reflected through the Stages of Concern Graph.
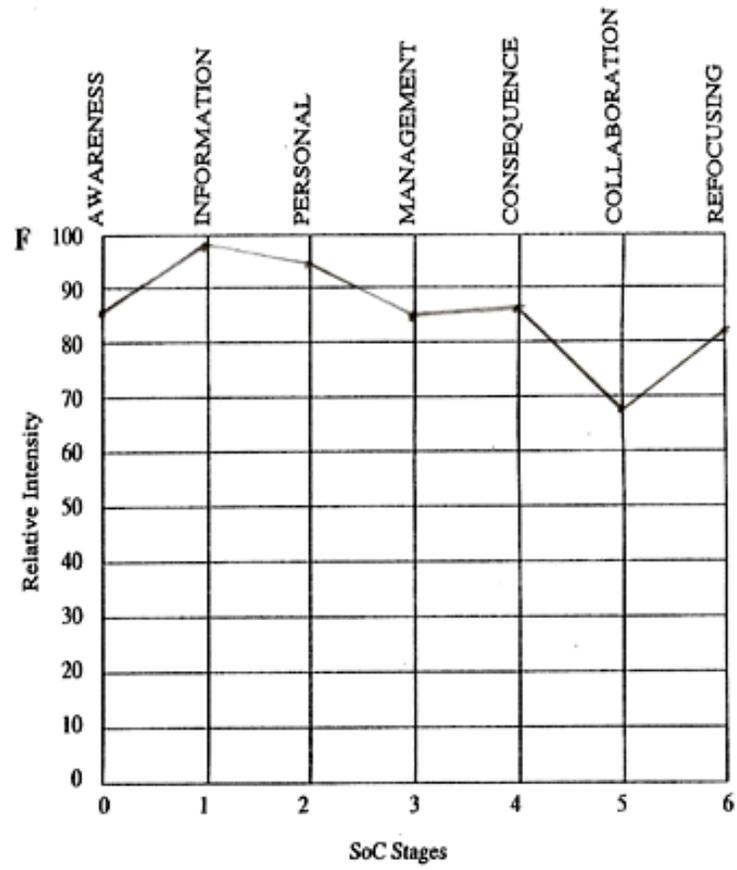
SoC Graph 2

Results for Teacher 2 as reflected through the Stages of Concern Graph.
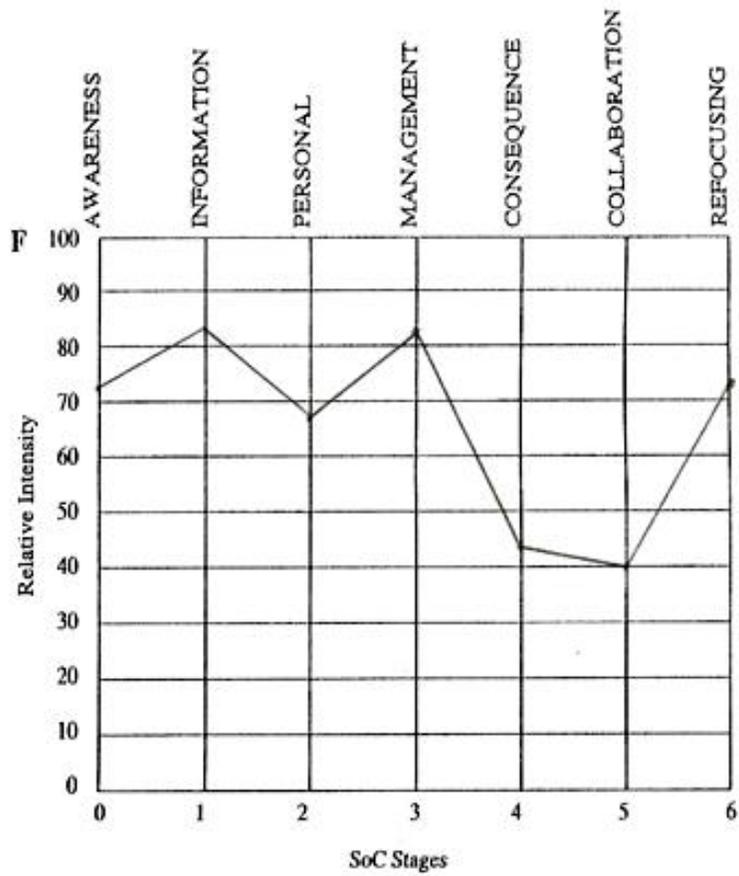
SoC Graph 3

Results for Teacher 3 as reflected through the Stages of Concern Graph
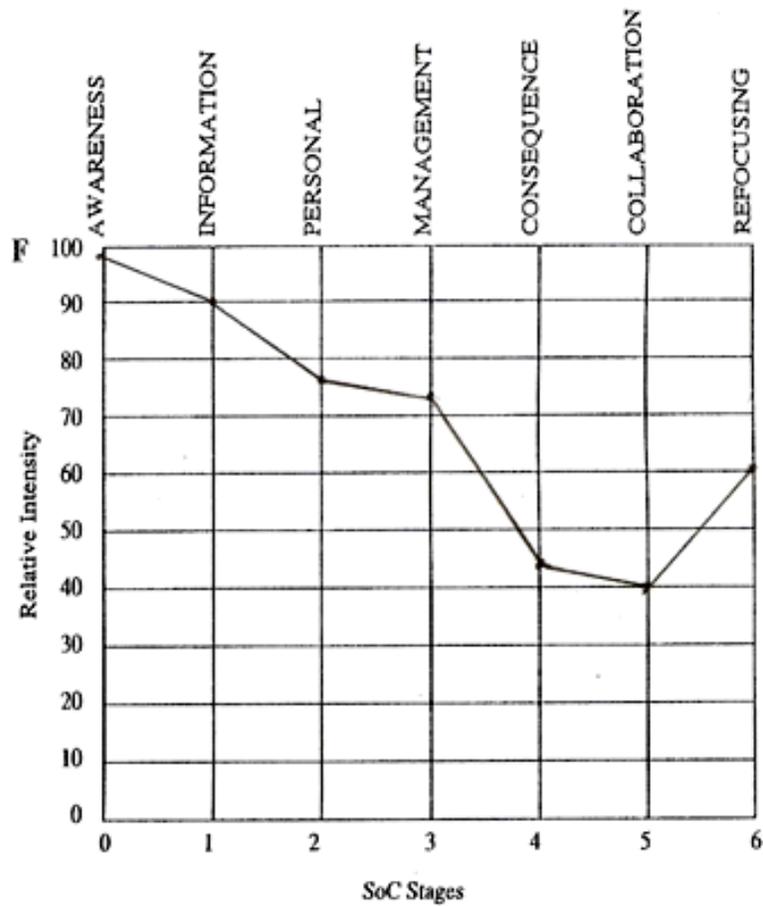
SoC Graph 4

The graph generated from the collated scores.

Teachers behaviours about the implementation process				
Behaviour Observed	RQ 5: What are the levels of use of the curriculum innovation in the primary school classroom?			Variable interpretation
	Teacher 1	Teacher 2	Teacher 3	
Before the lesson	No lesson plan was provided	Activities not on plan included in the lesson.	Only lesson topic provided "When should I	Most of the teachers did not have a written

		Decision made during the lesson. Done sometimes Spur of the moment. No. did not write down the procedure	use [Creole] and [Standard English]"	lesson plan to execute.
Beginning a lesson: Class structure	Excellent	Excellent	Excellent	All the teachers did an excellent introduction to the lesson.
During a lesson: Methods	Acceptable	Excellent	Excellent	Most of the teachers bordered excellence in the methodology used
	Inappropriate visual aids were used (size).	Used visual aids effectively.	Acceptable use of resources.	Most teachers used visual aids acceptably.
Teacher-student interaction	Excellent	Excellent	Excellent	There was an overall excellent display of teacher student interaction.
Content	. Excellent	Excellent	Excellent	All teachers' selection and delivery of content was excellent.
End of lesson: Closure	Acceptable	Excellent	Excellent	The lesson was excellently closed by most of the teachers
	Lesson ended ineffectively.	Effective ending of lessons.	Effective ending of lessons.	Most teachers were able to end their lesson effectively.
Cross-case interpretation	This teacher did not produce a lesson plan and delivered an adequate lesson.	A lesson plan was produced at the beginning of the lesson; as a result the teacher executed an excellent lesson.	Although this teacher did not produce a lesson plan, he was able to deliver an effective lesson.	Most teachers did not have a written lesson plan; however, most of them delivered an excellent lesson.

Table 6: Analysis of Observation Checklist

Information gathered from classroom observation on the execution of a lesson had

illustrated; although most of the teachers had not written a lesson plan, most of them were able to

deliver an excellent lesson.

Teachers behaviours about the implementation process				
Behaviour Observed	RQ 5: What are the levels of use of the curriculum innovation in the primary school classroom?			Variable interpretation
	Teacher 1	Teacher 2	Teacher 3	
Classroom discussion	Acceptable	Excellent	Excellent	Classroom discussions were effectively monitored by most teachers.
	Partially effective Small group discussion and presentation to aid social and thinking skills.	Effective A wider variety of resources provides more opportunities for students.	Effective Allow students to share their experience to develop their oral expression.	Most teachers were able to engage students in an effective discussion,
Comments	Classroom discussion needs more active participation of all students.	Resources were effectively used to provide opportunities for discussions.	Resources were effectively used to provide opportunities for discussions.	Most teachers were able to use resources effectively.
Cross-case interpretation	Acceptable	Excellent	Excellent	Most of the teachers did an excellent job in monitoring and engaging students in classroom discussions.

Table 7: Analysis of Observation Checklist: Classroom discussion

Data collected on classroom discussion suggest that most of the teachers were able to

effectively monitor students' engagement in classroom discussions.

Teachers behaviours about the implementation process				
Behaviour Observed	RQ 5: What are the levels of use of the curriculum innovation in the primary school classroom?			Variable interpretation
	Teacher 1	Teacher 2	Teacher 3	
Technology use in classroom	Acceptable	Acceptable	Acceptable	Technology was utilised in an acceptable manner.
	Basic technology (pictures) was used. Advance technology not available.	Basic technology (drawings) was used. Advance technology not available.	Basic technology (globe) was used. Advance technology not available.	All teachers used basic technology as computer software and other devices are not available.
Cross- case interpretation	The use of basic technology was acceptable.	The use of basic technology was acceptable.	The use of basic technology was acceptable.	All teachers utilised basic technology in learning activities.

Table 8: Analysis of Observation Checklist: Technology use in classrooms

Although the school lacks advance technology hardware and software, all the teachers

were able to utilise basic technology in an acceptable manner to realise the objectives of the

lesson.

Teachers behaviours about the implementation process				
Behaviour Observed	RQ 5: What are the levels of use of the curriculum innovation in the primary school classroom?			Representational Themes
	Teacher 1	Teacher 2	Teacher 3	
Problem solving and higher-level thinking skills	Acceptable	Excellent	Excellent	Most teachers effectively engaged students in problem solving and higher-level thinking skills.
	Acceptable use of problem solving and higher-level thinking skills.	Excellent use of problem solving and higher-level thinking skills.	Excellent use of problem solving and higher-level thinking skills.	Most teachers engaged students in problem solving and higher-level thinking skills,
	Classroom environment	Classroom environment	Classroom environment	All classroom environments

	appeared normal.	appeared normal.	appeared normal.	appeared normal.
Cross-case interpretation	Acceptable	Excellent	Excellent	All teachers had their students engaged in problem solving and higher-level thinking skills within their normal classroom environment.

Table 9: Analysis of Observation Checklist: Problem solving and higher-level thinking

The information generated on engaging students in problem solving and higher-level thinking had indicated that all the teachers engaged their students in these skills.

Teachers behaviours about the implementation process				
Behaviour observed	RQ 5: What are the levels of use of the curriculum innovation in the primary school classroom?			Variable interpretation: Representational Themes
	Teacher 1	Teacher 2	Teacher 3	
Class structure	Students work in groups; evidence of peer interaction; wide display of charts and class library were evident.	Students work in pairs; evidence of peer interaction; wide display of charts, work stations were strategically placed in the classroom and class library were evident.	Students work in pairs; evidence of peer interaction; wide display of charts, work stations were strategically placed in the classroom and class library were evident.	**CHILD-CENTEREDNESS** All the classrooms had varying degrees of student autonomy.
Classroom activities	Teacher maintained authority with little or no student-teacher interaction.	Authority was given to students to ask and answer each other questions, attempts were made to allow students to express their	Authority was given to students to ask and answer each other question, teacher guided discussions but students were allowed express	**CHILD-CENTEREDNESS** Most classrooms bore evidence of student autonomy.

		thoughts.	their thoughts freely.	
Individual activities	Individual activities were evaluated as opposed to being assessed.	Individual activities were assessed	Paired activities were observed. This was assessed and feedback was given.	**AWARENESS** There was evidence of both assessment of learning and assessment for learning in classroom 1 and 2.
Cross-case interpretation:	Although attempts were made to have the classroom child-centered, all authority resided in the teacher	There was visible evidence that this classroom was child-centered.	There was visible evidence that this classroom was child-centered.	Most classrooms appeared child-centered with assessment for learning being utilised.

Table 6: Analysis of Field Notes

The field notes had generated information regarding the general appearance of the classroom.

4.3 Presentation of Findings

The purpose of this qualitative case study had been to describe the attitudes of three teachers at the lower level at Peasdorm Primary School as the implement the new primary curriculum. In this study teachers' attitude had been viewed from three perspectives that had been identified by psychologists: cognitive, affective and behavioural. Therefore, this study had proposed to gain an understanding of these teachers' attitudes during the early stages of implementing the new curriculum innovation.

This chapter is organized according to the components of attitude. This approach had ensured its smooth transition into the Theory of Planned Behaviour theoretical framework. As a result, the questions had not proceeded in an ordinal manner. The findings are presented as a narrative to address each research question and show the connections among the components of attitude. Findings had been further supported with quotes from participants' interviews,

observation, field notes and CBAM SoC profiles. The chapter comes to a close with a summary of the results.

Research Question One

What do teachers know or believe they know about the curriculum innovation being implemented? Teachers had limited or no knowledge of the new primary curriculum document. However, they had perceived it to be an expanded activity based child-centered document that remains highly theoretical. Teacher 1 (T1) an Infant One teacher for the past fifteen years had stated in interview that she is unaware of the aims goals and objectives of the new primary curriculum: "I don't know any of them." Teacher 2 (T2) an Infant Two teacher for the past ten years had indicated that she had not read the entire document: "I haven't read the (whole) document. What I have done is look at the lessons that were set out in the Instructional Toolkit." However, Teacher 3 (T3) a Level One teacher for the past two years who had been working in the lower levels of the primary school for the past fourteen years conveyed: "The overarching aim … of the document is to foster holistic development in our children, whereby children see learning more meaningfully."

Additionally, two of the three teachers interviewed had no knowledge of how to create the appropriate learning environment to support the new primary curriculum document. T1 and T2 had not responded when asked, How do you create a learning environment that will facilitate the attainment of the aims, goals and objectives of the new primary curriculum document? This may account for why there is not always a good match between the intended curriculum and the implemented curriculum. T3 had partial knowledge on how to create the appropriate learning

environment; hence he expressed: "I have always seen teaching as a hands-on strategy … in fact I will incorporate that (*aspects of the new primary curriculum*) in my lessons.

Furthermore, all the teachers had believed that the new primary curriculum document is an activity based child-centered curriculum. T1: "You make the classroom child-centered … (You put in the classroom environment) child-centered activities." There is the underlying assumption in this response that the learning environment is the physical transformation of space. In her response T2 had remarked: "When I use resources in infants, I prefer to have enough for small groups to work in or for individual students." She had been of the belief that students in the lower levels in primary schools are able to work efficiently when they are given their own resources. T3 had shared: "… they can go to different corners … children can interact with manipulatives, things that have been used in teaching the lesson."

T1 had believed that the new primary curriculum document lacks the power to help students learn more quickly and comprehensively. She had expressed: "It is not sufficient on its own … that is only in theory." T2 had shared similar belief: "I do think so … however, what is happening to us is the lack of resources." Similarly, T3 had expressed: "Yes … I would believe so (*since theoretically*) what holistic does (*is to make those*) children who are seeing meaningful learning ... pick up the work … more quickly." Thus, all the teachers had shared the view that the new primary curriculum is more a theoretical that a practical curriculum.

Most teachers see the new primary curriculum as an expansion of the old document in at least one area, that of values, character and citizenship education (VCCE). As T1 had stated: "Not anymore than (*the curriculum before [it]*). As I said before, it doesn't have anything in addition to what was there before." Whereas, T2 and T3 had the belief that VCCE is an addition to the document, making it and expansion of the former curriculum.

Though T1 has very little real knowledge of the new primary curriculum, she believes that it is not different from the curriculum it replaced and so lacks any real power to help students learn more quickly and comprehensively. T2 has limited knowledge of the new primary curriculum, and believes that it has the potential to help students learn more comprehensively if the Ministry of Education provides the resources. She also welcomes values, character and citizenship education expansion. T3 is the most knowledgeable of the three of the new primary curriculum, and believes or at least, theoretically the new primary curriculum is an improved curriculum document over the old and has the potential to make learning more 'meaningful' to students. T3 seems to be uncritical and sees the curriculum innovation as panacea.

Research Question Two

What are teachers' perceptions of their role in the curriculum implementation process? Most of the teachers had believed the teacher's role in implementing the new primary curriculum is that of facilitator, and are aware that rubrics presenting student with real-life situations are integral parts of this document, but have no knowledge on how to make learning relevant so that students can obtain mastery.

All the teachers had believed that individual attention is needed for effective monitoring. T1 had explained: "You give them one-on-one attention. You move around and just look at the different children." In response T2 had stated: "… walk around and monitor. Monitoring for me is very important in order to provide feedback to children. … to know where they are, how much they understand, how much they are learning." In agreement T3 had replied: "… be a facilitator of knowledge … allowing students to interact with the material … give them

parameters but giving them that room to explore, ask questions. Sometimes group work helps …

(build) rapport …"

Two out of three teachers had believed, assessment for learning is an integral part of

learning and rubrics can be used for this process. T2 had posited: "I go online and source rubrics

… sometimes, I make up. (*Rubrics are*) sometimes (*used*). This teacher uses her creativity when

required to ensure her students are provided with appropriate grades for what they produce. T3

had unequivocally stated: "I see the need for assessment for learning … I have developed my

own rubric (*to*) assess where each … student is in the learning process so that I can tailor, make

my material my content to suit those particular, … needs in the classroom." On the other hand

T1 had firmly stated: "… infant children. They can't really complete a big project, they can't

write." T1 had misconceptualised assessment for evaluation.

All teachers had expressed that real-life situations assist students in extending their

learning beyond the class. T1 had stated: "real-life situations … field trips and expose them to

things and see how they react indifferent situations." T2 had confirmed: "role play, storytelling

… real-life situations, so eventually they (*will*) start doing it on their own." T3 had added: "the

new curriculum it engenders that … real-life situations, scenarios and bringing it to a question, a

problem and let them see (*what learning*) is about, practical learning … they (*will*) take it back

out in their own environment." These teachers seem to employ a variety of strategies to ensure

their students are able to apply what they learn to various situations.

Most of the teachers in this study had no or limited knowledge on how to assist students

in attaining mastery. T1 had responded: "No. It doesn't … one-on-one contact remains, … very

important." Within this teacher's view, working individually with students is important for them

to obtain mastery. T2 is quite clear and knows the extent to which students can benefit from the

curriculum that requires her interaction to become more knowledgeable about its contents. She had stated: "I am not sure. I don't think I have interacted with the document so much, in terms of using it with the children. I started it and I stopped because I found that resources were a problem." T3 had responded: "I would say yes. I'm hopeful, … I believe the best can happen out of this curriculum. We just need teachers who are fully committed. I believe this curriculum can take students to the highest form of mastery." T3 is of the firm belief all that is required for successful implementation of the curriculum is teachers' commitment as all resources that are needed for student to benefit from it are outlined.

Overall, T1 sees the teacher's role as one who provides individual attention to students and extends their learning by exposing them to different real-life situation. T2 believes that teachers are facilitator of learning, who uses resources that are available or designs material for classroom use and uses various strategies to extend students learning but is unsure of how to assist students in obtaining mastery. T3 views the teacher as facilitator of knowledge; one who adapts material for classroom use and places students in situations to extend their learning; and believes the new primary curriculum. can take students to the highest level of mastery.

Research Question Four

How do teachers feel about this particular curriculum innovation? Most of the teachers felt uncomfortable with the manner the new primary curriculum was implemented by the MOE but they found the document to be of interest to them and their students.

The initial feeling of discomfort that was experienced by most teachers upon implementation of the new primary curriculum has lessened. T1: "It is the same curriculum." "Yes." "It is the same curriculum." T1 is of the firm belief that no changes were made to the

former document. T2: "Very annoyed." "Yes" this feeling prolonged because of the manner in which the document was disseminated to them.   T3: "Skeptical. Not to that extent. I felt as though the material was being rush upon us." "Still … unsure as to (what) extent certain … parts of the material (*content to be covered*)." T3 is not comfortable with the approach take but is happy with what was done.

Two of the teachers are motivated to implement the new primary curriculum in spite of the challenges they are experiencing. T2: "I was eager … I felt it was workable … I realised the challenges with resources." "It hasn't daunted me in any way because my main objective is to make sure the children learn.

All the teachers have implemented the new primary curriculum because they believe it is beneficial to their students learning. T2: "Germination … it catered for the different learning styles." T3: "Nouns … students (*saw*) how the information from one subject transfers itself into another." T1: "Story time … I used it before and it worked." T1 is not motivated to implement the new primary curriculum because she is of the firm belief that it is same as the former document. Although this teacher (T2) expressed annoyance with the manner in which the document was dispatched and unavailability of resources she remains motivated as she implements aspects of the new primary curriculum. The approach taken by the Ministry of Education to implement the new primary curriculum had T3 skeptical about the document; however, peer interaction has cause alleviated that feeling.

Research Question Three

What are some of the challenges teachers face in implementing a new curriculum innovation? All the teachers had expressed that there are constraints to implementing the new

primary curriculum and requires more support from the school administration. As most of them believe the current document has the ability to cater for their students diverse learning needs.

All teachers in this study had expressed that there are hindrances to implementing the new primary curriculum viz. parental involvement, non-contact time, resources and assessment. T1 had stated: "Parent participation, I suppose." This teacher sees parental involvement as a major factor in curriculum implementation. T2 had replied: "Time to plan, resources … if we were given time where we could meet and decide on what course we are taking. There are three of us in second year, and I think … we could meet and plan." T3 had responded: "… understand to what extent certain skills of information retainal from the students to what extent it is required… in terms of (the nature of) the summative evaluation, …that could guide the extent to which I elaborate on a particular topic." Students learning needs are forsake as teacher prepares them to meet the requirements of the National Test; as he uses this standardization test to direct his teaching.

The analysed data had shown that most of the teachers had expressed the challenges they experience in implementing the new primary curriculum to the school administration and received no assistance in alleviating those challenges. T1: "Yes." "No." implying she expressed the challenges she had experienced and nothing had been done to alleviate the situation. T2 "I have spoken about resources. I haven't spoken about non-contact time. No … the principal told me that she was completing a document indicating our resource needs at that time." Teacher seems annoyed because of unfulfilled promises. T3 had expressed: "Yes." (*Teacher, uses summative tests to guide teaching*) trying to avoid, teaching just a curriculum, … want to teach the children. As the end of … the academic year, there is a standardized test and I would need to

know that my students, even the weakest one is able to comfortably pass the test." This teacher believes that in order for him to teach successfully he needs a framework of a National Test.

In response to the challenges that had confronted these teachers all of them have made attempts to alleviate the challenges they face in implementing the new primary curriculum. T2: "I have purchased resources for my class and sometimes I make, but time is not on my side … if we have non-contact time we can make more use of it." (*Non-contact time*) "Trying to manage." T3: "… I have tried studying the material, … looking at the elaborations … to make sure I hit that benchmark …at least cover what is required." T1: "Speak to parents individually. (*Have resulted in change*) for some children." Teacher 1 is being proactive. When administration fails to get parents involved teacher seeks them out herself.

Analysed data had shown most of the teachers believe the new primary curriculum caters for their students varying learning styles. T1 had responded: "No. Not much different from the previous document. Same curriculum, just they change around the words a little bit and say new curriculum." This teacher is of the firm belief that no major changes were made to the former document. T2: "And I think it … also caters for the different learning styles more so than the last one (*the former curriculum*)." T3: "Yes. … the subject area is not just boxed … greater flexibility so that I can ensure that the material has been properly learnt, … a theme that can run through a group of subjects and in doing so, student learning is more meaningful, … covering the topics in less time." T3 believes the elimination of block timetabling is a positive approach as it allows him to work at a pace that is conducive to the students.

Moreover, T1 believes that by getting parents involved she will be able to implement the new primary curriculum; however she expresses that there are some differences between the former and current documents. T2 believes resources and peer collaboration are integral in

implementing the new primary curriculum; however, she is being proactive in implementing the document as she sees the benefits of this document as it pertains to her students learning. T3 is unsure of the depth of the content to be delivered and thinks an example of the national standardized test will assist in overcoming this challenge; but has opted to study the document as its structure provides greater flexibility that assists in making learning meaningful to students.

Research Question Five

What are the levels of use of the curriculum innovation in the primary school classroom? This question had addressed the behavioural aspect of attitude. It had sought to gather data in support of the perceived behavioural control of teachers at Peasdorm Primary School. As such, the CBAM SoC was utilised to gather this information.

The Stages of Concern Graph 1 had been generated from T1. This graph is consistent with the profile of nonusers negatively inclined to the innovation. The Stages of Concern Graph shows the highest level of concern at 0, awareness stage, and the second highest at 1, information stage. This indicates that the teacher shows little concern about the innovation, as it is of low priority and it is centrally oppose to her thinking and work. Although it can be inferred that she may be willing to learn more about the innovation, (at the second highest point), it may span towards knowing about its general characteristics.

Results for T2 as reflected through the Stages of Concern Graph shows the highest level of concern at 1, information stage, and the second highest at 2, personal stage. This teacher has a general awareness of the innovation and is interested in learning more about it. However, she does not have significant is uncertain about the demands of the innovation as it pertains to her inadequacy to meet those demands.

Results for T3 as reflected through the Stages of Concern Graph shows the highest level of concern at 3, management stage, and the second highest at 2, information stage. The main focus of this teacher are the processes and tasks that are involved in using the innovation as well as the best use of information and resources. The teacher appears to be analysing his relationship to the requirements of the innovation.

Analysis of the Stages of Concern Graphs generated from the collated scores is that of the Typical Nonuser SoCQ Profile as the lower stages of concern (0, 1, 2) are at the highest level of concern. It also indicates that teachers are not fully aware of the innovation and that there are other concerns competing with the innovation. Results also show that these teachers want more fundamental information about what the innovation is, what it will do, and what its use involves.

Another attempt to gather data on the perceived behavioural control of these teachers was the use of classroom observation. Results generated from classroom observations had shown most teachers did not have a written lesson plan; however, most of them delivered an excellent lesson. T1 did not produce a lesson plan and delivered an adequate lesson. T2 A lesson plan was produced at the beginning of the lesson; as a result the teacher executed an excellent lesson. T3 although this teacher did not produce a lesson plan, he was able to deliver an effective lesson.

Additionally, the aspect of classroom discussion was further observed, most of the teachers did an excellent job in monitoring and engaging students in classroom discussions.T1 although classroom discussion was acceptable it needs more active participation of all students. T2 and T3 resources were effectively used to provide opportunities for discussions.

The use of technology in classrooms was also observed as a predictor of behaviour. The results had shown, all teachers utilised basic technology in an acceptable manner in learning

activities. Furthermore, the ability to guide students into problem solving and higher-level

thinking was most teachers had their students engaged in problem solving and higher-level

thinking skills within their normal classroom environment. Additionally, there were no

modifications to their classroom environment as well as to their behaviour while they were being

observed.

Field notes had been gathered to add rigor to the study. From these notes two themes

emerged: child-centeredness and awareness

Theme: Child-centeredness

Class structure all classrooms had varying degrees of student autonomy. T1 Students

work in groups; evidence of peer interaction; wide display of charts and class library were

evident. T2 Students work in pairs; evidence of peer interaction; wide display of charts, work

stations were strategically placed in the classroom and class library were evident. T3 students

work in pairs; evidence of peer interaction; wide display of charts, work stations were

strategically placed in the classroom and class library were evident.

Most classrooms bore evidence of student autonomy. T1 Teacher maintained authority

with little or no student-teacher interaction. T2 Authority was given to students to ask and

answer each other questions, attempts were made to allow students to express their thoughts. T3

Authority was given to students to ask and answer each other question, teacher guided

discussions but students were allowed express their thoughts freely.

Theme: Awareness

Individual activities had been the marked behaviour, this; however, was observed in

classrooms 1 and 2, and paired activity in classroom 3. There was evidence of both assessment

of learning occurred in classroom1 and assessment for learning in classroom 2. However, assessment for learning was observed in classroom 3.

4.4 Summary of findings

The Stages of Concern Graph 1 had been generated from T1. This graph is consistent with the profile of nonusers negatively inclined to the innovation. The Stages of Concern Graph shows the highest level of concern at 0, awareness stage, and the second highest at 1, information stage. This indicates that the teacher shows little concern about the innovation, as it is of low priority and it is centrally oppose to her thinking and work. Although it can be inferred that she may be willing to learn more about the innovation, (at the second highest point), it may span towards knowing about its general characteristics. This findings is consistnt with findings from the interview as T1 had expressed that she is unaware of the aims goals and objectives of the new primary curriculum: "I don't know any of them." Her views on child-centered classroom had been "You make the classroom child-centered … (You put in the classroom environment) child-centered activities." There is the underlying assumption in this response that the learning environment is the physical transformation of space. As such, T1 had not developed a sense of teaching as a process. Additionally, she had assumed that when students are doing things they enjoy they are learning. This gives the insight that T1 sees learning as overt behaviour.

Though T1 has very little real knowledge of the new primary curriculum, she believes that it is not different from the curriculum it replaced and so lacks any real power to help students learn more quickly and comprehensively. Additionally, T1 had no or limited knowledge on how to assist students in attaining mastery. T1 had responded: "No. It doesn't … one-on-one contact remains, … very important." Within this teacher's view, working

individually with students is important for them to obtain mastery. Overall, T1 sees the teacher's role as one who provides individual attention to students and extends their learning by exposing them to different real-life situation. This teacher is of the firm belief that no major changes were made to the former document "No. Not much different from the previous document. Same curriculum, just they change around the words a little bit and say new curriculum." As it pertains to motivation T1: "No motivation as yet," to implement the new primary curriculum because she is of the firm belief that it is same as the former document. These findings had been reflected in the observation as T1 did not produce a lesson plan and delivered an adequate lesson and classroom discussion was acceptable it needs more active participation of all students. The field notes had supported these findings students work in groups; evidence of peer interaction; wide display of charts and class library were evident. However, T1 maintained authority with little or no student-teacher interaction and there was evidence of both assessment of learning.

The information gathered had suggested that T1 is a typical nonuser of the new primary curriculum and had held a negative attitude towards the document.

Results for T2 as reflected through the Stages of Concern Graph shows the highest level of concern at1, information stage, and the second highest at 2, personal stage. This teacher has a general awareness of the innovation and is interested in learning more about it. However, she does not have significant is uncertain about the demands of the innovation as it pertains to her inadequacy to meet those demands. This findings had been consistent with observation data as T2 admitted: "I haven't read the (whole) document. What I have done is look at the lessons that were set out in the Instructional Toolkit." She had also added: "When I use resources in infants, I prefer to have enough for small groups to work in or for individual students." She had been of the belief that students in the lower levels in primary schools are able

to work efficiently when they are given their own resources. It can be implied that T2 has limited knowledge of the new primary curriculum, and believes that it has the potential to help students learn more comprehensively if the Ministry of Education provides the resources. She also welcomes values, character and citizenship education expansion.

However, as she implement the new primary curriculum T2 is quite clear and knows the extent to which students can benefit from the curriculum that requires her interaction to become more knowledgeable about its contents. She had stated: "I am not sure. I don't think I have interacted with the document so much, in terms of using it with the children. I started it and I stopped because I found that resources were a problem." She believes that teachers are facilitator of learning, who uses resources that are available or designs material for classroom use and uses various strategies to extend students learning but is unsure of how to assist students in obtaining mastery. However, her feelings had been expressed as: "Very annoyed." "Yes" this feeling prolonged because of the manner in which the document was disseminated to them. Consequently, T2: "And I think it … also caters for the different learning styles more so than the last one (*the former curriculum*)." Is of the firm belief that resources and peer collaboration are integral in implementing the new primary curriculum; however, she is being proactive in implementing the document as she sees the benefits of this document as it pertains to her students learning.

Although this T2 expressed annoyance with the manner in which the document was dispatched and unavailability of resources she remains motivated as she implements aspects of the new primary curriculum. This had been observed in the classroom as T2 presented a lesson plan was produced at the beginning of the lesson; as a result the teacher executed an excellent lesson. Classroom discussion was further observed, and she did an excellent job in monitoring

and engaging students in classroom discussions. This result had been confirmed with field notes as students were given varying degrees of autonomy. There had been evidence of peer interaction; wide display of charts, work stations were strategically placed in the classroom and class library were evident. T2 had given authority to students to ask and answer each other questions, attempts were made to allow students to express their thoughts and evidence of both assessment of learning and assessment for learning in classroom 2.

These findings had confirmed that T2 has a positive attitude and is motivated to use the curriculum innovation. Furthermore, T2 is a user of the new primary curriculum at the information stage which had been established by results from observation, the interview and field notes.

Results for T3 as reflected through the Stages of Concern Graph shows the highest level of concern at 3, management stage, and the second highest at 2, information stage. The main focus of this teacher are the processes and tasks that are involved in using the innovation as well as the best use of information and resources. The teacher appears to be analysing his relationship to the requirements of the innovation. The results of this graph had been reflected in the interview as T3 had expressed: "The overarching aim … of the document is to foster holistic development in our children, whereby children see learning more meaningfully." He had appeared to be the most knowledgeable of the three of the new primary curriculum, and believes or at least, theoretically the new primary curriculum is an improved curriculum document over the old and has the potential to make learning more 'meaningful' to students. T3 seems to be uncritical and sees the curriculum innovation as panacea. This teacher views the teacher as facilitator of knowledge; one who adapts material for classroom use and places students in situations to extend their learning; and believes the new primary curriculum. "can take students

to the highest level of mastery." He further added: "I would say yes. I'm hopeful, … I believe the best can happen out of this curriculum. We just need teachers who are fully committed. I believe this curriculum can take students to the highest form of mastery." T3 is of the firm belief all that is required for successful implementation of the curriculum is teachers' commitment as all resources that are needed for student to benefit from it are outlined.

However, his feelings had been: "Skeptical. Not to that extent. I felt as though the material was being rush upon us." "Still … unsure as to (what) extent certain … parts of the material (*content to be covered*)." T3 is not comfortable with the approach take but is happy with what was done. The approach taken by the Ministry of Education to implement the new primary curriculum had T3 skeptical about the document; however, peer interaction has cause alleviated that feeling. Consequently, T3 is unsure of the depth of the content to be delivered and thinks an example of the national standardized test will assist in overcoming this challenge; but has opted to study the document as its structure provides greater flexibility that assists in making learning meaningful to students. Nevertheless, had expressed that the new primary curriculum affords " … greater flexibility so that I can ensure that the material has been properly learnt, … a theme that can run through a group of subjects and in doing so, student learning is more meaningful, … covering the topics in less time." T3 believes the elimination of block timetabling is a positive approach as it allows him to work at a pace that is conducive to the students.

Results from classroom observation had shown T3 delivered an excellent lesson although he had not produced a lesson plan. Additionally, the aspect of classroom discussion was further observed, he had done an excellent job in monitoring and engaging students in classroom discussions. Furthermore, T3 had engaged the students in problem solving and higher-level thinking skills. Field notes had generated similar results in T3 classroom students were given

varying degrees autonomy as authority had been given to students to ask and answer each other question, teacher guided discussions but students were allowed express their thoughts freely. They worked in pairs; evidence of peer interaction; wide display of charts, work stations were strategically placed in the classroom and class library were evident. However, assessment for learning was observed in classroom 3 as the teacher had incorporated feedback from students in the lesson.

From the analysed data it had appeared that T2 had a positive attitude towards implementing the new primary curriculum. He is at management level with the document and is highly motivated as he engages in its implementation.

4.5 Summary

This chapter had focused on data analysis and presentation of findings from a qualitative case study that had aimed at describing the attitudes of teachers as they implement the new primary curriculum. Data had been analysed from interviews, CBAM SoC questionnaire, observations and field notes were generated to help create a rich thick description of these teachers' attitudes. Findings had shown that most teachers have limited or no knowledge of the new primary curriculum, most of them were also unclear about their roles as they implement the document. These teachers had expressed the challenges they face in implementing the curriculum and how their feelings have changed or remain the same since the inception of the implementation process. Additionally, the Levels of Use varied among teachers which were reflected in the observations made as well as the field notes gathered.

Chapter 5

5. Discussion and Recommendation

5.1 Introduction

Alwan (2006) defined educational change as an ongoing process that takes place with or without deliberate introduction of something different to education. It is with this understanding the government of Trinidad and Tobago had decided to rewrite the primary curriculum documents. In Trinidad and Tobago the overarching goal of the education system is geared to producing the ideal child (Education Sector Strategic Plan, 2011-2015).

This qualitative case study had been conducted to ascertain a description of teachers' attitudes during the early stages of implementing the new primary curriculum at the lower levels at Peasdorm Primary school. Additionally, this study had also been geared at unearthing challenges these teachers are experiencing as they implement this new curriculum. As such, the research questions laid out in this study had provided the researcher with information that is required to make describe these teachers' experiences.

This study had been directed by the overarching research question: What are the attitudes of teachers during the early stages of implementing a curriculum innovation? To answer this question the researcher developed five sub-questions which guided the study:

1. What do teachers know or believe they know about the curriculum innovation being implemented?

2. What are teachers' perceptions of their role in the curriculum implementation process?

3. What are some of the challenges teachers face in implementing a new curriculum innovation?

4. How do teachers feel about this particular curriculum innovation?

5. What are the levels of use of the curriculum innovation in the primary school classroom?

5.2 Discussion

I begin this discussion with teachers' attitudes towards the implementation of the new primary curriculum. . This had been achieved through research questions one, two and four. Findings had suggested the teachers at Peasdorm Primary School had little or no knowledge of the new primary curriculum document but had perceived it to be an expanded activity based child-centered document that remains highly theoretical. Lack of knowledge in some cases had affected their attitude and feelings towards the curriculum innovation. As Ball (1990b) affirmed teachers' content knowledge and attitudes play an important role in teachers' effectiveness. Barrow and De Lisle (2009) had similar findings in their evaluation of the SEMP science curriculum as teachers lack of content knowledge posed problem in the manner in which the curriculum had been implemented.

Furthermore, most of the teachers had believed the teacher's role in implementing the new primary curriculum is that of facilitator, but have no knowledge on how to make learning relevant so that students can obtain mastery. Teachers, play a fundamental role in the curriculum implementation process. Griffiths-Watson (2001) had emphasized the importance of having all school principals and teachers participate in curriculum orientation sessions that are aimed at sensitizing them to the curricula. In so doing teachers will become aware of how to effectively implement the document as well as what is required of them.

Akin and Black (1997) had suggested, teachers feelings whether negative or positive innovation impacted on curriculum implementation. Results from the study had further indicated that most of the teachers felt uncomfortable with the manner the new primary curriculum was implemented by the MOE but they found the document to be of interest to them and their students. Carroll, et al, (2003) had suggested that continued professional development is essential to maintaining high-quality education in all schools. Hence, it is imperative that the Ministry of Education provide teachers with resources as well as training in using these resources, which will assist in alleviating the level of discomfort expressed by these teachers.

All the teachers had expressed that there are constraints to implementing the new primary curriculum and requires more support from the school administration. This had been noted in light of the implementation of new mathematics curriculum for primary grades in Dominica which had been deferred because of a lack of resources (Berry, et.al., 1999, p. 17) by its implementers. Additionally, Barrow and De Lisle (2009) had found the implementation of the SEMP science curriculum had been inhibited by teachers' inability to use the resources and lack of time to plan learning activities.

The Stages of Concern Graphs generated from the collated scores had demonstrated the Typical Nonuser SoCQ Profile as the lower stages of concern (0, 1, 2) are at the highest level of concern. This had indicated that teachers are not fully aware of the innovation and that there are other concerns competing with the innovation. Results also show that these teachers want more fundamental information about what the innovation is, what it will do, and what its use involves. It must be noted that the Level of Use of an innovation is a powerful descriptor of how it is being implemented (Hall, Derksen and George, 2006).

5.3 Recommendations

In concluding, there are a few suggestions for future implementation of a curriculum innovation. According to Hall and Hord (2001) changes in outcomes are only possible when new practices are implemented.

Firstly, teachers should be encouraged to attend training sessions which should be done over a period of two weeks. This is of high importance as teachers are the main agents of change in a society. It is also imperative that all administrators attend a sensitisation workshop for a period of two days with specific focus on curriculum implementation.

Secondly, parents, as one of the main stakeholders in the education system should be encourage to attend and to participate in these sensitisation workshops or a one day training session. This will ensure that parents keep abreast of changes in the education system that will affect their children.

Thirdly, the Ministry of Education should provide resources that are necessary to ensure the effective implementation of this curriculum document. They should also allow primary school teachers a specified period of non-contact time; where they can plan individually or at a department level to implement the curriculum effectively.

Finally, school administrators should put structures in place to safeguard the resources they receive. This will ensure the resource serve their purpose for the desired period of time.

5.4 Conclusion

Curriculum implementation is a commonality in many countries globally; as such, it had been translated within our local and school contexts. Given the intent of this qualitative case study, it is imperative that the results be enacted upon. The teachers at Peasdorm Primary School

had indicated their attitudes with regard to the implementation of the new primary curriculum

document. They had also expressed the challenges they encounter as they attempt to enact the

document.

References

Alwan, F.H. (2006). *An analysis of English language teachers' perception of curriculum change in the United Arab Emirates*. Unpublished doctoral dissertation, The University of Exeter, UK.

Anderson, J.R. (2005). *Cognitive psychology and its implications* (6th ed.) New York NY: Worth Publishers.

Anderson, J., White, P. & Sullivan, P. (2005). Using a schematic model to represent influences on, and relationships between, teachers' problem-solving beliefs and practices. *Mathematics Education Research Journal*. 17 (2), 9-38.

Arévalo, G., Fryer, M., Leister, V., Loterszpil, M., Omaña, A., & Rogers, D. (2011). *Project completion report (2011: Secondary Education Modernization Programme*. Government of Trinidad and Tobago. Retrieve on June 2, 2014, from: http:/www.transforme.gov.tt/sites/default/files/evaluation-findings/Secondary%20Education%20Modernization%20Programme%20%28SEMP%29.pdf

Atkinson, R.C. & Shiffrin, R.M. (1968). Human memory: A proposed system and its control processes. In K. Spence, & J. Spence (Eds.). *The psychology of learning and motivation*. Vol 2, pp. 89-195. New York: Academic Press.

Atkin, J.M. & Black, P. (1997). Policy, perils of international comparisons: The TIMMS case. *Phi Delta Kappan*. 79, 22-28.

Asson, C. (2013). Principals object to curriculum changes. Newsday Newspaper: Section A, p. 8, October 7, 2013.

Bagoo, A. (2013). New Primary Schools curriculum in September. Newsday Newspaper: Section A, p. 9, April 8, 2013.

Ball, D.L. (1990a). The mathematical understanding that prospective teachers bring to teacher education. *The Elementary School Journal*, 90, (4), 499-466.

Ball, D.L. (1990b). prospective elementary and secondary teachers' understanding of division. *Journal for Research in Mathematics Education*, 2, (2). 132-144.

Bandy, H.E. & Boyer, W.A.R. (1994). The impact of special needs students on teachers in the rural areas of British Columbia. In D. McSwan & M. McShane (Eds.), *An international conference on issues affecting rural communities: Proceedings of the conference held by the Rural Education Research and Development Centre at Sheraton Breakwater Casino-Hotel, Townsville Queensland Australia*, 10-15 July 1994 (p. 2320241). Townsville: James Cook University of North Queensland, Rural Education Research and Development Centre.

Barbados Ministry of education, Youth Affairs and Culture. (1998). *EduTech 2000: An education policy framework for Barbados*. Bridgetown, Barbados: Author.

Barbados Ministry of education, Youth Affairs and Culture. (1998). *EduTech 2000: An education policy framework for Barbados*. Bridgetown, Barbados: Author. Available online: http://www.edutech2000.gov.bb/edutech_2000.htm

Beck, J., Czerniak, C.M.. & Lumpe, A.T. (2000). Research on teacher education. A philosophical oreientation. *Journal of Research and Development in Education*. 15 (4), 13-18.

Berry, J., Poonwassie, D. & Berry, D.B. (1999). Improving learning outcomes in the Caribbean: challenges and lessons. Curriculum Reform. *A regional study prepared for the Economic*

Development Institute of the World Bank and presented at a workshop Port of Spain, Trinidad and Tobago. April 21-23, 1999.

Best, J.W., & Khan, J.V. (2006). *Research in education*. 10th Ed. New York: Pearson Education Inc.

Best, L. (2006). Earth T&T under siege. *Daily Express: The Review*, Dec. 1st, 2006, Vol. 29, No. 12 p.5.

Bogdan, R.C, & Biklen, S.K. (1998). *Qualitative research for education: An introduction to theory and methods*. Needham Heights, MA: Allyn and Bacon.

Carroll, A., Forlin, C. and Jobling, A. (2003). The impact of teacher training in special education and the attitudes of Australian pre-sercice general educators towards people with disabilities. *Teacher Education Quaterly*, Summer 2003, p. 63-79.

Cresdee, M. (2002). *Dealing with curriculum change: How teachers perceive recent curriculum changes and the strategies they employ to cope with such change*. Unpublished M.Sc. thesis. Murdoch University , Perth, Western Australia.

Creswell, J.W. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Creswell, J.W. (2008). *Research design: Qualitative, quantitative, and mixed methods approaches*. 3rd ed. Thousand Oaks, CA: Sage Publications.

Creswell, J.W. (2012). *Qualitative inquiry and research design: Choosing among five traditions* (3rd ed.). Thousand Oaks, CA: Sage Publications.

Connelly, FM, & Ben-Peretz, M. (1980). Teachers' roles in the using and doing of research and curriculum development. *Journal of Curriculum Studies*. 12, 95-107.

Cronin-Jones, L.L. (1991). Science teacher beliefs and their influence on curriculum

implementation: Two case studies. *Journal of Research in Science Teaching*. 28, (3),

235-250.

Davies, M.B., (2007). *Doing a successful research project: Using qualitative or quantitative

methods*. New York, NY: Palgrave MacMillan.

Dep Ed (2005). *The monitoring and evaluation of the implementation of the Basic Education

Curriculum: Findings and recommendations*. Dep Ed Order No. 35; Department of

Education, Republic of the Philippines.

Dep Ed (Undated). *The 2002 Basic Education Curriculum*. Department of Education, Republic

of the Philippines.

De Souza, J. 2013. Gopeesingh pushing for new curriculum in September 2013. *Newsday

Newspapers: Section A*, p. 13, May 26, 2013.

De Wever. B., Schellens, T., Valcke, M., & Van Keer, H. (2006). Content analysis schemes to

analyze transcripts of online asynchronous discussion groups: A review. *Computer &

Education*, 46, 6-28.

Eagly, A.H. & Chaiken, S. (2007) The Advantages of an Inclusive Definition of Attitude. *Social

Cognition* 25:5, 582-602. Online publication date: 1-Oct-2007. Read More:

http://guilfordjournals.com/doi/abs/10.1521/soco.2007.25.5.638

Eisner, E.W. (1991). *The enlightened eye: Qualitative inquiry and the enhancement of

educational practice*. New York, NY: Macmillan Publishing Company.

Elbaz, F. 1981. The teacher's practical knowledge: Report of a case study. *Curriculum Inquiry*,

11, 43-47.

Franke, R. H. & Kaul, J. D. (1978). The Hawthorne experiments: First statistical interpretation. *American Sociological Review*, 1978, 43, 623-643.

Fraser-Abder, P. (1988a). Sub-cultural differences in cognitive development among elementary students in Trinidad and Tobago. *Caribbean Journal of Education*, 13(1-2), 27-41.

Frolin, C., Joblin, A. & Carroll, A. (2001). Preservice teachers' discomfort levels toward people with disabilities. *The Journal of International Special Needs Education*, 4, 32-38.

Fullan, M. (1982). *The measuring of educational change*. Toronto: Ontario Institute for Studies in Education Press.

George, J. (1988). The role of native technology in science education in developing countries: A Caribbean perspective. *School Science Review*, 69(249), 815-820.

Gething, L. (1994). The interaction with Disabled Persons Scale. *Journal of Social Behaviour and Personality*, 9, (5), 23-43.

Government of the Republic of Trinidad and Tobago. *The White Paper on Education 1993-2003*. Port of Spain, Trinidad: Government Printery.

Government of the Republic of Trinidad and Tobago. *Education Sector Strategic Plan 2011-2015*. Port of Spain, Trinidad: Government Printery.

Griffith-Watson, W. (2001). Sub-region Seminar on Curriculum Development for "Learning to Live Together" Havana, Cuba, 15-18 May, 2001. *UNESCO/IBE Barbados Country Report – Curriculum Development*. Retrieve on June 2, 2014 from: http://www.ibe.unesco.org/fileadmin/user_upload/archive/curriculum/Caribbean/CaribbeanPdf/barbados.pdf

Hall, G.E, Dirksen, D.J. & George, A.A. (2006). *Measuring implementation in schools: Levels of Use*. Austin, TX: Southwest Educational Development Laboratory.

Hall, G.E., George, A.A. and Rutherford, W.L. (1979/1998). *Measuring stages of concern about the innovation: A manual for use of the SoC questionnaire* (R&D Rep. No. 3032). Austin, TX: Research and Development Center for Teacher Education, University of Texas at Austin.

Hall, G.E. & Hord, S.M. (2001). *Implementing change patterns, principles and potholes*. Boston: Allyn-Bacon.

Haney, J., Czerniak, C.M., & Lumpe, A.T. (1996). Teacher beliefs and intentions regarding the implementation of science education reform strands. *Journal of Science Teacher Education*. 33, (9), 971-993.

Haney, J. & McArthur, J. (2002). Four case studies of prospective science teachers' beliefs concerning constructivist teaching practices. *Science Education*. 86, 783-802.

Heshweh, M.Z. (1996). Effects of science teachers' epistemological beliefs in teaching. *Journal of Research in Science Teaching*. 33 (1), 47-63.

Hopkins, D., Matthews, P., Matthews, L., Woods-Smith, R., Olajide, R. & Smith, P. (2007). *Review of Public Education in Bermuda*. London Centre for Leadership in Learning. Retrieve on May 2, 2014, from:

http://www.moed.bm/Educational%20Review/Hopkins%20Report%20-%20Education-Review%20of%20Public%20Education%20in%20Bermuda.pdf

James, R. (1981). Understanding why curriculum innovations succeed or fail. School *Science and Mathematics*. 81, 487-495.

Jorgensen, D.L. (1989*). Participant observation: A methodology for human studies.* Applied Social Research Series Vol. 15. Thousand Oaks, CA: SAGE Publications

Joseph, S. (2010). Lessons learnt from six years of education reform. *The Caribbean Journal of Teacher Education and Pedagogy*. Vol 1. Arima Trinidad and Tobago: The University of Trinidad and Tobago.

Kärkkäinen, K. (2012), "Bringing about curriculum innovations: Implicit approaches in the OECD Area", OECD Education Working Papers, No. 82, OECD Publishing. http://dx.doi.org/10.1787/5k95qw8xzl8s-en

Knobel, M. & Lankshear, C. (1999). *Ways of knowing: Researching Literacy*. Newtown, NSW: Primary English Teaching Association.

Levitt, K.E. (2002). An analysis of elementary teachers' beliefs regarding the teaching and learning of science. *Iative, the* . 86, 1, (1), 1-22.

Lincoln, Y.S. & Guba, E.G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage Publications

McGrail, E. (2005). Teachers, technology, and change: English teachers' perspectives. *Journal of Technology and Teacher Education*, 13 (1), 5-24.

Merrian, S. 1988. *Case study research in education: A qualitative appro*ach. San Francisco: Jossey-Bass.

Miles, M. & Huberman, A.M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: Sage.

Nespor, J. (1987). The role of beliefs in the practice of teaching. *Journal of Curriculum Studies*. 19, 317-328.

National Research Council. (2004). *On evaluating curricular effectiveness: Judging the quality of K-12 mathematics evaluations*. Washington, D.C.: The National Academic Press.

Onwuegbuzie, A.J. & Leech, N.L. (2007). A call for qualitative power analyses. *Quality & Quantity*. Spring 2007. 41:105-121.

Pajares, M.F. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of Educational Research*. 62 (3), 307-332.

Paton, M.Q. (1990). *Qualitative evaluation and research methods* (2nd ed.) Newbury Park, CA: Sage.

Potashnik, M. & Adkins, D. (1996). Cost Analysis of Information Technology Projects in Education: Experience form Developing Countries. *The World Bank: Education and Technology Series*. Vol 1. No. 3. Washington: World Bank.

Roberts, D.A. (1982). Developing the concept of "curriculum emphases" in science education. *Science Education*. 66, 243-260.

Roehrig, G.H. & Kruse, R.A. (2005). The role of teachers' beliefs and knowledge in the adoption of a reform-based curriculum. *School science and Mathematics*. 105, (8), 412-422.

Secondary Education Modernisation Programme. (2002). *SEMP Secondary Education Modernisation Programme: Providing quality secondary education for all*. Secondary Education Modernisation Programme Coordinating Unit. Aranguez: Trinidad and Tobago.

Spence, J. (2013). In education? Oh, the shame of it! *Daily Express Newspaper*. Port of Spain, Trinidad: The Trinidad Express Newspapers.

Smith. E.L. & Anderson, C.W. (1984). Plants as producers: A case study of elementary science teaching. *Journal of Research in Science Teaching*. 21, 685-698.

Sweeney, A.E. (2003). An overview of science education in Caribbean: Research, policy and practice. *Science Education International*, 14(2), 43-55.

Waters, A. & Vilches, L.C. (2008). Factors affecting ELT reforms: The case of the Philippines Basic Education Curriculum. *Regional Language Centre Journal*. 39, (1), 5-24.

Welch, W.W. (1979). Twenty years of science curriculum development: A look back. In D.C.

    Berliner (Ed.), *Review of research in education*. Vol. 7, p. 282-306. Washington DC:

    American Educational Research Association.

Wilkins, J.L.M. (2008). The relationship among elementary teachers' content knowledge,

    attitudes, beliefs, and practices. *Journal Math Teacher Education* (2008) 11:139-164.

Wishart, J.G. & Manning, G. (1996). Trainee teachers' attitudes to inclusive education for

    children with Down's Syndrome. *Journal o* century marked by a distrustful and even an

    angry electorate in many countries *f Intellectual Disability Research*, 40, 56-65.

Background Information
Interview 11:03:14
Duration 7mins 27 secs
How many years have you been teaching?
Since 1996 > 18 years
How many years have you been teaching at this level?
15 years

Analysis: 1

Q: What are some of the aims, goals, and objectives of this new primary curriculum
        document?
R: I don't know any of them
A: Shows no interest.

Q: How do you create a learning environment that will facilitate the attainment of the aims,
        goals and objectives of this new primary curriculum document? Explain how you do so?
R;   N/A

Q: Are the concepts in this new document powerful enough by itself to jump-start the
        learning process and help students learn more quickly and comprehensively so
        knowledge is generalized and transferred?
R: No.
Q: What can be done to make sure that happens?
R: It is not sufficient on its own. No. None of those things could ever stand on its own
        unless the teacher creates a learning environment.
A: Teacher has the ability to make learning transferrable.
Q: How do you create a learning environment?
        You create a learning environment, you make the classroom child centered and that is
        only theory it has no practical…. It has no practical benefits just theory. It has nothing.
A: Sees a learning environment as a physical transformation of space. Additionally, (also)
        teacher has not developed a sense of teaching as process.
Q: What do you put in that environment?
R: Child centered activities.
A: Teacher assumes that when students are doing things that they enjoy "child centered
        activities," they are learning. This gives insight into how the teacher views learning i.e.
        learning as overt behaviour. A behaviourist.

Q: Does learning activities in this new primary curriculum increase students capacity to
        create them into responsible citizens?
R: Not any more than before.
A: The current curriculum cannot accomplish what the former could not i.e. the teacher is
        resistant to change.
Q: In what way?

R: As I said before, it doesn't have anything in addition to what was done before. So it doesn't … It is not different from anything we have not seen previously.

A: It seems like a comparison of both documents was not undertaken; but also the teacher did not see that as necessary. As aforementioned, this teacher said that she 'right out front', "I do not know [No] what is [the purpose] of this new innovation." It's like answering a question before it is asked. This teacher's attitude is driven by 'emotions/effect/feelings' that is rooted in knowledge of the past "it is not different from anything we have not seen previously." The behaviour which flows out of this is one of Resistance to change!

2.

Q: This curriculum encourages active participation of all students. How do you monitor student engagement in all activities?

R: No. It only caters for one type of child.

A: Is of the belief that the curriculum does not cater for students individual differences.

Q: Like?

R: Children who are exposed to things and it doesn't cater for children who doesn't. As I said, teachers only look at one type of child and they are only in theory. In practical all the children in your class come from a different environment and they will not all be able to associate with all the things that have been said.

A: The curriculum is geared to students from middle and upper socio-economic status and that teachers have a preference of teaching such students. As such, individual differences are not accommodated in the classrooms as it pertains to students who come from lower socio-economic background.

Q: How do you monitor students engagement?

R: You give them one-on-one attention. You move around and the just look at the different children. You look at each child individually.

A: Sees individual attention as the key to monitoring students participation in classroom activities. Also believes that this approach affords the opportunity to see each student progress.

Q: Assessment for learning is one of the pillars in this new primary curriculum. What rubrics do you use for student assignments, products and projects?

R: Not really, mostly projects but not big projects because they are infant children. They can't really complete a big project, they can't write. Remember they cannot write.

A: The ability to write is viewed as a necessity for students to participate in classroom projects. It seems like this teacher does not to understand the purpose for using rubrics in the classroom. As a result, students ability is curtailed to small projects.

Q: What assessment for learning activities do you engage in within the classroom?

R: Evaluations, small evaluations, spelling evaluations, reading evaluations, they are unable to really write a complete sentence, so they can't really do more than that

A: There is a misconception of assessment as it is thought of as evaluation. The focus of students achievement is measured based on how they perform in evaluation exercises. The use of feedback which is consistent with formative assessment is absent from this classroom.

Q: How do you assist students in extending relevant learning beyond the classroom into real-life situations?
R: Well, you could present them with real-life situations. You could take them on field trips and expose them to other things (like Bob (pseudonym) and IMAX) and see how they react in different situations.
A: Field Trips beyond the school environment are important in extending student learning beyond the classroom. It also act as a mechanism by which teachers can monitor students social development by observing how they behave in such situations.

Q: Does the new primary curriculum afford students the opportunity to get necessary practice to attain mastery?
R: No. It doesn't.
A: Teacher's response is based on mere assumption as there is no factual base for the response. As aforementioned, the teacher stated that she did not read the document. As a result, this response is based on speculation as she is unwilling to accept the current curriculum document.
Q: What do you do to facilitate students obtaining mastery?
R: That is where the one-on-one contact remains, because it is still a very important. As I said before, it didn't change from what it had before, so it is still a general, it is a generalized thing and it doesn't assist with children who are unable or who were not exposed to those things before.
A: Within this teacher's view, working individually with students is important for students to obtain mastery. The teacher unawareness of the purpose of this document conflicts with her belief that it is the same as the previous curriculum. For this claim to be valid she needs to be aware of the focus of both documents. In addition, she sees students previous knowledge and experiences to be imperative in their ability to obtain mastery. This implies that the teacher cannot provide students with the necessary knowledge and experience that is required to take them from one point of learning to another. As a result, the teacher eliminates the use of vicarious experiences as a means of preparing students to transit to the next level.

3.
Q: What is the main challenge you experience when implementing this new primary curriculum?
R: Parent participation, I suppose.
A: Sees parental involvement as a major factor in curriculum implementation.

Q: Have you expressed these challenges to the school administrators?
R: Yes.
A: Getting parents involved
Q: Have they done anything to help alleviate these challenges?
R: No.
A: School administration has failed at getting parents involved.

Q: What have you done to overcome this/these challenge(s)?

R: Speak to the parents individually.

A: This teacher is being proactive. When school administration fails to get parents involved, teacher seeks them out herself.

Q: Has that resulted in any change?

R: For some children, yes.

A: Parent-Teacher Conference as key component in overcoming curriculum implementation challenges. I think the main focus of the question was avoided because I think this teacher is not implementing the curriculum document as such the challenge stated is probably superficial. (As a teacher at the school, the main challenge teachers face is student indiscipline which is mainly addressed through Parent-Teacher consultations). Therefore, hinging parental involvement as a means for hindering curriculum implementation is trying to steer the researcher away from knowing that the teacher is not implementing the curriculum.

Q: In comparison to the former document, do you think this document will be able to cater for the varying needs of your students?

R: No.

A: Is not aware of the focus of the document and makes claims about its ability to function. This implies that this teacher prefers to remain in her comfort zone as such she is unwilling to accept change.

Q: Why do you think so?

R: Not much different from the previous document. Same curriculum, just they change around the words a little bit and say new curriculum, do something. Teachers just like to feel important. So they have something to do, they do something.

A: Reiterates, "Not much different from the previous document." This teacher is of the firm belief that no major changes were made to the former document. She also believes that teachers were the key players in changing the curriculum and that teachers quest for recognition is the main reason for the curriculum rewrite. She also insinuated that the new curriculum is a result of teachers desire to 'do something' and not the desire to keep the country abreast of global changes that will prepare students to effectively fulfil their roles as global citizens. This teacher sees change as a threat to the status quo, which can be a possible explanation for the high level of resistance that is being expressed.

4.

Q: How did you feel about this new primary curriculum upon its implementation in September 2013? Do you currently have these feelings?

R: It is the same curriculum. Yes.

A: This teacher, who has not read the new primary curriculum document, feels it is the same document that was being used prior to September 2013.

Q: What caused them to remain the same?

R: Because it is the same curriculum. When I saw it I thought it was the same curriculum. A year after the fact is the same curriculum.

A: Is of the firm belief that there were no changes to the former document.

Q: What is your level of motivation as you implement this new curriculum?

R: No motivation as yet.

A: Teacher is definitely not interested in implementing the curriculum.

Q: What motivates you in the classroom?

R: The children, the individual needs of the children.

A: The students individual needs is seen as the main source of motivation. however, this curriculum is founded on five principles that are required for developing the 'Ideal Child', and choosing to disregard it shows that the level of interest expressed for students is not what is practised in this classroom

Q: Can you describe one activity that you have recently used and what motivated you to try it?

R: I used, I doh know nah. What I used? I used the story time, the story.

A: The choice of this activity was 'by the way' as this teacher has demonstrated that she is not in support of the curriculum.

Q: Why did you use it?

R: I used it before and it worked, two years ago before the new curriculum came out and it worked.

A: This activity is a safe guess because of the number of years this teacher has with teaching at this level; hence, the reason it was chosen.

Thank you.

Background Information

Interview 2 13:03:14
Duration 12 mins 56 secs
How many years have you been teaching?
28 years
How many years have you been teaching at the infant level?
Within recent time 5 years and 5 years before a total of 10 years.

Analysis: 2

1.
Q: What are some of the aims, goals, and objectives of this new primary curriculum document?
R: I haven't read the document. What I have done is looked at the lessons that were set out in the instructional tool kit.
A: Teach in the manner 'they' want me to teach. In addition, this is typical. Teachers seldom (hardly ever) read most of the key components of the written curriculum document. They equate curriculum with content!

Q: How do you create a learning environment that will facilitate the attainment of the aims, goals and objectives of this new primary curriculum document? Explain how you do so?
R: N/A
A: This may account for why there is not always a good match between the INTENDED CURRICULUM and the IMPLEMENTED CURRICULUM. **Theme:** Teachers have incomplete knowledge of what constitutes a curriculum, e.g. a science curriculum is taken to mean the science content. Students, therefore, learn the content in isolation from the purposes for which the content was selected.

Q: Are the concepts in this new document powerful enough by itself to jump-start the learning process and help students learn more quickly and comprehensively so knowledge is generalized and transferred?
R: I do think so, however, I think what is hampering us is the lack of resources. Because I have had in some of the instances to abandon the lessons because we don't have resources set out. When I use resources in infants, I prefer to have enough for small groups to work in or for individual students. But we were promised resources and it was not forthcoming when school reopened.
A: (This teacher is at Stage 3 - Management - general level of concerns. This should be reflected in her SoC profile i.e. Peaking at Stages 1 and 2)
     The curriculum has the power to assist students assume ownership of concepts and use them in various situations. However, a lack of resources is placing restrictions on executing the curriculum. The teacher believes that students at the infant level can work efficiently when they are given their own resources or allowed to share with a small number of students.

Q: Does learning activities in this new primary curriculum increase students capacity to create them into responsible citizens?

R: I think it does increase their capacity to become responsible citizens. I look at some of the areas that have been included, citizenship and; I remember something with citizenship education. To me I always thought that have been lacking; that and even the part where people. The sections where you have to interact and share, yeh, I think it would.

A: The key analytic insight here is that "teachers tend to have a positive attitude towards curriculum change when the curriculum innovation includes and prioritizes some of the elements that are also part of their personal priorities. This can lead to a greater commitment of the teacher to the curriculum change process, and ultimately to greater levels of success of the implementation of the curriculum." The implication of this is that teachers should be involved at all levels of the curriculum innovation process (the Strategic level, the Tactical level) and not just the implementation level.
The current curriculum document encourages social interaction which was absent in the former curriculum. As such, students will become responsible for what they do as well as the choices they make.

        2.

Q: This curriculum encourages active participation of all students. How do you monitor student engagement in all activities?

R: Even before this curriculum came on board I always walk around and monitor. Monitoring for me is very important in order to provide feedback to children. And to know where they are, how much they understand, how much they are learning. So I monitor, I move around.

A: Moves around classroom to monitor how students are progressing and gives feedback on whatever they are doing. This teacher shows interest in her students progress; as feedback can be utilized by students to improve their learning.

Q: Assessment for learning is one of the pillars in this new primary curriculum. What rubrics do you use for student assignments, products and projects?

R: Some, like when I do projects, I, sometimes for my projects I go online and I source rubrics from there, right, depending on what I am doing.

A: Rubrics are fundamental to the teaching-learning process. Teacher puts much effort into selecting the most viable rubrics to grade students work.

Q: And what about for the products, that's what they produce in the classroom?

R: That, sometimes, I make up.

A: This teacher uses her creativity when required to ensure students are provided with appropriate grades for what they produce.

Q: What about the assessment? Do you use rubrics for your assessments?

R: Not always. Sometimes, but not always yes.

A:

Q: How do you assist students in extending relevant learning beyond the classroom into real-life situations?

R: Through things like role play, storytelling and then pulling from that to relate it to our real-life and sometimes just, they too find ways. I have found that, my children have been able to, is something I do with storytelling when I get them. First, we do lots of storytelling, we do lots of relating what is in stories to real-life situations, so eventually they start doing it on their own. If we do science, they can tell you what happens where, where they relate it to in real life. But, I mean, it doesn't happen for all the children all the time but to me the majority of them get it.

A: Teacher uses a variety of strategies to take learning beyond the classroom. She sees learning as a means of making connections between what is taught and what occurs in students daily lives. Additionally, education is viewed not only as making students academically inclined but also fostering within them the ability to function in the real world. As such, the teacher uses this aspect of learning to allow students to become independent learners.

Q: Does the new primary curriculum afford students the opportunity to get necessary practice to attain mastery?

R: I am not sure. Because I don't think I have interacted with the document so much, in terms of using it with the children. Like I say, I started it and I stopped because I found that resources were a problem.

A: This teacher is quite clear and knows the extent to which students can benefit form the curriculum requires her interaction to become more knowledgeable about its contents. Because of limited use she is 'not sure' of its ability to ensure students obtain mastery.

   3.

Q: What is the main challenge you experience when implementing this new primary curriculum?

R: Time to plan, resources. I think that having non-contact time is very important for us now. Because I think that if we are given time where we could meet and decide on what course we are taking. To me three heads might be better than one. There are three of us in second year, and I think if we could meet and plan, I think the children will benefit. So non-contact for me.

A: Planning is essential for the successful implementation of the curriculum. As such, collaboration with other teachers at this level will assist in efficient planning to ensure the successful execution of the curriculum. The teacher is being a little idealistic in terms of non-contact time which is not afforded to primary school teachers. Although this will prove effective as teachers will be able to plan thoroughly for their students, who will benefit the most out of this opportunity.

Q: Have you expressed these challenges to the school administrators?

R: I have spoken about the resources. I haven't spoken about the non-contact time.

A: An expression of part of the requirement for effective implementation of the curriculum was expressed; as the other part of the request is unrealistic because of the structure of primary schools.

Q: With regard to the resources have anything been done to alleviate this challenge?

R: No. At least I was told that, the principal told me that she was completing a document indicating our resource needs at the time. Up to yesterday, Mr. Scott (pseudonym) was here, our numeracy coach and he indicated that resources may come next term. Now we were promised this for September, it is now March.

A: Teacher seems annoyed because of unfulfilled promises. With the hope for the best out of the situation she could not avoid expressing the expanse of time between the promise date and the current date. This indicates that the Ministry of Education officials with the responsibility for providing resources to schools should be mindful of making promises; as unfulfilled promises can cause teachers to become despondent.

Q: What have you done to alleviate this problem of lack of resources?

R: As far as I can I purchase resources for my class and sometimes I make, but time is not on my side now so that is what I am saying, if we have non-contact time we can make more use of it.

A: Teacher is aware of the developmental level of the students. Hence, she is willing to purchase and make resources which are of great importance to ensure her students grasp concepts that are taught. Thus, she strongly advocates for 'non-contact time'.

Q: What about the aspect of non-contact time. How have you been coping with it since you have not expressed that? What have you been doing to help yourself?

R: Driving myself crazy in class.

A:

Q: Doing what?

R: Trying to manage, trying to plan. I mean, to me it imposes on my family life, because I am up late planning, right, sometimes if I get an hour at school it might make a difference. As well I think we need, for this new curriculum we need the technology. We need to have if it is a laptop and a projector in class or available in the school for us to use.

A: To ensure that her students get the opportunity to maximise their potential, the teacher uses her personal time to plan school work. However, she is still hoping for some non-contact time to be afforded to them at school. The infusion of Information and Communication Technology as one of the pillars in this curriculum requires the need for certain technological tools to be made available at school. These tools will assist in the effective implementation of the curriculum at this school.

Q: In comparison to the former document, do you think this document will be able to cater for the varying needs of your students? Why do you think so?

R: Yes. And I think it that also caters for the different learning styles more so than the last one, the way its set out, so I think it will cater for the different needs of the learners.

A: An integrated curriculum takes into consideration the varying learning styles of all students, as expressed by this teacher. She also believes that this aspect of the curriculum makes it superior to the former document.

    4.

Q: How did you feel about this new primary curriculum upon its implementation in September 2013?

R: Very annoyed.

A: It is part of human nature to resist change.
Q: Do you currently have these feelings?
R: Yes. I still do.
A: For a feeling of annoyance to continue over a period of time indicates that there are substantive reasons to support such feeling.
Q: What caused those feelings to prolong?
R: The document was supposed to be available online in July. And I felt that if it was available in July, I would of have time to peruse it throughout the vacation, and plan, with ample time, source resources and be ready for September. When we came out in September, we weren't able to access it until probably the, almost the end of the first week. And by then it is difficult to plan at least in the way I would like to. It is difficult to have resources ready for. When I am home in the vacation that is what I do. So when I came out and it was available one week into the school year, I was annoyed and I am still annoyed because some of the things we were promised we are still waiting on it. And the documents came in parts, we got a part now and a part later and we were trying to connect all.
A: The Ministry of Education inability to deliver promises on time can be attributed to the level of annoyance felt by the teacher. We are creatures of habit and as such when there is forced change in our routines we tend to become very stressed. As a result the level of disequilibrium expressed by the teacher as she describes the way she felt and continues to feel can be directly aligned to how the curriculum document was disbursed to her.
Q: Have you gotten all three documents?
R: So now you have all three documents: the curriculum guide, the teachers' guide and the instructional toolkit.
      Yes. Last week we got the, I think the curriculum for second year.
A: All three documents are required for the effective implementation of the curriculum. However, teachers were expected to begin implementation with one document and make adjustments as they receive the others which occurred over a period of six months.

Q: What is your level of motivation as you implement this new curriculum?
R: In spite of everything, I was eager to when I looked at it I felt that it was workable and as I got deeper into it and I realized the challenges with resources. I think that if you are going to do something, do it wholeheartedly, and we should have things available. All the things we were promised should be available for us. If we had to find it, we should have been told, "We had to find it." And that to me is a turn-off. But it hasn't daunted me in any way because my main objective is to make sure the children learn.
A: The level of eagerness felt can be equated with any new innovation. However, in reality, the ability to sustain such eagerness will depend on how the challenges presented are dealt with and overcome. As a result the challenges that were presented left the teacher feeling despondent. [One can make the assumption that this teacher teaches curriculum as it is written (written and taught curriculum are the same)].
Q: What motivates you to use the new primary curriculum in your classroom?
R: If we are given the things we were promised at the workshop. At the workshop it sounded like a fairy tale and it seems as it was. We had our doubts and we waited. You know one of the things I laughed at and I tell myself, "Is a good thing that I didn't leave that workshop expecting much."

A: Past experiences play an important role in teacher expectation. As a result teachers are aware of what to expect from the Ministry of Education and are able to prepare for the opposite of what they are promised. In spite of their expectations they firmly know what to believe and what not hence this teacher, "didn't leave that workshop expecting much."

Q: Can you describe one activity that you have recently used and explain to me what motivated you to try it?

R: If we look back at, we did germination I can talk about that one. I did it the way it was set in the instructional toolkit. It was more hands-on, the children really enjoyed doing it, they were engaged. Everyday they would come, they would measure, get their strip record, they would draw and thought that, this time it really catered for the different learning styles. They were actually able to see, some people were able to draw and at the end they were able to compare and contrast something that we were suppose to do in comprehension but we were able to do it in science. We compare and contrast the way it grew. We look at, they were able to predict as well. I remember, skipping a day when they didn't measure and they had to predict how tall I would have been. So I think its workable is just that we need everything that was promised in order for it to work.

A: This teacher believes in doing what is required of her. Student involvement plays a major role in this classroom. Students are given the opportunity to assume roles this makes them highly motivated for the duration of the exercise. In the named activity students took on the role of scientists as they measure, observe and draw. Such activities assist in developing students scientific competencies. They realise that learning is both the learning of content and processes through which learning takes place.

Thanks

Background Information

Interview 3 17:03:14
Duration 24 mins 15 secs
How many years have you been teaching?
20 years in the primary school
How many years have you been teaching at this level?
2 years.
How many years have you been teaching children within that age group?
14 years. I have been at infant year two for 12 years prior to being at standard one for 2 years, so that will be 14 years.

Analysis: 3

1.
Q: What are some of the aims, goals, and objectives of this new primary curriculum document?

R: As I would see it, the overarching aim or objective for the curriculum is to foster holistic development in our children; whereby, children will not see learning as isolated where subjects are unrelated but they are seeing how subject material, content material for one subject area it also applies in another and in that way children can learn more meaningfully and it will be a more effective approach to teaching.

A: Teacher seems to accept the aims, goals and objectives of the innovation uncritically, and appears to be accepting it wholeheartedly (swallowing it hook, line and sinker, so to speak). (Question: How committed are teachers to a curriculum innovation when they uncritically accept the innovation?) **Theme:** Uncritical Acceptance
       To develop student holistically. Promote meaningful learning. Foster easy application of knowledge.

Q: How do you create a learning environment that will facilitate the attainment of the aims, goals and objectives of this new primary curriculum document? Explain how you do so?

R: I have always seen teaching as a hands-on strategy. I don't ever try to employ the chalk and talk approach and in so doing I have always had a vision of having a classroom where children can interact with materials. The same content that was taught by way of lessons, they can interact with that in the form of some form of manipulatives or as a chart that they can use. To interact with the materials, they can go to the different corners and in so doing the concept is reinforced. They are familiar, they are relaxed and I foster that, I encourage that so at the end of a lesson, in fact I will incorporate that in my lesson where children can, at the latter end, interact with the manipulatives, things that have been used in teaching the lesson.

A: One implication of the above seems to be that uncritical implement the innovation in a very "mechanical" way i.e. their implementation strategies lack creativity. Also their discourse is rhetorical.
       Create learning centres with age appropriate activities that afford students opportunity to interact with concrete manipulatives; thus fulfilling teacher's personal vision. Create a

relaxed environment so that students are comfortable enough to express themselves freely. Use hands-on strategies and allow students to discover how learning is transferred across content areas.

Q: Are the concepts in this new document powerful enough by itself to jump-start the learning process and help students learn more quickly and comprehensively so knowledge is generalized and transferred?

R: Yes. Yes it, I would believe so, in that, that is what holistic development does, children who are seeing meaningful learning they will of themselves pick up the work, the content more quickly and in that way it can be, the learning process, teaching/learning process would be facilitated and you would eventually have a group of students who is moving faster when they are seeing where the learning is taking them.

A: Their discourse is also pregnant with platitudes (see examples 1 and 2). **Theme:** Learned Helplessness
The curriculum is geared towards developing students holistically; hence learning becomes meaningful to them. As a result, students are able to grasp content more easily. Thus, some of them will begin to work faster than others as well as become engaged in learning activities beyond the classroom.

Q: Does learning activities in this new primary curriculum increase students capacity to create them into responsible citizens?

R: Yes, unlike the old curriculum, there are subjects which to me were needed, much, much needed. In particular the values, the character education subject VCCE, that's an area where it allows social education, as I would put it so children are not just getting the basic, what we would call the 3Ws and an R, but they are also getting that type of social development which to me will increase their capacity to learn the normal math, language arts, so, those areas, even social studies did not really hit that spot that I believe the VCCE component has added to the curriculum.

A: The third implication is that the uncritical see a single curriculum innovation as panacea "[the children] are also getting that type of social development which to me will increase their capacity to learn normal math, language arts, … those areas, even social studies …"
The introduction of Values Character and Citizenship Education takes learning beyond the 3Ws and R. As such, students will develop socially which increase their capacity to become competent learners. VCCE has the ability to prepare students with the ability to become effective citizens which is beyond what social studies was doing.

2.
Q: This curriculum encourages active participation of all students. How do you monitor student engagement in all activities?

R: The teacher, to me has to be a facilitator of knowledge so that in allowing students to interact with the material we are not just trying to give them parameters but giving them that room to explore, ask questions. Sometimes group work helps where they can among themselves here a strong sometimes with a weaker student and asks questions in that situation where one can learn from a peer. And also in my style I like the children to feel free and comfortable enough to have that rapport so they can speak to me ask questions

and in that way, and I have seen it, they are relaxed, they are not afraid to make their opinions known to me and so I am able to see what's lacking or what gaps I need to fill and to me that's the approach I employ.

A: Teacher employs questioning and observing students interacting with each other as well as conversing with students to ensure they participate in classroom. Paired learning and peer tutoring are also among the strategies used as well as classroom discussions. Teacher is of the belief that students need to feel comfortable in the classroom to actively participate in discussions and other classroom activities. By utilizing this approach gaps in learning are discovered and filled. Hence, all students will benefit from such classroom activities.

Q: Assessment for learning is one of the pillars in this new primary curriculum. What rubrics do you use for student assignments, products and projects?

R: I see the need for assessment for learning before any new content is given I would usually try to assess what previous knowledge children have so in so doing it may be a simple case of questions asking questions to ascertain where they are, to take them from where they are to where I would like them to be. I have developed my own rubric, in that, the current or present situation where they are be it poor, satisfactory, good, excellent. I am able to grade where they are and I can assess where each particular student is in the learning process so that I can tailor, make my material, my content to suit those particular, the needs in the classroom.

A: Student previous knowledge holds the key to learning. This is discovered through oral questioning which provides the teacher with the necessary information of the knowledge, skills and experience students currently possess. Teacher made rubrics are developed to aid this process. Furthermore, the teacher adapts content to fit the learning needs of students in the class.

Q: How do you assist students in extending relevant learning beyond the classroom into real-life situations?

R: The present curriculum, the new curriculum it engenders that. I have seen there are a lot of situations where the problem solving approach is used so that we are asking children to be more aware of that skill. And I use it in all my subjects, mathematics in particular where they are seeing problems that may, might be taken from their money, their classroom situations, at the cafeteria, the playground where they may go shopping. And you are using real-life situations, scenarios and bringing it to a question, a problem and letting them see how is really about practical learning and then too when they see that they take it back out in their own environment. When they go outside on recess, they can see how problems of a mathematical format. You are looking the key. The key is finding what operation is required and sometimes on the playground they may have a problem, someone is doing something that may be unfair and they, in their assessment of what's happening they can realise what "operation," I using the word, they may need to use outside. In the classroom they may need to use addition, subtraction. Out there they may need to tell a teacher and that might be the correct "operation" for the problems, for a solution outside. They are seeing that problems have solutions and the idea is to get the most practical approach to solving a problem.

A: This curriculum embodies the problem solving approach. It encourages students to become aware of skills being taught. Through the use of scenarios that require students to apply their learning makes learning practical. Using situations that students encounter at school have them assess the situation and come up with a plausible solution contribute to the development of their critical and creative thinking skills. Thus, students are able to explore options and select the best solution.

Q: Does the new primary curriculum afford students the opportunity to get necessary practice to attain mastery?
R: I would say yes. I'm hopeful, I am a hopeful person, in that I, I believe the best can happen out of this curriculum. It has the material for it. We just need teachers who are fully committed. But I believe this curriculum can take students to the highest form of mastery.
A: All that is required for the successful implementation of this curriculum is teachers' commitment as all resources that are needed for students to benefit from it are outlined. This teacher believes that the curriculum is teacher proof and it should be implemented as stated

   3.
Q: What is the main challenge you experience when implementing this new primary curriculum?
R: My biggest challenge has been, and to some extent continues to, understand to what extent certain skills or information retainal from the students to what extent it is required. So I am, I am not sure in terms of how far to go in teaching a concept and it may appease me if I knew. So, for instance if I had some form of assessment from the writers of the curriculum, in terms of where the summative evaluation, how, what nature it would take. So that, that could guide the extent to which I elaborate on a particular topic. Although elaborations have been given, yet, I am unsure. So to my, for my satisfaction, to help me to execute this curriculum, I need to know what extent I need to go, in terms of teaching a particular topic or covering a content area.
A: Students learning needs are forsaken as teacher prepares students to meet the requirements of the National Test; as he uses this standardized test to direct teaching. When teachers teach to the test valuable learning experiences are lost as concepts are poorly developed.

Q: Now you mentioned about having a visual in front of you, of a summative test. Do you teach to test? OR Do you use the summative test like the National Test to guide your teaching?
R: Yes. I would say yes.
A: The teacher main focus seems to be preparing students for the National Test as oppose to providing students with valuable learning experiences.
Q: To what extent do you use this test to guide your teaching?
R: Very good. In that, in teaching, we try to avoid, teaching just a curriculum, we want to teach the children. So, we want to get where they are, we want to make sure that we can bring them from step 'A' to 'B'. But at the end of the year, the academic year, there is a

standardized test and I would need to know that my students, even the weakest one is able to comfortably pass that test. Having that type of guide, will help inform me as to how much I would elaborate or extend myself on a topic. So in order for each of my students to be comfortable when that time should approach (arise).

A: Students performance at National Tests and high stakes examinations is used to measure a school's as well as a teacher's performance. This can be the reason for this teacher equating teaching children to preparing them to be successful in these tests.

Q: Have you expressed these challenges to the school administrators?

R: Not to the administrators. I did it at the workshop we had, PCR workshop when all the presenters, I did raise that point. Saying that, in the old curriculum, the old syllabus, math and English for standard one, over the years we have been seeing the format of the national test and we know what, basically what to expect, in terms of, how the questions tend to come. And although you will not necessarily have the same questions repeating themselves every year, you have a kind of guide a kind of framework to cover. And, we are as psychologists say, "human beings are cognitive misers, we tend to not to like wasting cognitive energy." So, what makes us comfortable as human beings, apart from being professionals is knowing where we are going with what we are doing. And it helps as a teacher, it helps me. If I am to teach something I don't want to over-teach. As, a supervisor had once told me, I am over-teaching a subject. And I like what this curriculum does, in that you don't have a specific or a cut off point in terms of time to the extent as the last one did. But still it is good to know that we are not doing too much or too little, we just want to, we want to have all that is required, all that is necessary covered and from there we can add or subtract.

A: This teacher believes that in order for him to teach successfully he needs a framework of a National Test. It seems that all the classroom activities are in line with what is required to succeed at these tests. Additionally, he uses theory to guide his decisions as well as to validate his position taken, 'psychologists say, "human beings are cognitive misers, we tend to not to like wasting cognitive energy."' So to avoid 'wasting time' it is better to prepare students to pass a test than to teach them the content that is required to transform them into the 'Ideal Child' (Strategic Plan 2011-2015).

Q: What have you done to alleviate this challenge?

R: For me, I have tried studying the material, the curriculum and looking at the elaborations in particular. As I've been told that's sort of what is required and I like to hit make sure I hit that benchmark, what is required. And if I have done that, then I can extend according to the group of students I have before me, I can extend. I like to at least cover what is required.

A: Focus on what is required and do as you are told – the requirements of a teacher proof curriculum is not only the main focus of this teacher; but also to teach the students so that they will be successful at the National Tests.

Q: In comparison to the former document, do you think this document will be able to cater for the varying needs of your students?

R: Yes.

A:

Q: Why do you think so?

R: Again, as I mentioned earlier, the time limit where the subject area is not just boxed forty minutes or forty five minutes as the case may be. There is a greater flexibility so that I can ensure that the material has been properly learnt, I have receive feedback from my students and I think that was lacking to an extent where we are just rushing to get material covered. It was a bit heavy and this one, because as well too, there are subjects (topics) that may have been too heavy for the level has been removed in some subject areas. And is more, in terms of themes, so we are looking at a theme that can run through a group of subjects and in so doing, student learning is more meaningful, one, and the topics covering, in covering the topics is less time. It may have been done here in science, you see it repeated again in social studies and I would not need to cover that again a second time, I'm showing the link and when students see the link they can even extend it to other areas that I may not have mentioned. They can even see it in other things showing up where I may not even have pointed it out to them. So they are learning, learning how to learn, using this curriculum.

A: The teacher is of the belief that the elimination of block timetabling is a positive approach as it allows him to work at a pace that is conducive to the students. Moreover, the thematic approach makes learning more meaningful as learning is not done in isolation. Relationships among core subject areas are intertwined; as such, concepts across curriculum areas are easily reinforced. Students will be able to see these links across content areas and will be able to take learning beyond the classroom.

        4.

Q: How did you feel about this new primary curriculum upon its implementation in September 2013? Do you currently have these feelings?

R: Skeptical. Not to that extent.

A: The feelings this teacher had upon the implementation of this new curriculum until the time of this interview has undergone little change

Q: How have your feelings changed?

R: I felt as though the material was being rushed upon us. As much as I appreciated the need for it I did not see how it was being conducted, the dispersal of it was being conducted in a manner that was sort of a fidgety and it was my impression or opinion as though the facilitators or even the higher bodies were waiting on our feedback in order to further adjust and tailor make the document. So I was of the opinion that it was being done as a work in progress, and is not a well thought out material. And that had me skeptical as to whether these people were serious and whether, the whole thing has been properly well formulated, thought out and I no longer feel that way. I am still kind of unsure as to, as I said earlier, as to what extent certain material, certain parts of the material is required.

A: Not comfortable with the approach that was taken but happy with what was done. Approach taken seemed like the planners were in need of teachers' feedback to complete the document. The level of uncertainty felt made him feel unsure about knowing what is required of him.

Q: What caused this change in your feelings about this new primary curriculum?

R: Interacting with others, colleagues on the same level, standard one level, having people who were writers of the curriculum as well on my staff that I can I could speak with and

will reassure me that the document is in fact well thought out, it's a 'A' to 'Z' material. And I'm more confident now that it's not something that is just like an overnight.

A: Interaction with peers about the curriculum documents made it more acceptable to him. Peer interaction at class level plays an important role in teachers acceptance and implementation of an innovation.

Q: What is your level of motivation as you implement this new curriculum?

R: I am very much motivated. I don't see any ministry or any governments are taking this approach away. To me this is twenty first century education. This is where other countries have taken their learning and they have gone places with it and it makes sense. To me it makes a lot of sense, where learning can be holistic and not in parts. It helps the student and as teachers we are aware that we are competing with a lot of influences outside. We need to know that students are enjoying their learning so that they will not be thinking about when the bell rings at three, but while they are there before us, they are enjoying, they understand what we are presenting to them and I am seeing that coming out. I am seeing students looking forward to being at school and I'm motivated and I believe they are as well.

A: The approach taken by curriculum developers is what our students need to make them globally competitive so that they will be able to take up their position in the global economy. This approach gets students focused as they enjoy what they are learning. Activities are structured to motivate students to enjoy school and teachers to enjoy teaching as students enjoy learning.

Q: What motivates you to use the new primary curriculum in your classroom?

R: I like change. I believe in change. I am sort of a dynamic person. I like to keep moving and I think that this document is leading me somewhere and I want to see how far it goes. So I'm exploring I like the idea of exploring new things.

A: Personal beliefs, likes and performance are key motivating factors in implementing an innovation.

Q: Can you describe one activity that you have recently used and tell me what motivated you to try it?

R: Okay, for instance I did nouns. When I did nouns I had to make it practical as you were saying so I allow students to empty their bags onto the desk and they identified the names of the things that were there in the bags, in their book bags and they are seeing there before them that all along they had a bag full of nouns. Form there you can take that into science, naming materials, they can take that into social studies where they can name buildings in their environment. And that practical approach also that integrated approach it's rewarding. The students are seeing how the information from one subject transfers itself into another. And at the end of it they were able to tell me what nouns were and they could give me examples from their classrooms and in the environment.

A: Sees an integrated approach as highly beneficial to both teachers and students. This teacher is of the belief the integrated approach allows for easy application of knowledge gained in one situation to another that is similar or new.

Thank you.

Stages of Concern Questionnaire

Date Completed: _____

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 programs 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, according to the explanation at the top of each of the following pages.

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 is 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 or potential involvement with The New Primary Curriculum Document. We do not hold to any one definition of this program, so please think of it in terms of *your own perceptions* of what it involves. Since this questionnaire is used for a variety of innovations, the name The New Primary Curriculum Document never appears. However, phrases such as "the innovation," "this approach," and "the new system," all refer to The New Primary Curriculum Document. Remember to respond to each item in terms of *your present concerns* about your involvement or potential involvement with The New Primary Curriculum Document.

       Thank you for taking time to complete this task.

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

1. I am concerned about students' attitudes toward this innovation. 0 1 2 3 4 5 6 7
2. I now know some of the other approaches that might work better. 0 1 2 3 4 5 6 7
3. I don't even know what the innovation is. 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 very limited knowledge about the innovation. 0 1 2 3 4 5 6 7
7. I would like to know the effect of this reorganization of 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 this innovation. 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 this innovation. 0 1 2 3 4 5 6 7
16. I am concerned about my inability to manage all 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 to 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 instructional approach. 0 1 2 3 4 5 6 7
21. I am completely occupied with other things. 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. Although I don't know about this innovation, I am concerned about other things in the area. 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 my time spent working with nonacademic 0 1 2 3 4 5 6 7

problems related to this innovation.

26. I would like to know what the use of their 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 this 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. At this time, I am not interested in learning about the innovation. 0 1 2 3 4 5 6 7

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

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 this innovation is better than what we have now. 0 1 2 3 4 5 6 7

Appendix III

Observation Checklist

Before the Lesson

Focus on Teacher Planning

Date: _____

Time: _____

Level: _____

Class Size: _____

What to Record: Before observing a classroom lesson, ask to see what the teacher has written in his/her lesson book as a guide for the lesson. As you observe the lesson, make a record of three things that the teacher does that were not noted in the written comments in the plan book.

1. _____

2. _____

3. _____

1. When did you decide that you were going to do this in the lesson?

   _____

   _____

2. Is this a procedure that you use often with these students?

   _____

   _____

3. What is your main reason for using this procedure?

_____

_____

4. Have you ever written this procedure down as part a lesson? Why or Why not?

_____

_____

Beginning a Lesson

*All items marked Not Observed must be explained in Comments

Class Structure	Could Improve	Acceptable	Excellent	Not Observed*
Students are made aware that the lesson was beginning				
Students are motivated to become involved in the lesson				
The frame of reference used helped students to organize their learning				
Teacher's use of students' prior knowledge				

Comments:

During a Lesson

Methods	Could Improve	Acceptable	Excellent	Not Observed*
Provides well-designed materials				
Employs various learning activities (small group discussion, student-led activities				
Employs other tools/instructional aids (technology – computer, video, overheads)				
Delivers well-planned lesson				

Comments:

Teacher-Student Interaction	Could Improve	Acceptable	Excellent	Not Observed*

	Could Improve	Acceptable	Excellent	Not Observed*
Solicits student input				
Involves a variety of students				
Demonstrates awareness of individual student learning needs				

Comments:

Content	Could Improve	Acceptable	Excellent	Not Observed*
Appears knowledgeable				
Appear well organized				
Explains concepts clearly				
Relates concepts to students' experience				
Selects learning experiences appropriate to level of learners				

Comments:

End of Lesson

Closure	Could Improve	Acceptable	Excellent	Not Observed*
Students were made aware that the lesson was ending				
Students were helped to organize or consolidate whey have learnt				
Students learning was reinforced				
Summary of the lesson				
Directs student preparation for the next activity				
Extends lesson beyond the classroom				

Comments:

Reflections on Observation:
1. Was the ending of the lesson effective? Why or why not?   _____

_____

_____

   2. One way the lesson could have been ended and a description of that ending.

_____

_____

_____

Observation Checklist

Classroom Discussion

Date: _____

Lesson Title: _____

Level: _____

Class Size: _____

What to Record: You will be observing student behaviours reflecting their ability to engage in effective discussion.

Discussion	Could Improve	Acceptable	Excellent	Not Observed*
Students demonstrate their respect for others				
Students maintain an open mind				
Students demonstrate their willingness to accept responsibility for getting the task done				
Evidence of students trying to reach consensus				
Students demonstrate their ability to stay focused on the issue				
Evidence of students thinking about the issue being discussed				
Students demonstrate their ability to work cooperatively				

Comments:

Reflections on Observation:

3. Summary of general impression about students' ability to engage in effective discussion.

   _____

   _____

   _____

   _____

4. If I had been leading the discussion, the changes I would have made include:

   _____

   _____

   _____

   _____

   Why?

   _____

   _____

   _____

   _____

Observation Checklist

Technology Use in Classroom

Date: _____

Lesson Title: _____

Level: _____

Class Size: _____

	Could Improve	**Acceptable**	**Excellent**	**Not Observed***
Instructional goal the technology is meeting (bringing problems in, resources and scaffolds, feedback, communication and community)				
Students seem familiar with technology				
Kinds of software students are using				
Engagement levels of students				
Teaches' interaction with students at computers				
Other materials used along with computers				

Comments:

Reflections on Observation:
1. Level of technology use _____ _____ _____

     _____

     _____

2. Good thing for teacher to try in his or her class using technology

     _____

     _____

     _____

Observation Checklist

Problem Solving and Higher-level Thinking Skills

This observation focuses on what strategies the teacher uses for engaging students in problem solving and developing and applying higher-level thinking skills

Date: _____

Lesson Title: _____

Level: _____

Class Size: _____

	Could Improve	**Acceptable**	**Excellent**	**Not Observed***
Strategies used for engaging students in problem solving				
Strategies used for developing critical thinking				
Strategies used for applying critical thinking				
Teacher approaches to engaging students in problem solving activities				

Comments:

Reflections on Observation:

1. To what extent was what you observed consistent with the instructional model for engaging students in problem solving and in developing higher-level thinking skills?

   _____

   _____

   _____

   _____

2. Did the classroom environment and activities appear to be "normal" or were they modified to accommodate your visit?

   _____

   _____

   _____

   _____

Appendix IV

Interview Protocol

1. What do teachers know or believe they know about the primary curriculum innovation?
   - ➢ What are some of the aims, goals, and objectives of this new primary curriculum document?
   - ➢ How do you create a learning environment that will facilitate the attainment of the aims, goals and objectives of this new primary curriculum document? Explain how you do so?
   - ➢ Are the concepts in this new document powerful enough by itself to jump-start the learning process and help students learn more quickly and comprehensively so knowledge is generalized and transferred?
   - ➢ Does learning activities in this new primary curriculum increase students capacity to create them into responsible citizens?

2. What are teachers' perceptions of their role in the curriculum implementation process?
   - ➢ This curriculum encourages active participation of all students. How do you monitor student engagement in all activities?
   - ➢ Assessment for learning is one of the pillars in this new primary curriculum. What rubrics do you use for student assignments, products and projects?
   - ➢ How do you assist students in extending relevant learning beyond the classroom into real-life situations?
   - ➢ Does the new primary curriculum afford students the opportunity to get necessary practice to attain mastery?

3. What are some of the challenges teachers face in implementing new primary curriculum innovation?
  ➢ What is the main challenge you experience when implementing this new primary curriculum?
  ➢ Have you expressed these challenges to the school administrators? Have they done anything to help alleviate these challenges?
  ➢ What have you done to overcome this/these challenge(s)?
  ➢ In comparison to the former document, do you think this document will be able to cater for the varying needs of your students? Why do you think so?

4. How do teachers feel about this particular primary curriculum innovation?
  ➢ How did you feel about this new primary curriculum upon its implementation in September 2014? Do you currently have these feelings? How have your feelings changed? What caused this change in your feelings about this new primary curriculum?
  ➢ What is your level of motivation as you implement this new curriculum? What motivates you to use the new primary curriculum in your classroom?
  ➢ Can you describe one activity that you have recently used and discuss what motivated you to try it?

Appendix V

Field Notes 1

The students are arranged in groups of five or six. The criteria used to group these students were unknown to the researcher. They are allowed to share resources and interact with each other.

The use of peer tutoring was commendable; as stronger students were able and willing to assist those who are weaker in different subject areas.

This classroom can be deemed teacher centered most of the talking was done by the teacher. Students were asked questions and they respond; they were not encouraged to ask questions.

During activities, the teacher guides the entire group. There was no of student-teacher interaction while students were performing tasks.

Student ability to call words was evaluated individually. Whenever a student was unable to pronounce a word, they were asked to spell the word instead of sounding the letters to aid pronunciation (the absence of phonetic analysis). However, I think this activity would have been more beneficial to students if they were asked questions on what was read.

Within the classroom there is a wide display of charts which include some that were made by the teacher, some purchased in the store, students' work and interactive charts. There is also a class library where students will go and take a book when they are finished doing their assigned task.

Field Notes 2

This classroom is structured in a traditional manner; students sit in rows and columns. However, there are two tables grouped in each column. In other words, the students are paired. The criteria used to group these students were unknown to the researcher.

There were work stations on the perimeter of the classroom. These stations consisted manipulatives that are associated with the activities that were associated with the lesson that was taught. Students were allowed to go to the various stations, where they interacted with these manipulatives; thereby, reinforcing concepts that were taught.

More authority was given to students, whereby, they were given the opportunity to ask questions and answer each other's questions. They were also given the opportunity to comment on what was said by the teacher as well as on what said by their peers. Although, the teacher guided classroom discussions, more attempts were made to allow the students to express their thoughts and feelings about the topic of discussion. Students were allowed to discuss with their partner, in small groups at the work station as well as within the whole class setting. (These discussions assist in developing students' oral expression, self confidence as well as their self esteem).

Students' ability to read was individually evaluated. Whenever a student was unable to pronounce a word, they were asked to sound the letters of the word until they were able to pronunciation was clear. If a child was unable to pronounce a word the teacher will pronounce underscore and pronounce it for him or her. That child will then asked to read the sentence that contains the word pronouncing the word as it was done by the teacher. I think reading activities would be more beneficial to students if they were asked questions on what was read.

Within the classroom there is a wide display of charts which include some that were made by the teacher, some purchased in the store, students' work and interactive charts. A class library was present students were allowed to take a book to read when they were finished their tasks.

Field Notes 3

This classroom is structured in a traditional manner; students sit in rows and columns. However, there are two tables grouped in each column. In other words, the students are paired. The criteria used to group these students were unknown to the researcher.

There were work stations at the back and on the side of the classroom. These stations consisted manipulatives that are associated with the activities that were associated with lessons that were taught. Students were allowed to go to the various stations, where they interacted with these manipulatives; thereby, reinforcing concepts that were taught. The researcher is unaware of how long these manipulatives will remain in the work stations.

Authority was given to students, whereby, they were allowed to ask questions and answer each other's questions. They were also given the opportunity to share their opinion on what was said by the teacher as well as on what said by their peers. Although, the teacher guided classroom discussions, students were asked to share how they feel about the topic of discussion. Students were allowed to discuss with their partner and share their opinion with the class. Additionally, these students were allowed to solve problems in pairs and share their solution with the class who confirmed or refuted their solution and gave suggestions when the answers were incorrect. (These discussions and activities assist in developing students' critical and creative thinking skills, oral expression, self confidence as well as their self esteem).

Within the classroom there is a wide display of charts which include some that were made by the teacher as well as students' work. A class library was present students were allowed to take a

book to read when they were finished their tasks and during Uninterrupted Sustained Silent Reading Session.