PERSPECTIVES OF THE PRIMARY SCHOOL CURRICULUM REWRITE (PCR) IMPLEMENTATION IN ONE PRIMARY SCHOOL

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Ritesh Lyndell Beepot

815007578

University of the West Indies

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Dr. Rinnelle Lee-Piggott

School of Education

Faculty of Humanities and Education

St. Augustine Campus

Table of Contents

Abstract

An understanding of curriculum implementers' views of the PCR is important in order to identify strengths and weaknesses of the curriculum innovation. This paper studied teachers and administrators perceptions' of the implementation of the new Primary School curriculum, the PCR in one school in central Trinidad. A case study was done involving analysis of PCR documents, teacher records and also interviews. Five participants were involved, two administrators and three teachers of the school. Results reveal that the PCR is viewed as a novel attempt to modernise the education system; however there are issues with allocation of time and resources, the physical infrastructure of the school and its in-adequacy for implementation in addition to the heavy workload involved with implementation.

Keywords: Curriculum, innovation, implementation, perceptions, implementers.

Chapter 1: Introduction

Curriculum Rewrite in Trinidad Primary Schools: Implementers' Perspectives

Background

Curriculum innovation is defined as deliberate actions to improve a learning environment by adapting a method of presenting material to students that involves human interaction, hands-on activities and student feedback (Altrichter, 2014). The curriculum design and implementation process involves many complex steps. At the top of the hierarchy, education policy makers envision ideas and concepts that they would like to implement in schools. These policies are almost always tied to governmental goals, and reflect the values of those in charge. At the school level, the implementation of any curriculum innovation requires a keen eye to detail and a comprehensive style of management. Principals, teachers and students are the key stakeholders who have direct contact with any given curriculum innovation. Curriculum officers and developers monitor the implementation of the curriculum and also gauge its progress in the Primary schools.

Primary school curriculum change has been a global initiative over the past decade. Many countries have altered or even replaced their primary school curricula to suit the new needs millennial students.. In 2014, the primary school curriculum of English Schools was changed. The content was reduced or "slimmed down" in some subject areas, leaving the Math and Language Arts curriculums without much change (BBC, 2014). The reform was met with apprehension from members of the public, but teachers were considered to be "warming" up to the new curriculum, as it allows them to tailor teaching strategies to meet the needs of their students. In Botswana, there is ongoing study (e.g. Mosothwane, 2013) about the gradual change of the primary school curriculum. This change has been compartmentalised, and is being done

subject by subject in their primary schools. These changes are due to lack of resources and state capital. Mosothwane (2013) states that with respect to the introduction of the new Science curriculum, teachers were apprehensive because some of the concepts were new to them and classrooms lacked resources to properly teach using the new child-centred model.

In the Caribbean region, primary school curricula have undergone reform. For instance, Jamaica has undertaken a complete overhaul of both their primary school curriculum, the main facets being a focus on project based and problem based learning. The implementation of the changed curriculum was strategic. The Chief education officer of the Ministry of Education (MOE) of Jamaica states in the Jamaica observer that *"The development of this curriculum started about three years ago and we have already engaged a number of our teachers. We have a pilot that is currently going on with 49 schools; a pilot went on with 12 schools last year,"* (Jamaica Observer, 2014).

Over the past five years, the MOE in Trinidad and Tobago has embarked on a system wide "renovation", where the curriculums of both the primary and secondary schools have been changed to meet the needs of new 21st century learners, taking into account the multiple intelligences of learners. The education White policy paper of 2003 states the Ministry of Education's key philosophies and educational beliefs. One of the beliefs that ties in appropriately with the new curriculum reform being undertaken speaks to the commitment of the MOE to "be alert to new research and development in all fields of human learning and to the implications of these developments for more effective teaching and school improvement" (Education White Paper 2003).

The Primary School Rewrite, or PCR as it is referred to, is a newly implemented curriculum innovation, introduced to modernize the education system of Trinidad and Tobago. Envisioned in

the early 2000's, curriculum policy developers sought to create a new hands-on, inclusive curriculum that would cater to the 'multiple intelligences' and also cater for 21st century learners in keeping with the MOE's educational philosophies and educational objectives. As a signatory to the Dakar framework of 2000, Trinidad and Tobago positioned themselves along with many developing countries to revamp the outdated Primary school curriculum and teaching methods in use. Keeping in tandem with the tenets of the Dakar framework of 2000, this involved aligning curriculum goals to be inclusive to all students' needs regardless of ability (Dakar, 2000). These new curricula should take into account the integration of technologies and cater to the needs of 21st century learners. The Ministry of Education, states that the new curriculum for the Primary school, focuses on skills and dispositions that students should possess in order to become holistically developed citizens of Trinidad and Tobago. The Ministry of Education website states that the PCR was characterized by:

1. Focus on 9 Subject areas (Agricultural Science; English Language Arts; Mathematics; Physical Education; Science; Social Studies; Spanish; Values, Character and Citizenship Education and Visual and Performing Arts) with an integrated, thematic approach.
2. Cross- curricular development for literacy and numeracy
3. Infusion of information technologies in classroom instruction
4. Prioritization of assessment for learning
5. A conscious development of values, including HFLE
6. Attention in great detail to differentiated instruction to meet the needs of students.

The website also states that curriculum guides and teacher guides for all levels have been carefully developed to make instruction clearer for educators.

In the early 2000's, the task force in keeping with the facets of the Dakar framework began developing a new hands on curriculum that involved the use of new medias and technologies, relevant and modernized teaching methods and also more hands on, formative assessment strategies. Divided into themes, the PCR seeks to create a seamless Primary Curriculum, allowing for the teaching of skills necessary in tandem with student's developmental levels. The following table briefly outlines the themes around which the primary school curriculum is designed.

Class Level	Curriculum Theme
Infant 1	Me and My world
Infant 2	My sense of belonging
Standard 1	My country: The people of Trinidad and Tobago
Standard 2	My country: The environment of Trinidad and Tobago
Standard 3	Our region: The Caribbean
Standard 4	A world of Change
Standard 5	Pulling it all together, Project and Subject learning. Becoming a global citizen.

Note: Table showing the Class levels and thematic themes of the PCR curriculum in Primary, (*Sourced from the MOE's Parent/Teacher PCR guide)*

The PCR was introduced in September 2013. Training began on a phased basis involving class levels. In 2013 to 2014, the lower school, including Infant 1 and Infant 2, Standards One,

and Two teachers were Trained in using the PCR. Training for Standard three teachers was conducted in 2015. As of September 2016, Standard 4 teachers, were trained in using the PCR. The Standard 5 teachers of the 2016-2017 academic year were not trained as the SEA exam of 2017 was still based on the former primary school curriculum. The MOE states that residual training will occur for teachers in 2017.

This implementation has resulted in changes to the infrastructure of some schools and training of teachers with respect to the new innovation. It has raised many concerns, especially among those who use the curriculum innovation at the school level. The curriculum change is needed, as the needs of students also change. The outdated curriculum did not satisfy the needs of millennial learners. Alvilor (2014), suggests that curriculum change is necessary because it plays a vital role in a country's development. It is also suggested that curriculum change should focus on skills and competencies that allow for economic development. This meshes well with the MOE's view that the goals of the PCR is to engender positive holistic values that lead to well-rounded students who contribute to the development of Trinidad and Tobago.

Problem Statement

For stakeholders in education it has been problematic, managing the implementation of the PCR curriculum, having to deal with teachers who refuse to use the PCR, and even those who try to use the PCR but are not able to do so in entirety.

The PCR's implementation has led to issues with usability, adaptability and teacher ability. While some do not discount the curriculum document, many criticize its heavy content and time needed for planning of lessons. Some teachers even voiced their concerns at the voluminous paperwork associated with the PCR. It is not uncommon to hear of teachers not using the curriculum in their classrooms and sticking to the old methods of teaching. There is also some

discontent among more seasoned teachers who see the PCR as irrelevant and unsuited for the Trinidad and Tobago context, whereas newly trained teachers see the curriculum as dynamic and relevant to acquired skills at university. This however is arguable.

The issues highlighted need to be addressed. Their impact on the PCR's continued implementation in the Primary school is deserving of investigation. Empirical investigation is needed as the stakeholders views is key in understanding how the issues affect the implementation process at each level, and what factors act as hindrances in the PCR's functioning. An understanding of issues surrounding the PCR needs to be made available, as stakeholders at the top levels of planning at the MOE can use this knowledge to make adjustments if necessary or implement on a continuous basis.

There is only one other study done on the PCR entitled "Teacher's experience in implementing a curriculum change in one Primary school", done by Ms. Ann Bahadoorsingh in 2014. There are studies on the now discontinued CAC or Continuous Assessment Component of the Secondary Entrance Exam (SEA), (Brooms, 2014). The CAC component is however a part of the PCR and not representative of its implementation. This study hopes to add to the limited literature on studies relating to the PCR. There is also no information available from a Caribbean perspective on curriculum implementation at the primary school. More information is needed to aid in the development of primary education in the region.

Purpose of the Study

The purpose of this research is to identify the impediments and enablers that are involved in the implementation of the PCR Curriculum innovation in the Primary School. Hall and Hord (2005) referred to these impediments and enablers as barriers and facilitators to curriculum implementation. Using these identified barriers and facilitators, it is hoped that a better understanding of what teachers, principals and developers faced when implementing the PCR of Trinidad and Tobago, in particular those of the Caroni Education District. This research also hopes to add to the limited literature available on the PCR and its implementation within the primary schools in Trinidad and Tobago.

Research Questions

The Research questions that would guide my inquiry are as follows:

Main research Question:

What are the perceptions of developers and implementers on the implementation of the PCR?

Sub-questions:

1. What factors facilitated the implementation of the PCR?
2. What factors acted as barriers to the implementation of the PCR?

Abbreviations

CAC- Continuous Assessment Component

CAP- Continuous Assessment Programme

MOE- Ministry of Education

PCR- Primary School Rewrite

SEA- Secondary Entrance Assessment Exam

Chapter 2: Literature Review

This chapter will discuss the curriculum development and implementation process used in education systems throughout the globe. It will also speak about thematic integration, with which the PCR is designed. This review hopes to highlight the process involved and identify the policy actors and their role in the curriculum development process. The barriers and facilitators faced by curriculum implementers globally will be highlighted to paint a bigger picture of the issues faced and if any commonalities would be found in this study. This will be linked to the theory postulated by Hall and Horde (2001), Barriers and Facilitators to Curriculum Implementation. Locally there is a lack of literature on curriculum implementation, even more so the implementation of the curriculum innovation the PCR.

Thematic integration

Globally there are many education systems that use the thematic integration design in their Primary schools. Thematic Integration is one of ten ways to integrate curriculum, proposed by Fogarty (1991). Fogarty (1991) posits that the integrated (thematic) model views curriculum through interconnected topics arranged around, overlapping concepts and blending disciplines. Thematically integrated curriculums involve the organization of subjects round a core curriculum objective. This can be organized as a theme, and allow teachers to use a particular theme to tailor instruction for subject disciplines. Humphrys, Post and Elis (1981) posit that children are actively engaged in thematically integrated curriculum and it poses beneficial to student learning and development. Thematic integration is not new to the education systems, but they have been seldom implemented in the way the PCR has been. With the mandate of the Dakar framework of 2000, many developing nations have redesigned their curricula in tandem with the thematic integration approach. Thematic integration seeks to make learning more meaningful (Min,

Rashid, & Nazri, 2012), allowing students to build more meaningful relationships with the content being learnt.

Thematic integration is linked to the theory of social constructivism. Cook, (2009) suggests that constructivism makes learning more fun, and students engage themselves in the subject matter more fully, socially interacting with their peers, learning from their friends and thus making learning more meaningful . Hung (2008) found that in Hong Kong, the use of thematic integration and the subset of cooperative learning was beneficial to the education system, boosting student and teacher morale. Hinde (2005) posits that the benefits of an integrated curriculum take the form of creating positive attitudes towards learning among learners. Hinde (2005) also posits that integrated curricula are beneficial making curriculum more meaningful to students and improves student engagement. Hung (2008) posits that the cross subject nature of a thematically integrated curriculum where disciplines are linked by common core learning objectives creates a more holistic learning process for both teachers and students. Hinde (2005) suggests that the effectiveness of a thematically integrated curriculum is highly dependent on the teacher's expertise and the ability to translate instructional objectives into teaching strategies, making learning more meaningful to students. These benefits are mirrored by the findings of Liber (2007) who found that curriculum integration is beneficial to teachers and educators in bridging traditional academic styles, making learning more relevant to students and developing meaningful relationships with students and learning materials and concepts.

Curriculum design

Curriculum policy is viewed by many researchers as a dynamic process. Taylor et al. (1997), suggest that policy development is a multi-dimensional process that includes the views of developers and is open to much debate. Skyles & Elmore (1992) agree with this, noting that curriculum policy is a complex process that puts into power the visions of those who have envisioned an educational ideal. Educational policy and in turn curriculum policy often originates from a political perspective. Taylor et al (1997) states that educational policy belongs to the realm of public or social policy and can often be linked back to political aspirations by those in charge of power. This allows for the value laden nature of policy which makes it filled with personal ideologies. Grundy & Bonser (2006) suggest that Curriculum policy is an ideal opportunity for developers and theorists to work together to create a well-meted, cohesive curriculum. This allows for value in what is created, further supporting Tyler et al (1997) and the assumption that curriculum is value laden.

Curriculum policy making takes many forms. Delacruz (2016) cite linear or rationale models as being the most popular models of Curriculum policy development with the Tyler (1949) model being the most used model by curriculum developers. The Tyler, 1949 model involves a four-step linear model that begins with designing in tandem with curricular objectives, developing strategies and teaching methods and learning, implementing these in the educational system and finally evaluation of the curriculum's performance (Ornstein & Hunkins, 2009). Although a popularist model, some researchers such as Sheenan (1989) and Shalberg (2005) view the Tyler model as missing the critical element of review and re-implementation. Both Sheenan (1989),and Shalberg (2005) criticize the Tyler model as lacking the accommodation for revision of problematic areas of a newly implemented curriculum.

Curriculum development can either take a cyclic or linear approach. The Tyler model seeks to use students' interests to build objectives for learning and teaching (IAC, 2006). This rational model is in keeping with the positivist tradition (Morris, 2004). It is a uni-directional model that allows for development in tandem with set aspirations of initial developers. The five stages are as follows: problem initiation, problem definition, policy initaton, policy formulation, policy implementation and policy evaluation.

At each stage there are representative policy actors or developers, responsible for dialogue and development. Bertrand (2014) and Ball (1996) identify policy actors at each stage of the development process and state that their importance is integral to curriculum policy development. The table below summarizes the developers at each stage of the rationale process and their functions. Each of the mentioned policy actors play a part in the development of a curriculum in one way or another.

The role of change agents in curriculum implementation.

Rationale Stage	**Policy Actor**	**Role**
Problem Initiation	Chief Education Officer, Minister of Education, Education District Manager.	Initiates Policy using political goals and aspirations as an impetus.
Problem Definition	Curriculum Officers and developers	State the issues with the given curriculum.
Policy Initiation	Curriculum officers, supervisors, developers	Holds meetings to initiate formulation of new curriculum.

Policy Formulation	Curriculum officers, Supervisors, Developers and teachers.	Formulates the new curriculum
Policy Implementation	Principals, Students	Uses new curriculum in schools
Policy Evaluation	Curriculum Officers, Supervisors.	Reviews curriculum's performance

*Adapted from Bertrand (2014). *The Major Policy Actors. Chapter 6, pp 26-30.*

Phillips &Hawthorne (1987) and Elliot (1994) and more recently Heitink (2012) all agree that policy actors' roles are important to curriculum development. The state plays a fundamental role in the initiating and management of curriculum change (Phillips, Hawthrone, 1987). This is underscored by the findings of Elliot(1994) who through the eyes of Stenhouse (1980), suggests that government initiates curriculum change, and manage this change. Elliot (1994) and Hetinik (2012) posits that without governmental intervention, curriculum change cannot occur or be managed sustainably, and this is the key function of the state as a policy actor in curriculum development. In our local context this can be seen with the government and ministers initiating change at the Ministry of Education level, implementing policies that have a ripple effect throughout the entire education system.

Policy actors have a responsibility for keeping in tandem with changing ideals and needs of students. As was highlighted by Heitink (2012) the role of policy actors is to design a fair and just curriculum that suits students' learning styles and needs. Teachers have a critical role in the development of a curriculum as they are the ones who put into practice what is developed. Stenhouse (1980), posits that the teacher plays a central role in curriculum implementation and

change. Heitink (2012) also found that without the teacher's input in the curriculum development process key areas are missed out, resulting in flaws in enactment in the classroom.

The aims and aspirations of those the curriculum implementers and educational managers who initiate curriculum change should always be of importance when designing a new curriculum. Kopewh (2014) and Heitink (2012) both found that policy formation is managed better when policy initiators keep in their goals and objectives embedded in the formulation of the curriculum policy. This allows for a streamlined implementation of curricular goals and objectives. Kopweh (2014) and Heitink (2012) also found that management of curriculum implementation must be streamlined to facilitate implementation in schools, as teachers would not have to implement blindly and use new curricula that are not relevant to their context. Researchers have found that if curriculum objectives and design stray from the underlying philosophies of initiators it is destined for failure or to become problematic in implementation.

Elliot (1994) again looked at the importance of teacher inclusion in the curriculum development process. Often, teachers are excluded by government officials when designing a curriculum and this leads to a weakened curriculum in terms of teacher and student needs when enacted in the classroom. Abbot et al (2011) posit that the role of teachers in designing a curriculum innovation is integral to its success. Without the teacher's input, key affective connections with content are left out or overlooked and the curriculum becomes just a document that is forced upon teachers and used to meet political goals and aspirations of those in charge. Abbot et al (2011) also suggest that managing the implementation of a curriculum also depends on agreement between teachers and developers. Curriculum officers and monitors have a part to play in ensuring that teachers are involved in planning of a curriculum and also that enactment of the curriculum in the school is done as envisioned.

Curriculum implementation models

The implementation of a new curriculum is a form of curriculum change. Michael Fullan has focused much of his work on implementing curriculum change. His theory of curriculum implementation and change is used widely by curriculum developers throughout the globe. Ellsworth (2001) suggests that he focused on the humanistic part played in implementation of curriculum change and the role of change agents as integral to the success of a curriculum. Fullan's work has focused on the role of change agents, the implications for implementing curriculum change from different perspectives and the need for promotion of needs as a priority in development (Ellsworth, 2001).

Change facilitators are those which allow for a smooth transition from old curriculum use to a new innovation. In their book, Implementing change, Patterns and Principles and Potholes, Hall and Hord (2001) posit twelve principles of change that facilitates the implementation of a curriculum innovation.. Administration leadership and team effort are essential to the success of a curriculum. Syomwene (2013) agrees with these two principles of change as proposed by Hall and Hord, (2011) as being of high importance. Administrators and those who enact the curriculum are the ones solely responsible for its success at the school level (Syomwene, 2013), however this is arguable as in a school setting many other persons are responsible for implementing and monitoring curriculum innovations. Teacher efficacy and relationship with administration and the ability of both to work cohesively are required for the successful enactment of a curriculum (Syomwene, 2013).

Curriculum change is a process and not an event. Change is a process through which people move as they gradually come to adopt an understanding and become skilled and competent in the

use of new ways pertinent to the change implemented. This is relevant as the implementation of a new curriculum often challenges the preconceived beliefs and notions of teachers and educators, even parents and students. Hall and Hord (2011), suggests a systematic process model, representing the barriers and facilitators that lubricate curriculum implementation and change. Hall and Hord (2001), focused on a study done by Gonzalez, Resta De Hoyte (2005) of a newly implemented ITESM curriculum. The study identified six facilitators to and eight barriers to change when implementing a curriculum. The table below shows the barriers and facilitators of curriculum change. This is the basis on which their theory of curriculum change was developed.

Barriers	**Facilitators**
Lack of evaluation	Student Acceptance of change
Lack of collaboration and adaptation	Adoption and Adaptation
Infrastructure and Operational problems	Institutional Change (Culture)
Time	Ongoing support and training
Administrative alignment and support	Faculty Academic background
Support shortcomings- curriculum developers	Professional Learning Community
Faculty issues and skepticism	

Facilitators and Barriers to the systematic process as proposed by Hall and Hord (2001), Implementing Change, Patterns Principles and Potholes. Pg. 53

Researchers such as Hetnik (2012) and Syomwene (2013), have used the above mentioned barriers and facilitators to evaluate the operation of a newly implemented curriculum. They also use the theory to guide their decision making on implementation, foreseeing problems that may

arise. Weber (2010) posits that curriculum development is a rewarding process which enables teachers to have professional conversations about the intended curriculum.

Barriers to Curriculum Implementation

Common themes shared by researchers in terms of barriers to the implementation of curriculum innovations are contextual barriers, psychological barriers, professional barriers and logistical barriers. The researchers who come from different socioeconomic backrounds in which there studiers were undertaken have similar issues in terms of the aforementioned barriers. However the degrees to which they affect the implementation of a curriculum differs according to the context in which they operate.

Contextual barriers take the form of culture and adoption of change. Main (2010) posits that teachers attitudes to the acceptance of change forms the biggest barrier to the implementation of a curriculum. As a study done in an Australian context, Main (2010) found that teachers were accepting to the new curriculum that was implemented and this aided in how the curriculum was viewed. Bag (2007) found that teacher's attitudes to the acceptance of a new curriculum formed a major barrier to the implementation of a curriculum especially at the class level. Studies done in the developing world such as Syomwene (2013) and Patius (2014) found that in Sub-Saharan Africa, teachers attitudes towards the acceptance of newly implemented curricula formed major barriers to implementation. Teachers just did not want to use the new curriculums and refused in instances to acknowledge the documents, leading them to stick to traditional methods of teaching.

Psychological barriers involve the aspects of teacher and administrative motivation and acceptance to change and implementation of curricula. Motivation is also another barrier that is

psychologically linked to acceptance of curriculum innovations. Main (2010) speaks about teachers being intrinsically motivated in the use of new curriculum innovations. Teachers who are not intrinsically motivated often do not use new innovations. Patius (2014) found that teacher motivation can lead to the success or failure of newly implemented curriculum innovations. It was found that the curriculum in which Patius (2014) conducted its study failed because teachers were demotivated because of socioeconomic factors along with intrinsic, self-motivation. Syomwene (2013) also found that in the Kenyan context, teachers did not fully implement the new curriculum because they lacked motivation due to factors such as economics, and some preferred to operate in their comfort zones. While Bahadoorsingh (2012) did not state directly that teachers were demotivated, the study indicated that teachers' motivation was linked to training and use of the PCR in the local context and this formed a major barrier to its implementation.

Professional barriers were seen as most problematic in implementing curriculum innovations in the given study-contexts. Bahadoorsingh (2014) found that teacher training and administrative support were lacking in the local Trinidad and Tobago context. The lack of training for both administration and teachers has led to much consternation about the PCR and its use in the primary school. Patius (2014) also found that administrative and teacher training formed barriers to curriculum innovation in their given context, where teachers complained that training was not given in using the new curriculum innovation. This has led to severe underuse of the innovation. Bahadoorsingh (2012) showed that teachers lament at the lack of training with respect to the PCR.

The proper training of teachers and staff members in the use of a new curriculum innovation can lead to its success or failure. Syomwene (2013) found that lack of training of teachers in

using the new curriculum in Kenya led to teachers misuse or subsequent lack of use in the classroom. This made for a negative influence on the curriculum innovation and its near failure. Teachers stated that they were not trained in using the curriculum innovation and thus could not implement in their classrooms. Main (2010) found that teacher training allowed for the smooth implementation of the curriculum in the Australian context, and consummate with administrative training and support allow for a smooth implementation of the new curriculum innovation.

Logistical barriers were mentioned by researchers as being one of the main barriers to implementation. Logistics in terms of allocation of resources and time for planning formed major barriers to curriculum implementation. Bahadoorsingh (2014) stated that in the local context, both time for planning by teachers and also the allocation of resources formed major barriers to the implementation of the PCR. Patius (2014) also found that the allocation of resources and time for planning by teachers to be problematic in curriculum implementation. Both researchers stated that teachers do not have sufficient time to properly plan for lessons and the given documents are too voluminous. Teachers thus do not use the necessary record keeping and documents for planning leading to lack of coordination and monitoring the progress of the curriculum innovations.

Time was seen by all researchers as a major logistical barrier to the implementation of curriculum innovations. Bahadoorsingh (2014), Patius (2014) and Syomwene (2013) all found that there was insufficient time allocated for teachers to plan lessons and complete required documentation. Bahadoorsingh (2014) stated that teachers found time as being problematic in terms of time given to plan lessons in class and also complete the paperwork attributed to the PCR. This led to a major barrier being formed, resulting in underuse of the curriculum

innovation. Patius (2014) and Syomwene (2013) found that teachers did not have enough time to plan for lessons and paperwork.

The allocation of resources is seen as a major barrier to the implementation of a curriculum innovation. Main (2016) states that resources once cupplied in a timely manner can allow for a fluid implementation of a curriculum innovation. Bahadoorsingh (2014), Patius (2014) and Syomwene (2013), all found that the allocation of resources in their given context proved to be barriers to curriculum implementation. Bahadoorsingh (2012) stated that the lack of appropriate resources prevented the implementation of the PCR curriculum innovation in the local context. Patius (2014) and Syomwene (2013) found that in Sub-Saharan Africa, economic issues and subsequent lack of resources formed barriers to the implementation of given curricula. Resources were seen as important to both teachers and administrators in the delivery of a curriculum , and the inability to effectively implement due to lack led to problems at both levels.

Facilitators to curriculum implementation

Researchers such as Main (2016) suggest that teacher training plays an integral part in facilitating curriculum implementation and change. Teachers who are trained are able to adapt and use new curriculum innovations in their classrooms, thus facilitating its use. Teachers who are untrained and have issues with the use of curricula are put at a disadvantage and cannot implement new innovations. Administrative support also plays an important part in facilitating curriculum implementation. Schools in which the administration did not support new initiatives often found themselves having issues with curriculum innovations, whereas those in which the administration supported newly implemented curriculums had a higher success rate.

Chioslm (2004) considers this notion as that study found that teacher education and training and retraining is key to the implementation and sustainment of a newly implemented curriculum (Chioslm, 2004). It was also suggested that if there is discord between governmental representatives such as curriculum developers and monitors, and teachers who enact the curriculum, there will be unforeseen barriers to implementation and enactment that can lead to failure of a new curriculum.

A study conducted into elementary schools in the United States found that there were many facilitators to curriculum change which included teacher willingness, resource allocation and administrative support. Campbell (2016) found that facilitating change was daunting in schools, but a doable process. Teachers took into consideration the learning styles of students and thus adapted the curriculum to suit their teaching. This study by Campbell (2016) revealed the barriers in the context of the United States to be minimal. One major barrier included the physical changing of curriculum and how it affected student understanding. But this was often seamless. Adequate resources were given to teachers and they are given ample time to plan and execute lessons.

Researchers found more barriers to curriculum implementation than facilitators. It should be noted that the studies reviewed in this literature review come from various levels of economic prosperity, and along with differing cultural values and attitudes, these play a part in forming barriers to curriculum implementation or facilitators. In some instances, where barriers were formed, other researchers formed facilitators for example teacher attitudes differed, where researchers in more developed nations found that teachers were more accepting in new curriculum innovations, whereas researchers in developing nations found that teachers attitudes where more negative in curriculum innovation acceptance.

Methodology

This chapter discusses the research methodology employed in this study. It focuses on the Justification for the use of qualitative research as the chosen method of research. Justification for conducting the research in tandem with the chosen method follows with particular emphasis on using the Case Study method of data collection. Sampling and participants is also discussed to justify why certain sampling strategies are used and the participants chosen. Data collection and ethical considerations round off this chapter. These highlight the data collection strategy and data interpretation method used. Ethical considerations would take into account strategies employed to ensure the credibility of the research.

Justification for Qualitative research

Qualitative research is the chosen method that guides this study as this focuses on phenomena that occurs in its natural settings, Leedy and Ormund, (2007). Because the PCR is the subject of the study and it is being used in schools in Trinidad and Tobago, by using the qualitative research methodology the researcher hopes to hone in on the issues to be identified with respect to the identification of barriers and facilitators. One aspect of qualitative research is that it allows for the researcher to come as close as possible to the issue under study and also the participants. A more meaningful connection is built with the data retrieved in qualitative research. A qualitative approach focuses on the individual's subjective responses and allows the researcher to explore individual perspectives in some depth (Creswell 2012,).

The research entails going into the setting in which the curriculum is being enacted and retrieving information from persons who have had direct, meaningful contact with the PCR. As the PCR is an under-studied curriculum innovation, qualitative methods should be used to allow

for more exploration and the clear articulation of users' needs, according to Sauro (2015). Understanding the context in which a phenomenon operates is also another reason why qualitative research is being used in this study because qualitative research allows for such an understanding and that of the user (Sauro, 2015). In this way, according to Sauro (2015), some of the richest qualitative data can be captured and not when collected in a contrived lab; it comes from observing and collecting data in person and getting as close as possible to participants and the issue being observed.

In qualitative research, the researcher to form connections with the study that would not have been able to be made with a study that is quantitative in nature. Often the data collected is complex, and the onus is on the researcher to delineate meanings and make assumptions and conclusion about the data collected in response to the research questions posed Creswell (2007). Thus, qualitative research is the ideal research method to be used in studying the barriers and facilitators to the implementation of the PCR.

Justification for case study

A case study is a specific instance that is frequently designed to illustrate a more general principal (Cohen, Manion & Morrison, 2007). Case studies allow for an in depth analysis of an issue. Popular in qualitative research, case studies strive to portray "what it is like" to be in a particular situation to catch close-up reality and descriptions. From the reader's perspective, case studies allow for a better understanding of how ideas and abstract principles fit together (Cohen, et al., 2007). For the purpose of this study, where the implementation of the PCR is under investigation, the case study will allow for the identification of trends and patterns in implementation. Choen, et al (2007) state that case studies help establish cause and effect. Thus

identifying the barriers and facilitators to the implementation of the PCR can be more aptly done through a case study investigative method.

Shuttleworth (2007) states that the case study research design is useful for testing whether scientific theories and models actually work in the real world. Using the implementation theory posed by Hall and Hord (2007) to identify the barriers and facilitators to the implementation of the PCR the case study would reveal patterns and trends through investigation. Choen, et al (2007) state that case studies are set in temporal, geographical, organisational and institutional contests that enable boundaries to be drawn around the case. By using policy actors from the same educational district as participants in the study, there would be clear parameters in which data is being collected as the participants have experience designing, monitoring and using the PCR.

Sampling strategy

The sampling strategy used in this study is purposive sampling. Leedy and Ormund (2007) suggest that purposive sampling is a type of non-probability sampling indicative of qualitative research. Cohen, et al (2007) state that researchers "handpick" the cases and participants to be included in the sample on the basis of their judgement and possession of characteristics sought. Participants must have like characteristics and be involved with the issue being studies (the PCR). This is done on purpose to garner views on the topic of study. Also, having like characteristics allows for a more fair collection and presentation of data.

Choen et al (2007) cite Ball (1990), stating that purposive sampling is used to access knowledgeable people who have in-depth knowledge about a particular issue maybe by virtue of their professional role etc. Creswell (2007), in agreement, suggests that the inquirer should select

individuals and sites for study because they can purposefully inform an understanding of the research phenomenon central to the study. Thus purposive sampling is the chosen method used in this study as it allows for a fair, common collection of information from participants who can give credible insight into the PCR and its implementation.

The sampling strategy used in this study is purposive sampling. Leedy and Ormund (2007) suggest that purposive sampling is a type of non-probability sampling indicative of qualitative research. Cohen, et al (2007) state that researchers "handpick" the cases and participants to be included in the sample on the basis of their judgement and possession of characteristics sought. This sampling strategy was selected because it allows for a fair, common collection of information (Cohen et al., 2007) from "knowledgeable" participants (Ball, 1990 cited by Cohen et al., 2007, p.132) who can give credible insight (Creswell, 2007) into the PCR and its implementation. The following describes the schools and participants that were purposively selected.

Access to participants was done through channels in the school in which they study is being conducted. Participation from all teachers in the school was sought before conducting the study to ascertain its feasibility. Most teachers in the school agreed to take part in the study. The Principal and Senior teacher of the school also agreed to participate prior to school selection. The curriculum officer chosen because of experience with developing and implementing the PCR in the Primary school. Prior consent was sought from the Curriculum officer to garner interest in participating in the study.

Site

This study is focused on the real life interactions participants have had with implementing and using the PCR. The study was conducted at one Primary school and one Educational office in the Caroni Educational District. The school, Palm Village Government Primary School was established in 1970 and currently has a population of one hundred and fifty students with a teaching and administrative staff of twelve. There are three male teachers and nine female teaches on staff including the Principal. There are also three auxiliary staff members responsible for the maintaince of the school and its surroundings. The school preforms well at both the National Test and Secondary entrance exam levels. The classes are inclusive with students of mixed abilities.

Participants

The participants of this study include one principal, a senior teacher and three teachers at the school level.

Principal, Ms. Lenore has been an educator for over the past 25 years. She has held the post of principal for the past five years. She has taught at all primary school levels. This participant holds a Bachelor of Education and Masters of Education with concentration in reading from the University of the West Indies. She is a determined individual who takes a hands-on approach in running the school in which this study is being conducted.

The second participant at the administrative level is Mr. Ali. He has over twenty five years of teaching experience including five years at the Senior teacher Primary level. He currently aids in teaching Mathematics at the standard four and five levels along with his administrative duties.

Ms. Veena is a teacher of twenty years. She holds a Teachers' Diploma. She has taught at the Standard three, four and five levels for the past twelve years. She is a respected individual who has great rapport with her students.

The second teaching participant, Mr. Singh, is a young male teacher with seven years' teaching experience. He holds a Bachelor of Education from the University of Trinidad and Tobago. Mr. Singh has been teaching the Standard three at the Palm Village Government Primary school for the past four years. He loves to use new technologies in his instruction and is known for using new methods of instruction.

Participant four, Ms. Defour has fifteen years of teaching experience at multiple levels in the Primary school. She is currently teaching the standard one class. Ms Defour is University trained and is currently pursuing a second degree in Reading and the teaching of Literature to elementary students.

Data Collection

The method of data collection employed in this study is the interview. Patton (1990) suggests that the main idea of an interview is to garner a better understanding of participants' experiences with an issue in lieu of direct observations. Interviews in qualitative research can take structured, unstructured or semi-structured formats. For the purpose of this study, a semi-structured format will be used. Semi-structured interviews are particularly useful if the research problem refers to a wide-ranging problem area and researchers need to detect and identify the issues relevant to understanding the situation. Stakeholders who are actively involved with the implementation and use of the PCR will be interviewed. These stakeholders include teachers, senior teachers, principals and curriculum officers. Questions will range from development of the

PCR curriculum to implementation and use in the Primary schools. The table below shows how the study's research questions match the methods that have been selected and the sources of the data that would answer those questions, the participants.

Research Question	Data collection method	Participants
1. What factors facilitated the implementation of the PCR?	Interview, Document Analysis	, Principal, Teacher1, Teacher 2, Teacher 3, Teacher 4
2. What factors acted as barriers to the implementation of the PCR?	Interview, Document Analysis	Principal, Teacher1, Teacher 2, Teacher 3, Teacher 4

Table showing the match between research questions, data collection methods and respective participants

. This format is also chosen to make participants feel at ease and allow for as much gathering of information on the topic as possible. Open-ended questions will be used. This use will allow for the specific retrieval of pertinent information from participants and deep, meaningful responses to key questions in relation to the research topic.

In addition to the interviews, document research would be done. Research into documents pertinent to the PCR would be done in order to garner a better understanding of the PCR's development and suggested operational effects in the primary school. Review of the PCR's main curriculum guides and also instructional toolkits will be done. Review of documents in relation to the development of the PCR would be done to garner an understanding of the procedures and aims of developers from the MOE. Thus only reference can be made with respect to these documents. The documents that would be reviewed would include teacher's daily plans, record and evaluation, and schemes of work. Patterns would be looked for to gauge if teachers are using

aspects of the PCR and its instructional content or if teachers are not using the given PCR documents.

Document research is advantageous as it adds value to information retrieved during qualalativie researches, especially case studies. It allows the researcher to retrieve information that would not have been able too by any other means (Patton, 1990). Creswell (2007) suggests that document analysis removes the "researcher effect", reducing biases that the researcher may have when conducting a study. By using raw data the researcher can impartially and rationally analyse data in accordance with pre-collected data or other sources of data thus reducing bias. This would add to more fair analysis and presentation of data by the researcher, adding value to the study and its findings.

Kulkarni (2013) suggests that triangulation is a means of using more than one method of data collection to add value and reduce bias in a research. Multiple sources of data used in research reduces the amount of errors that can be made by researchers and allows them to focus on the data itself, reducing personal bias and increasing fairness in research data (Kulkarni, 2013). The methods of triangulation employed in this study were source triangulation and method triangulation. Data triangulation aims to elucidate complementary aspects of the phenomenon under investigation (Patton, 1990). Source triangulation would involve the review of documents used by teachers in schools with respect to the PCR. The data collected in both instances would be analysed to gauge commonalities and identify patterns pertinent to the posed research questions. This would allow for richer data collected and fairer analysis and representation.

Data Analysis

There are two methods of data collection employed in this study, and would thus require two different methods of analysis. Interview data could be transcribed manually to form codes (common themes) with respect to the research questions posed. The Documents would be analysed manually and matched with the data collected in the interviews to ensure consistency. The data collected would be written down manually during the interviews. Recording of participants will be used once in agreement. Pope, et al (2000) suggest that qualitative data produces vast amounts of information and manual coding is sometimes the best way to transcribe data for analysis. Coding is essentially organising and sorting data in to usable parts. Codes allow you to label data and organise into themes. Summarising and synthesis of data is much easier (Creswell, 2007).

By using the interviews, highlighting and identifying emergent codes will be identified. These will then be arranged by how often the codes arise to order in importance or number of times coded. The codes that arise the most will be organised into themes. The themes identified will be named and organised using the Barriers and Facilitators derived from the guiding theoretical framework of this study. The constant comparative method will be used to analyse data . This method suggests comparing newly acquired data with that of earlier studies under the same discipline. This would involve comparing the transcribed data with that of local studies and international studies contained in the literature review chapter of this paper. Triangulation of data would involve cross checking of data collected with that contained in the literature review to identify points where there is commonality, thus confirming assumptions related to the research questions.

Ethical Considerations

The trustworthiness of qualitative research generally is often questioned by positivists, perhaps because their concepts of validity and reliability cannot be addressed in the same way in naturalistic work (Shenton, 2004) .Validity in qualitative research involves ethical considerations that must be adhered to in planning, conducting and reporting a study. Orb, (2001) considers the fact that the difficulties inherent to qualitative research can be alleviated by the use of well-established ethical procedures and principals.

Purposive sampling plays a part in ensuring transferability in qualitative research (De Vault, 2016), for which specific information is maximized in relation to the context in which the data collection occurs. In the context of this study, using purposive sampling would ensure the aforementioned. As transferring the context of this study into another study in time will be assured. The interpretation of the data collected can be used to guide studies into the PCR. Researchers will have rich insight into the PCR and its performance in the primary school and also from the experiences of monitors.

Halai (2006), posits that sound research is a moral and ethical endeavour and should be concerned with ensuring that interests of those participating in the study are not harmed as a result of the research being conducted. As this study involves the personal views of individuals' on a public policy, the anonymity and confidentiality of the participants must be maintained throughout. Informed, written consent was attained before conducting the research. Permission from the participating school and educational district was obtained (appendix to be added). Permission from participants was also obtained via a letter of consent, as advised by Halai, (2006). Halai, (2006) implores obtainment of prior consent before conducting a study. Written

letters of consent to participating individuals and institutions will be supplied prior to conducting the research (see appendix).

Researchers are expected to provide the participants with an outline of the risks and benefits to the participants of a study. Using Halai (2006) as a guide, an information sheet (See Appendix) was attached to the letters of consent, allowing participants a glimpse of what the study entails and the benefits expected to be derived from the study. This was administered prior to conducting the study to allow participants the time to understand fully what the study entails and whether they should consent or decline participation.

Ensuring the confidentiality of participants is critical to the credibility of the research. Kasier (2010) suggests that qualitative researchers must maintain respondent confidentiality while presenting rich, detailed accounts of the study. To ensure participant confidentiality, this research uses pseudonyms in place of real names for institutions and participants. Maintaining deductive disclosure (Kasier 2010), of participants prevents them from being easily recognisable by readers.

Experience in conceptualising the study

This study was begun in September 2016. There were many twists and turns before settling on exactly what aspect of the PCR was to be studied. Implementation from the perspectives of administrators and teachers was agreed upon because this looks at the issues or facilitators faced by those who use the PCR in situ in schools. I used the Barriers and Facilitators model (Hall and Hord, 2001) as the theoretical guiding framework because this was a vivid, simple theory that is used in the field of curriculum studies. Everything began to flow as I settled on these key aspects. I presented my thesis proposal in January 2017 and began Data collection thereafter in

the Months of February and March. Document analysis was seen as problematic as most of the participants did not have proper documentation. But those from which I was able to acquire information proved to be invaluable to my study.

Conducting the interviews and collecting data proved intriguing, as it allowed me to put my bias aside, having used the PCR and look at the issues facing teacher individually. Teachers seemed to enjoy being able to partake in the study, as most of the interviews were cordial, friendly and information rich. Transcribing the data I used the traditional method of manual analysis, looking at codes and common nodes among the responses to arise themes. The information was triangulated with the document data collected to ensure that there were no disparities. I choose this method because of time and other extenuating circumstances in preparing this study.

Limitations

This study is limited by the lack of local data on the PCR and also regional studies on curriculum implementation and change. The number of participants is also a limitation, as only the perspectives of teachers in one primary school would be taken into consideration. Thus factors affecting them only at that given school would be reflected in the study and generalisation to other schools is not possible.

Delimitations

This study is delimited to the use of school based participants However, while the research recognises that MOE staff who were involved in the genesis of the PCR would have brought a different and valuable perspective on the research topic, they were not included because of their unavailability and time constraints to participate in the study.

Chapter 4

Data Analysis

This chapter presents the findings from the data collected in conducting the study. The chapter includes presentation of data collected from document analysis with answers to posed research questions from interviews, highlighting the barriers and facilitators separately in implementing the PCR. Document analysis was done with prior permission from participants. Interviews were the main method of data collection employed in this study. The information collected was corroborated with that of the data retrieved in document analysis. The findings are presented below.

The overarching research question that guides this study is: What are the perceptions of implementers and administrators on the implementation of the PCR? The two supporting questions are:

1. What factors facilitated the implementation of the PCR in the primary school?
2. What factors acted as barriers to the implementation of the PCR in the primary school?

Each of the aforementioned sub questions and their findings will be presented separately.

Using the above mentioned questions, and after transcription of interviews, five themes were generated. These themes include four barriers and one facilitator to curriculum implementation. The themes like directly to the Barriers and facilitators to curriculum implementation as proposed by Hall and Hord (2001). There were more barriers than facilitators identified in this study. This indicates that there are more issues to curriculum implementation than facilitators with respect to the PCR. The barriers identified are :Workload, Resources, Training, Time, and Infrastructure. PCR Value (Value Adding) or innovation value is the sole facilitator identified in

this study. The findings suggest that the implementation of the PCR has been problematic, affecting how teachers and administrators use the curriculum innovation in the Primary school.

Interviews

Research sub question 1

With respect to the research question: What factors facilitated the implementation of the PCR in the primary school? The following theme was generated using the guide of the Theoretical framework of this study. Only one theme could be generated using the information retrieved in the data analysis. This theme reveals how teachers perceive the curriculum innovation and their level of acceptance despite the numerous aforementioned barriers. The opinions of the participants' as being valuable is contradicted by the many problems highlighted. But an attitude of acceptance seems to arise from teachers.

Value adding

It was found that the teachers and administrators interviewed in this study all agreed that the PCR was indeed a good innovation. This indicated that teachers saw some intrinsic value with the PCR. All three teachers interviewed were in agreement that the PCR adds value to the teaching and learning process in schools. The teachers agreed that the PCR caters for the needs of learners in their classroom. Teacher 1 specifically stated that the *" needs of millennial learners are met through the use of the PCR".* Both administrators interviewed, the principal and senior teacher, also agreed that the PCR added value to the teaching and learning process. The Principal stated that the PCR was a good way to *"revamp an outdated curriculum".*

Participants were in agreement that the PCR is a good innovation and changes the way teaching is conducted in the classroom. The content and curriculum objectives of the PCR are

well suited for each class level. Teacher 3 indicated that students also enjoy some of the activities when using the PCR stating *"The students using the PCR, well the parts that I have adapted I see changes. They enjoy what is being learnt and taught. They enjoy the group activities. They are eager to learn and like the PowerPoints and videos".* This indicates that aspects of the PCR are well received by students in this classroom. Some teachers even indicated that the PCR is *" a good innovation, however changes need to be made for it to work in our local context, there needs to be more room for adaptation in the classrooms".*

Document analysis also revealed that some teachers are using aspects of the PCR but not to a great extent. Teachers are pulling out themes and topics and using them in classes to create projects for instruction. This in itself is a facilitator showing that the PCR is not at all disregarded and there is some degree to with teachers are prepared to use the PCR in the primary school. Teacher three stated that *"that toolkit and associated documents are too much to understand. I have no choice but to use the PCR as we are mandated by the Ministry of Education to use the PCR",* revealing that some teachers just use the PCR as they are seemingly forced too.

The facilitators of the PCR involve a mix of adaptation and acceptance and also teacher's attitude to change. It involves as this study reveals how teachers perceive the new curriculum and how it affects their instruction and learners. Thus this factor acts as a facilitator in the implementation of the PCR.

Research sub question 2

With respect to the research sub question two: What factors acted as barriers to the implementation of the PCR in the primary school? The following themes were generated in

accordance with the guiding theoretical framework. The factors that acted as barriers to the implementation of the PCR fall under the following themes: Time, Workload, Training and Infrastructure.

Time

All teachers and administrators interviewed spoke about time as being a barrier to implementing the PCR. The Principal indicated that *" the PCR was too hastily implemented and this caused chaos among teachers and others in the education sector"*. This was supported by the Senior teacher who said that *"the PCR was just dropped into our laps with o warning and we know nothing about what it entails, we have to sit and figure it out"* . The three teachers agreed, indicating that the time taken for implementation and training was too short and they were not given time to get accustomed to the PCR.

Time in terms to the allocation of preparation time in the classroom is also related barrier highlighted. Teachers indicated that there is no time allocated for planning in the classroom and if used it takes from their on-task time with students Teacher 1 indicated *" that there is not time included in the current class timetable for teachers to plan for instruction using the PCR, and thus the toolkit is not used as it involves much prior planning before instruction".* Teacher 2 indicated that in addition to time it was not very cost friendly to use the PCR. There was also no specific time table given as some teachers suggested.

The above mentioned issues with time were reflected in teachers' planning documents. The given PCR planning documents were not used, and teachers kept to old formats for schemes of work and record and evaluations as was indicated by all interviewed. However, there are other aspects related to time and are linked to the other themes mentioned such as the time taken to

prepare all of the documents necessary for PCR implementation in the classroom. These are discussed in the themes that follow.

Workload

In relation to time, workload construed another barrier to the implementation of the PCR in the Primary school. All of the participants cited the voluminous paperwork associated with the PCR as being problematic and demotivating. The principal stated that "*The PCR needs to be revamped. I would like to see a country-wide scheme of work given to schools so teachers can follow and tailor their instruction. At this point there is too much paperwork and this needs to be disbanded"*. This was supported by the view of the senior teacher who in similar terms suggested that documents be sent to teachers, instead of teachers creating their own documents from scratch so as to reduce the time away from teaching and planning. Only one teacher provided a copy of a PCR scheme of work, but the teacher indicated that it is not being used in full as there is too much preparation of resources related to its use in proper.

Teachers said that the PCR was too voluminous and linked training in creation of schemes and record and evaluation to be very problematic and lacking. Teacher three who tried to use the PCR initially stated that *"As I began to use aspects of the PCR I realise that it is too overwhelming for the children to grasp all those concepts"*. This indicates that the workload is not only problematic for teachers but also students. Teachers records show that the PCR documents have not been adhered to. Teachers still use their weekly plans and extract curriculum objectives before teaching. This is in keeping with the old methods of instruction prior to the PCR's introduction. Figure 1 below shows and excerpt from a teacher's daily plan.

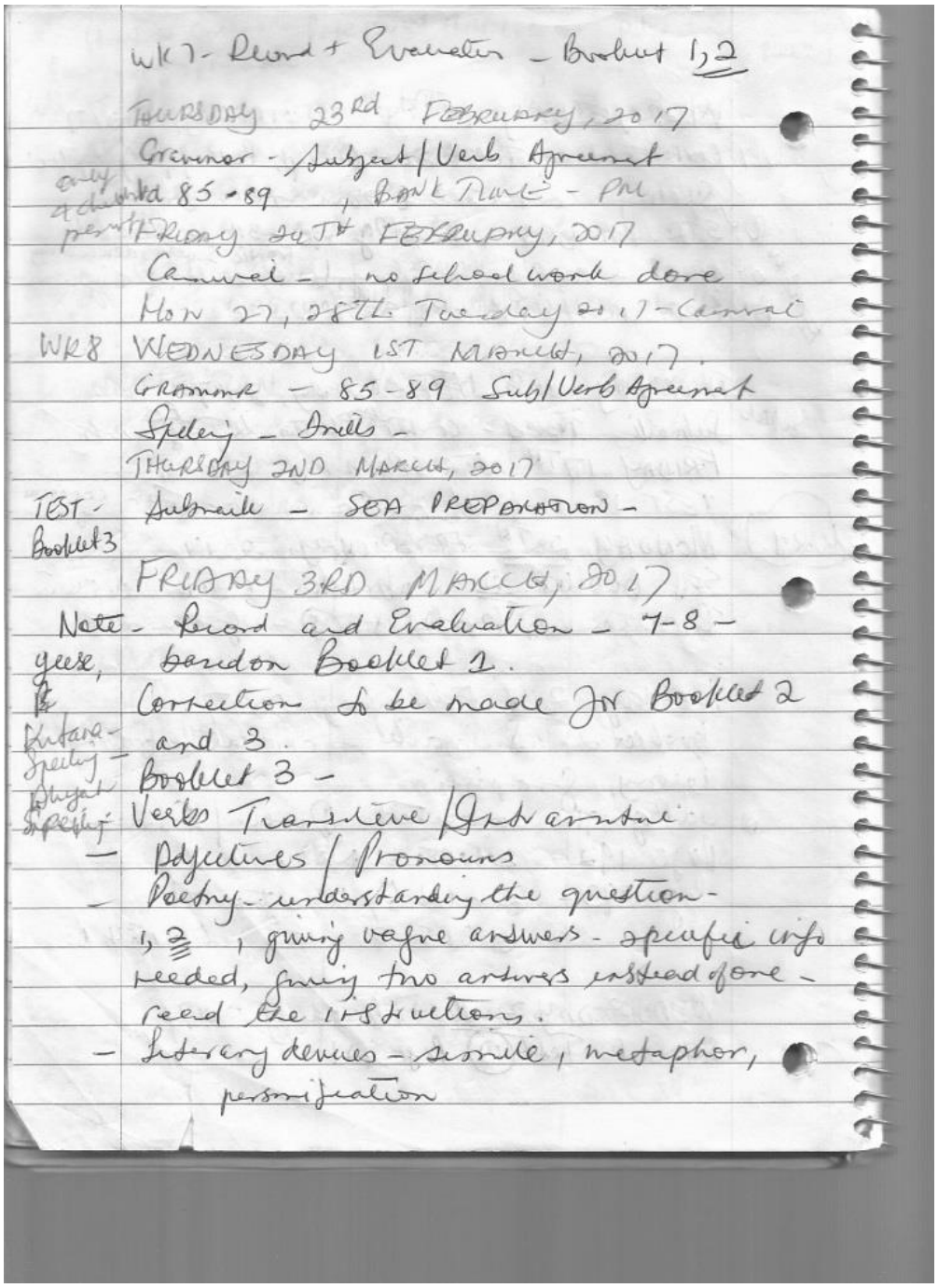
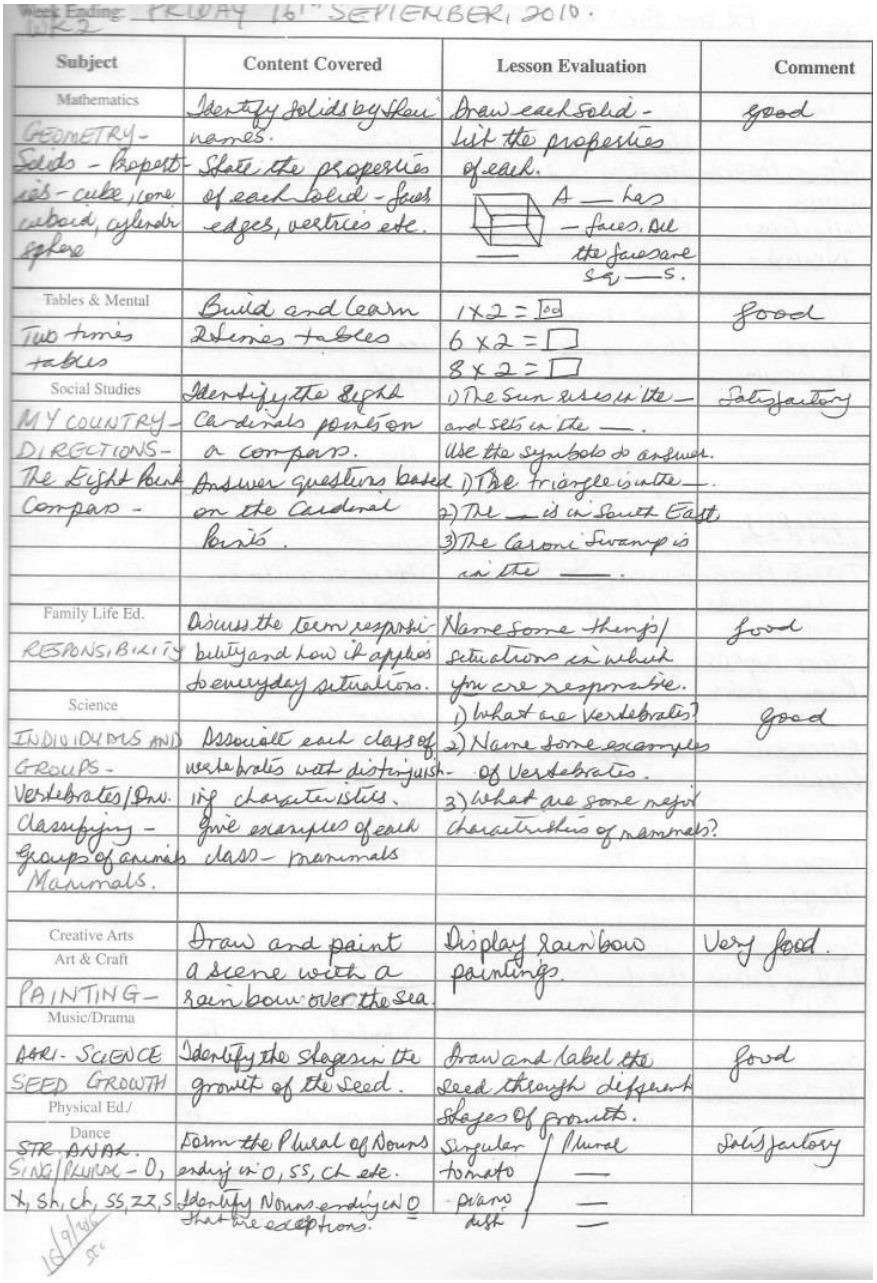


Figure 1: Teacher's Record and evaluation sample.

The teachers due to the high workload associated with the PCR, kept using the same format of the PCR. This was seen as a zone of "comfort" for some teachers as they were not familiar with

the use of the PCR's scheme of work. Figure 2 below shows one teacher's record evaluation and n keeping with the traditional method, without any thematic planning.



Week Ending: FRIDAY 16TH SEPTEMBER, 2010.
WK 2

Subject	Content Covered	Lesson Evaluation	Comment
Mathematics	Identify solids by their	Draw each solid -	good
GEOMETRY -	names.	list the properties	
Solids - Properties - cube, cuboid, cylinder sphere	State the properties of each solid - faces edges, vertices etc.	of each. A — has — faces. All the faces are sq — s.	
Tables & Mental	Build and learn	1 x 2 = 2	Good
Two times tables	2 times tables	6 x 2 = ☐	
		8 x 2 = ☐	
Social Studies	Identify the Eight	1) The Sun rises in the —	Satisfactory
MY COUNTRY -	Cardinals points on	and sets in the —.	
DIRECTIONS -	a compass.	Use the symbols to answer.	
The Eight Point	Answer questions based	1) The triangle is in the —.	
Compass -	on the Cardinal	2) The — is in South East.	
	Points.	3) The Caroni Swamp is	
		in the —.	
Family Life Ed.	Discuss the term responsi-	Name some things/	Good
RESPONSIBILITY	bility and how it applies	situations in which	
	to everyday situations.	you are responsible.	
Science		1) What are Vertebrates?	Good
INDIVIDUALS AND	Associate each class of	2) Name some examples	
GROUPS -	vertebrates with distinguish-	of Vertebrates.	
Vertebrates/Inv.	ing characteristics.	3) What are some major	
Classifying -	Give examples of each	characteristics of mammals?	
Groups of animals	class - mammals		
Mammals.			
Creative Arts	Draw and paint	Display rainbow	Very Good.
Art & Craft	a scene with a	paintings.	
PAINTING -	rainbow over the sea.		
Music/Drama			
AGRI - SCIENCE	Identify the stages in the	Draw and label the	Good
SEED GROWTH	growth of the seed.	seed through different	
Physical Ed./		stages of growth.	
Dance	Form the Plural of Nouns	Singular / Plural	Satisfactory
STR. ANAL.	ending in o, ss, ch etc.	tomato —	
SING/PLURAL - O,		piano —	
X, Sh, ch, ss, zz, s	Identify Nouns ending in O	dish —	
	that are exceptions.		

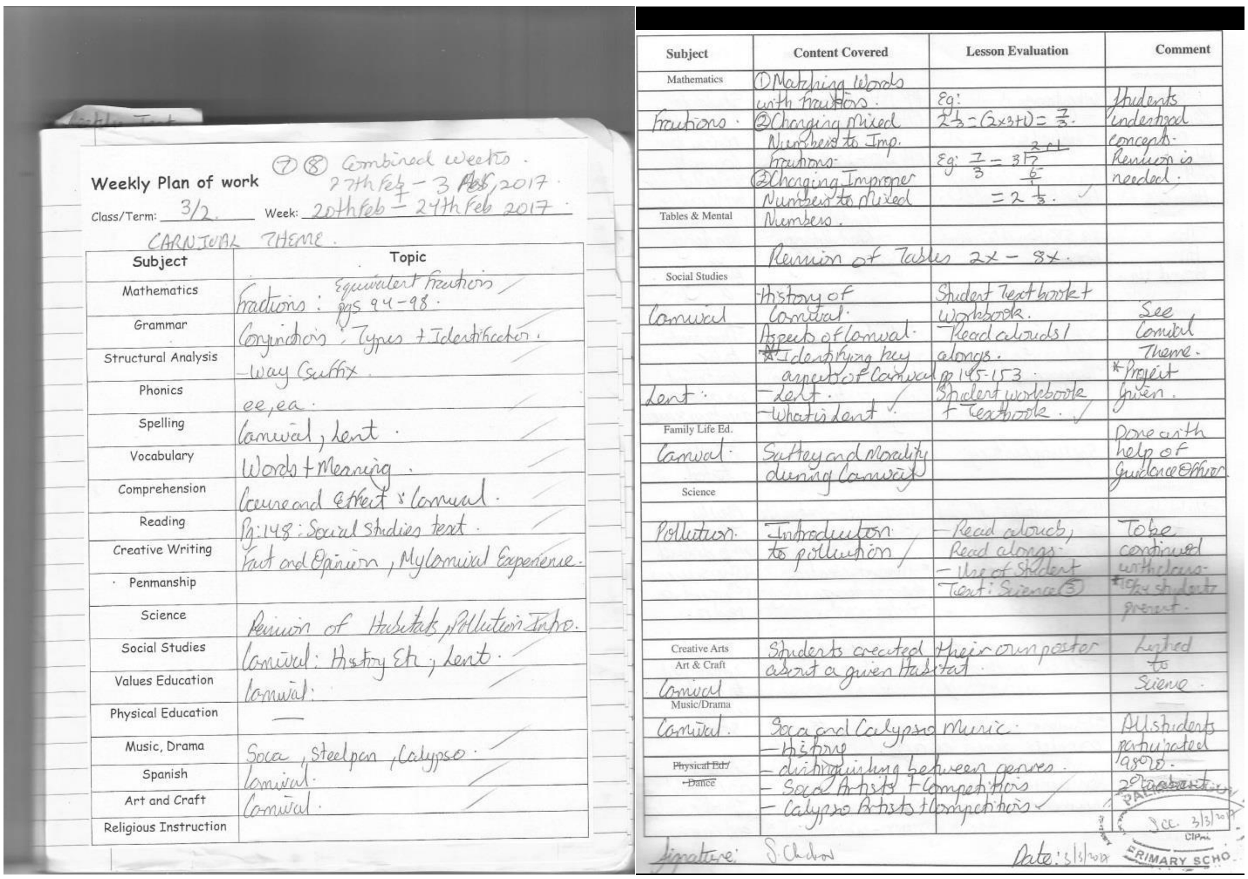
Figure 2: Teacher's record and evaluation (no theme adhered to)

Training

Training is another barrier towards the implementation of the PCR. All of the participants stated that the low quality of training and knowledge of the PCR impairs their use and understanding of the curriculum innovation. The Principal when interviewed, stated that there is some attempt to train staff at the school to supplement the gaps in training teachers have received. The principal stated *"I have tried to do training sessions with the staff in implementing the PCR. When a teacher goes to the training session, I hold a staff meeting and the teacher presents what he or she has learnt, and the skills acquired".* But unfortunately this is not enough to boost teacher efficacy. One teacher stated the toolkit is problematic, as cited by another teacher who says *"the toolkit makes absolutely no sense, and I do not use it at all, it is too confusing!"* Thus the workload is seen as a barrier to the implementation of the PCR at this primary school. The principal also indicated that the MOE should provide the necessary documentation to reduce the stress and strain on teachers *"There is a consensus that that ministry should provide these documents in order for the PCR to work positively in the schools".*

All three teachers interviewed indicated that the training received was inadequate. Teacher one stated that *"The training received was not enough and I did not understand what was said in the sessions".* Teacher two also indicated that *"I was not trained in the PCR, it is new to me as I was in UTT at the time and I have never been synthesised to it."* Teacher three said that "*I went to training for standard 1, 3 and 4 and to me it was confusing. They were never clear on exactly how to use the PCR. They only spoke about one set of documentation that I don't really see helping me in the classroom". Teachers and administrators were asked if clarification on issues were given at the training sessions.* All indicated that instructors to some degree tried to attend to the issues but there was no clear remedies to issues raised by educators.

Thus it can be clearly seen that there are flaws with respect to the training of teachers in using the PCR and this forms a barrier to seamless implementation. Another teacher stated that training should be given citing issues with usability in the classrooms *"this PCR across the board they must be ready to assist teachers in effective training on how to use PCR in classrooms as well as provide all the necessary and adequate resources for teachers so that teachers can ease into this new PCR method."*. One teacher despite the lack of training and understanding of the PCR, started to organise plans around a central theme – Carnival (see figure 3). However this was not in keeping with the PCR format.



Weekly Plan of work ⑦⑧ Combined Weeks. 27th Feb – 3 Mar, 2017.

Class/Term: 3/2. Week: 20th Feb – 24th Feb 2017.

CARNIVAL THEME.

Subject	Topic
Mathematics	Fractions: Equivalent Fractions pgs 94–98.
Grammar	Conjunctions: Types + Identification.
Structural Analysis	-way (suffix).
Phonics	ee, ea.
Spelling	Carnival, Lent.
Vocabulary	Words + Meaning.
Comprehension	Cause and Effect: Carnival.
Reading	Pg: 148: Social Studies text.
Creative Writing	Fact and Opinion, My Carnival Experience.
Penmanship	
Science	Revision of Habitats, Pollution Intro.
Social Studies	Carnival: History Etc, Lent.
Values Education	Carnival.
Physical Education	—
Music, Drama	Soca, Steelpan, Calypso.
Spanish	Carnival.
Art and Craft	Carnival.
Religious Instruction	

[redacted]

Subject	Content Covered	Lesson Evaluation	Comment
Mathematics Fractions.	① Matching Words with fractions. ② Changing Mixed Numbers to Imp. fractions. ③ Changing Improper Numbers to Mixed Numbers.	Eg: $2\frac{1}{3} = (2 \times 3 + 1) = \frac{7}{3}$. Eg: $\frac{7}{3} = 3\overline{)7}$ $= 2\frac{1}{3}$.	Students understood concepts. Revision is needed.
Tables & Mental	Revision of Tables 2x – 8x.		
Social Studies Carnival	-History of Carnival. Aspects of Carnival. * Identifying key aspects of Carnival	Student Text book + Workbook. Read alouds / alongs. pg 145-153.	See Carnival Theme. * Project Given.
Lent.	-Lent. -What is Lent.	Student workbook + Textbook.	
Family Life Ed. Carnival.	Saftey and Morality during Carnival.		Done with help of Guidance Officer
Science Pollution.	Introduction to pollution.	-Read alouds, Read alongs. -Use of Student Text: Science ③	To be continued with class. *10% students present.
Creative Arts Art & Craft Carnival	Students created their own poster about a given Habitat.		Linked to Science.
Music/Drama Carnival.	Soca and Calypso Music. -History -distinguishing between genres. -Soca Artists + Competitions -Calypso Artists + Competitions		All students participated 98%. 2% absent.
Physical Ed./ Dance			

Signature: Date: 3/3/2017

Figure 3: Teacher's Record and evaluation (Carnival Plan)

Infrastructure

Infrastructure and physical flaws with the school formed another barrier to implementation of the PCR. The Principal indicated that there is inadequate space for all of the activities contained in the PCR to take place and teachers often complained about that aspect. The senior teacher also indicated flaws with the infrastructure citing issues with ICT or information technologies and use and availability in the school stating *"there are computers and internet, but the equipment is outdated and cannot be repaired, some teachers are also unwilling to use the technologies or use their personal devices".*

Teachers also indicated that infrastructure was problematic or non-existent at the school. Teachers stated that classrooms were too small to conduct some of the activities that were involved in the PCR. One teacher stated *"I complain all the time (to the principal and supervisors) how they expect us to use a curriculum with no proper infrastructure.* Teacher three stated *"we do not have the facilities to accommodate such events in the PCR and I cannot conduct the lessons as outlined by the toolkit",* showing that there are indeed issues at the school physically forming barriers to the implementation of the PCR. Teacher two further explained that *" I cannot teach properly using the old curriculum let alone the new curriculum, I have thirty students in a room that can hold twenty, three students are sitting on [each]desk, what am I supposed to do"?*

The teachers' perceptions clearly reveal that there are issues, forming barriers to the PCR's implementation at the school in which this study was conducted. The principal also stated issues with infrastructural problems in particular space for teachers *"my teachers complain of not having enough classroom space and physical facilities such as projectors and whiteboards and arts and crafts items to use the PCR in the classroom".*

Teacher Attitude: facilitating and hindering

The principal and senior teacher both indicated that there were issues with teachers' acceptance of the PCR documents and curriculum. On the other hand, teachers were accepting to a point with respect to the PCR but indicated numerous problems. Teacher attitude towards the PCR construed both barriers and facilitators to its implementation. While some were not accepting. Teacher 1 indicated that *" I am not using the PCR because it means nothing to me, the ministry just gave me the document and I have no idea how to use it. I just keep to my old way of teaching",* while others wanted to give it a chance in the schools, but with reservations. Using the theoretical framework of this study it can be determined that teachers' attitude towards the innovation can indeed form both a barrier and facilitator depending on the context.

Teachers and administrators attitudes affected the rate of adoption of the PCR. There was much apprehension among those interviewed with respect the PCR and its use in the schools. The lack of clarification on issues of use and also familiarity with concepts led to much of the participants having reservations and even led to no use in some instances.

Summary

The findings of this study revealed four barriers and one facilitator to the implementation of the PCR. Though skewed to one side, the PCR is seen as a admirable innovation that has been implemented. However these findings cannot be overlooked, as it can add value to the PCR's success. The themes generated are large in content. The task of this researcher was to consolidate these winde ranging codes generated into broad themes that could be presented clearly to readers. The findings are representative of the level of implementation of the PCR at the Palm Vale Government Primary school. The findings cannot be generalised to all schools in the nation.

The following figure below summarises the findings from the interviews conducted showing in the barriers and facilitator identified in this study.

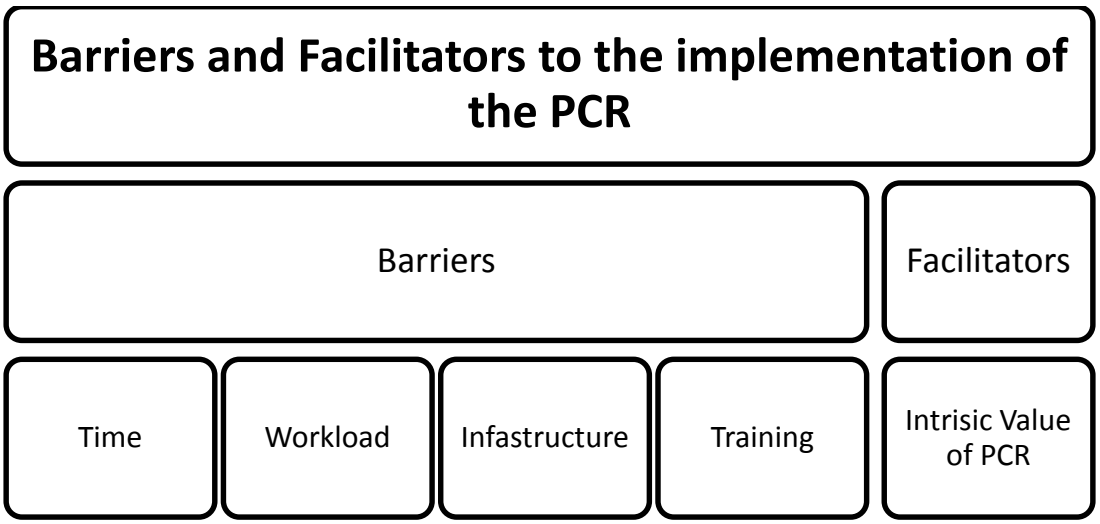


Figure 4: Summary of Barriers and Facilitators

Chapter 5

Discussion and Recommendations

This chapter presents a discussion on the findings of the study and proposes recommendations where necessary for improvement of the implementation of the PCR. It discusses what can further be done to improve implementation of this curriculum innovation.

Facilitators

. All of the participants stated that there is some value in the PCR and what it entails. The PCR curriculum is based on the theory of integration where subjects are linked around a key central theme or concept. Taylor et al (1997), suggests that curriculum must have value in order for it to be successful. The nature of the PCR speaks to how it caters for students and their multiple needs.

On perusal of teachers' records it can be seen that some teachers adapted the curriculum while one refused to use the PCR. This mutual adaptation reveals that teachers use the PCR but with reservations. This adds to the value attributed to the nature of the PCR, where teachers see it as adding to students' learned experiences. There is some sort of deviation from the general principles of the PCR, but there is thematic integration taking place in the classrooms. These findings are similar to Hetnik (2012) and Syomwene (2013), where both researchers found that teachers were accepting of the new curriculum innovations despite issues in implementation. Pendragon (2012) also supports this notion, that teachers see value in curriculum innovations, but with reservations. This meshes well with the findings in the study.

Barriers

There were more barriers to the implementation of the PCR found in this study than facilitators. The reasons for this lies in the perception of teachers and what physically impedes use of the PCR. The studies of Hetnik (2012) and Syomwene (2013) also mirror the findings of this study. The major themes derived are common, and all speak to what exactly affect teachers in situ and also administrative issues in implementing a curriculum innovation. The issues of Time, Workload, Training and Infrastructure will be discussed in detail.

Time

The findings indicate that teachers viewed time as a major barrier to the implementation and use of the PCR. This was also the view of the Senior teacher and Principal. Bhadoorsingh (2012), Hetnik (2012) and Syomwene (2013) , all agree that time is a major barrier to the implementation of a curriculum. Time in terms of planning and preparation are areas of concern. Bahadoorsingh (2012) found that teachers did not have enough time to plan lessons in tandem with the PCR and toolkit. This was also found to be the case in both the document reviews where teachers have not been using the given PCR documents or teaching along with the toolkit and teacher interviews where they lament the lack of time in given to prepare for lessons.

Implementation time was also of concern with teachers and administration, where it was found that there was concern with how the PCR was implemented. Teachers and administrators viewed the implementation of the PCR to be hasty, with not enough time given to sensitization among both staff and pupils in schools. Syomwene (2013) found that when the newly implemented curriculum in Kenya was introduced, there was also not enough time given to the training of teachers and administration. This formed a major barrier to the perception of the curriculum in its

context. Training time was also mentioned by teachers interviewed, where not enough time was given to train teachers in using the PCR and its accompanying documents.

Workload

The amount of paperwork attributed to the PCR and its implementation by teachers and administrators has been viewed as a major barrier. The time taken to create weekly plans and schemes of work were seen as major issues with the PCR. Document analysis also revealed that teachers are not using the prescribed documents. The Schemes of work remain in the same traditional format. Teachers attribute this lack of adherence to the PCR because of lack of knowledge and some simply do not know how to format the documents. Kopewh (2014), found this to be a major barrier to the use of implemented curriculums. Teachers tend to stay in their comfort zones and use traditional methods and do not view new documents with much amiability. Bahadoorsingh (2012) also stated that teachers had issues with the amount of paperwork, and this was linked with lack of time and also lack of resources and infrastructure.

Training

Main (2016), speaks about teacher and administrative training being tantamount to the success of a curriculum's implementation in an educational sector. It adds undue emotional and motivational value to teachers, and propels them forward when using a curriculum innovation. Administrators can with ease monitor the implementation of a curriculum. The data collected in this study showed that teachers were unmotivated because of the lack of training attributed to the PCR. This has led to misuse or no use at all with respect to the PCR. Bahadoorsingh (2012) also found training to be problematic in implementing the PCR, where teachers also said that they were not trained enough in using the documents. Kopewh (2014) also found that the lack of

teacher training with the newly implemented curriculum was the cause of many teachers keeping to old methods of instruction and disregarding the curriculum in that context. This speaks volumes as clearly training for both teachers and administrators is key in the success or failure of a curriculum innovation in any given context.

Infrastructure

Some of the researchers indicated under this topic originate from developing and underdeveloped nations. This links well for comparison with the local Trinidad and Tobago context in which this study was undertaken. The literature revealed that infrastructural issues were not problematic in the studies conducted in developed countries. This was not the case with the developing nations where infrastructural problems formed major barriers to the implementation of curriculum innovations .

Infrastructural issues speak both to resource issues and physical problems with the school itself. The findings of this study that teaches were concerned about the lack of physical space with which they were unable to fully implement the PCR. There were infrastructural issues with telecommunications and internet thus impeding the use of ICT in the classrooms. This along with lack of adequate ICR equipment proved to be of issue with using the PCR. Syomwene (2013) found issue with the lack of infrastructure and adequate resources to implement the new curriculum in Kenya. These lead teachers to misuse or not use the curriculum in that particular context. The same was said by Kopewh (2014), where inadequate classrooms, lack of electricity, internet and ICT resources led to issues with the newly implemented curriculum.

Resources and Infrastructure play an integral part to the success of a curriculum as Main (2016) states a major facilitator to curriculum implementation. Resources need to be supplied in

a timely and adequate manner so teachers and administrators can familiarise themselves with the items and tailor instruction to match their particular context. Additionally, the Ministries should allow for some adaptation to suit a school context and be lenient where the need arises where aspects of the PCR or other curriculum cannot be taught in full.

Recommendations

This segment of this chapter proposes some recommendations to the problems derived in this study. It is hoped that the recommendations will be useful to curriculum planners and developers at the Ministry level in Trinidad and Tobago and overseas. Time, workload, infrastructure and training will be addressed as barriers to the PCR implementation.

Time

To deal with the issues of time and workload which are seen as synonymous issues with respect to the implementation of the PCR, the allocation of a standardised Scheme of work document for all schools in Trinidad and Tobago should be provided. This document should be developed per class level, and incorporate the necessary headings of Week, Topic, Resources, teacher comments and a section for Principal's signature and records. This Scheme of work would incorporate both the schemes and topics for each class topic to be taught per term, on a weekly basis. It would act as both a Scheme of work and Record and evaluation. The Teacher Comments section would allow for mutual adaptation to the classroom and context of each school. This would show how the teacher uses the curriculum objectives and tailors his or her instruction. This document would cut down on the Planning time and also time taken for writing up record and evaluation documents in the classroom. It would allow for more time for teachers to plan lessons properly and keep on task with their students' needs.

Within the school, there should also be time set aside on the time table for teachers to plan work and complete paperwork to support the PCR in their classrooms. Time should be allocated for collaboration among teachers and also for planning lessons and acquiring resources. This would allow for more contact teaching time with students, reducing time taken off task, improving students learning in the classroom as a result.

Training

Ample training should be administered to both administrators and teachers in their respective use of the PCR. A training team should be established by the MOE and instead of district wide training, school wide training should be implemented. Training seminars can be held in each of the schools so that all staff members can be synthesised in the use of the PCR. This would minimise the instances of staff members not being exposed to training so that teachers can use the PCR at any class level when assigned. Training for administrators would work in tandem with teachers training so that administrators can gauge how teachers use the PCR in their classrooms.

Resources

Main 2010 suggests that resources play an import role in the delivery of a curriculum innovation for both teachers in the classroom and administrators in monitoring. Allocation of ample resources for all schools should be of the utmost priority. There should be training also incorporated for proper use of the Resources by teachers and other staff. Others have not and this disparity should be dealt with by the MOE and relevant authorities. There should be a handbook of how resources can be used for various lessons and cross curricular subjects. Infrastructure such as internet and projectors along with revamped ICT rooms should be done for all schools

and a monitoring system put in place so that teachers an use multiple means of instruction in their classrooms to deliver the curriculum. WIFI for schools should be established so that if teachers were to use their own devices in their classrooms they can. While this may be costly it can aid in the success of the PCR's implementation and resultant institutionalization and boost teacher morale.

Infrastructure

Cohen and Bhatt (2012) suggest that infrastructure is integral to the success of a curriculum innovation. It can spell the success of a curriculum innovation and can motivate or demotivate teachers (Cohen and Bhatt, 2012).To deal with infrastructural issues with respect to the PCR, the MOE should institute island-wide school upgrades and development programs. Surveys of school should be done to ascertain infrastructural issues that impede the delivery of the PCR. The PCR can only be implemented fairly if all teachers in schools are given the an equal chance with appropriate infrastructure such as WIFI, Computer labs, ICT equipped classrooms and also training for teachers in the use of ICT medias. Infrastructural development also should include the provision of adequate seating, lighting and ventilation for all classrooms and schools in Trinidad and Tobago. There needs to also be continuous monitoring by school administration and ministry officials with respect to infrastructure in schools. If any lapses are noticed it can be remedied in a timely fashion to avoid loss of contact time and the delivery of the curriculum.

Facilitator Recommendations

The value added nature of the PCR should be harnessed . Once an ample Scheme of work is designed, keeping some of the attributes of the toolkit, it can work in the classrooms. The PCR should not be removed from the education system entirely but the aforementioned

recommendations can aid in its implementation and reduce the current confusion surrounding the curriculum innovation. The recommendations mentioned work together with motivation of teachers and ultimately influence how teachers perceive the PCR as a new innovation.

Conclusion

This study sought to investigate teachers and administrators perceptions' on the implementation of the new curriculum innovation, the PCR or Primary Curriculum Rewrite. A case study methodology was employed in one primary school in Trinidad and Tobago. The perspectives of teachers and administrators were obtained by conducting interviews at the Palm Vale Government Primary School. This study garnered what barriers and facilitators to curriculum implementation exist with respect to the PCR at the school. It highlighted many issues, using as a guide Hall and Hord (2001) and their theory of Barriers and Facilitators to curriculum implementation. The barriers of time, training, resources and infrastructure arose as being of utmost importance , affecting teachers and administrators' use of the PCR. Teachers and Administrators sought not to discount the PCR, but recognised that it held some intrinsic value, this was the sole facilitator to curriculum implementation derived in this study.

The Barriers and Facilitators with respect to the implementation of the PCR in one school in Trinidad cannot all be identified and dealt with immediately. It will take a long process to use the recommendations proposed and implement change in this and likely all other primary schools in Trinidad and Tobago. While the teachers and administrators see that there is value with the PCR and its content and what it aims to achieve, there are infrastructural problems and administrative issues that need to be addressed. Once these barriers of Time, Workload, Infrastructure and Training are dealt with the PCR can be a successful curriculum innovation.

There is need for a country wide study to identify the problems associated with the PCR are common. And if they are common then remedies for the barriers can be administered at the mirco-management and macro-management levels. This all links back to the curriculum development process and the constant need for evaluation of the innovations to ensure success and smooth implementation in primary schools.

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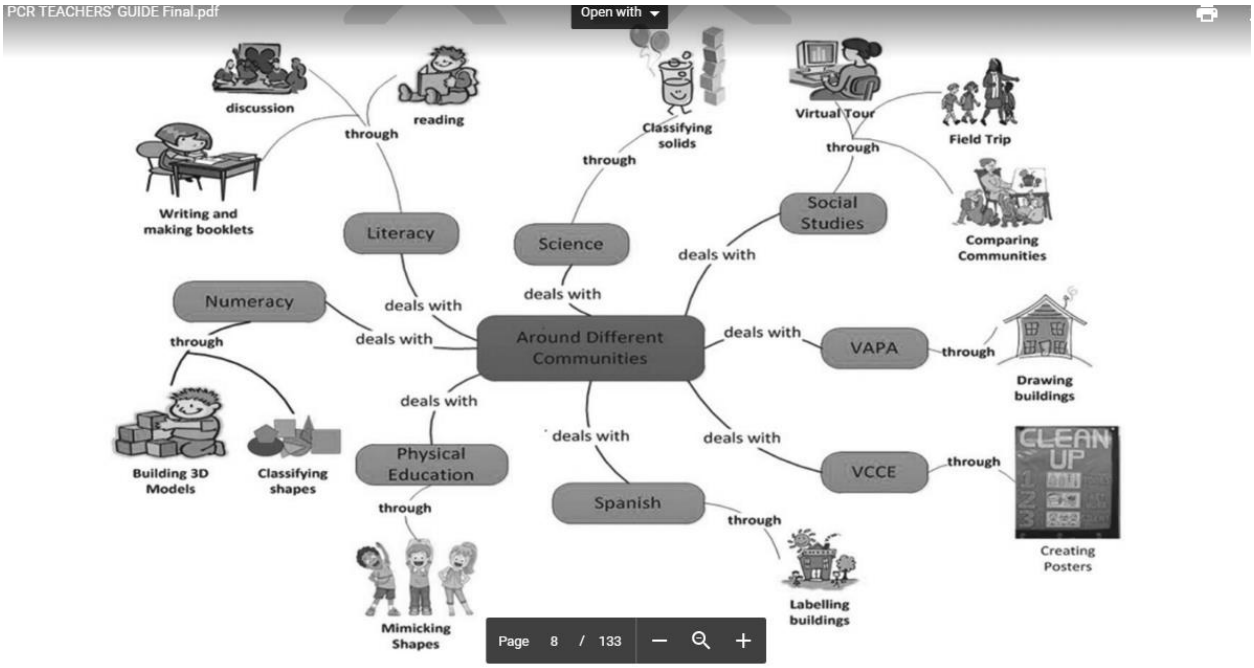
Appendix 1

PCR toolkit thematic representation and instructional toolkit themes and outcomes.

Example of thematic representation (taken from PCR document).



Organisation of themes for class levels (Std 1-4). Taken from PCR document

Standard 1: My Country – The People and Cultures of T & T	The Past The People	Leisure, Work and Entrepreneurship	The Culture
Standard 2: My Country: The Environment of T & T	Land	Water	The Economy
Standard 3: Our Region – The Caribbean	Waters that Link and Divide Us	Different But the Same	In an Interdependent World
Standard 4: The World of Change	Media and Information	Understanding Change	Making choices

Appendix 2

Example of PCR toolkit lesson plan.

(Taken from PCR toolkit)

Class: Standard 2 Term 1	**Theme:** My Country: The Environment of Trinidad and Tobago - Land
Duration: 2 1/2 days	**Topic:** Becoming Responsible Citizens

Context:
The land provides us with all the physical resources that we need to survive. It is, therefore, the responsibility of every citizen to learn how to respect and protect the environment. There is no better place to start learning about this kind of care and respect than with young, impressionable students who are responsible for the future.

Outcomes:
At the end of this learning experience, students will:

- explain the purpose of selected media texts
- interpret content in print, visual, audio and electronic media
- describe ways in which respect for the environment can be displayed
- cite benefits of respect for environmental laws
- keep area and personal things/self- clean and tidy
- organize descriptive paragraphs using a topic sentence, supporting details and transitional words and phrases
- use full stop, question mark, exclamation mark, apostrophe in contractions, possessives correctly in writing
- use simile in writing
- create and perform a song/jingle related to respect and care of the environment in groups in correct tempo (speed) and with a pleasing tone.

CONSIDERATIONS:

☒**HFLE:**
Understanding
Consequences
Self-Management

Literacy
☒Reading
☒Writing
☒Oral Communication
☒Media & Information Literacy

Numeracy
☐Problem Solving
☐Critical thinking
☐Communication
☐Representation
☐Reasoning

☒**ICT Skills**

☒**Differentiated Instruction**

☒**Assessment for Learning**

Appendix 3

Sample of curriculum guide showing organisation of learning objectives with headings. (Taken from curriculum guide).

AGRICULTURAL SCIENCE: STANDARD 3				
CONTENT	**SKILLS**	**DISPOSITIONS**	**OUTCOMES**	**ELABORATIONS**
Students will:				
3.1.1 Explore how local dishes from various Caribbean islands can enhance food tourism.	3.2.1 Create promotional material to market food tourism. 3.2.2 Make appropriate dishes to celebrate an island festival. 3.2.3 Sample a variety of Caribbean cuisines.	3.3.1 Appreciate Caribbean diversity through food. 3.3.2 Enjoy making Caribbean dishes. 3.3.3 Savour Caribbean cuisine.	3a. Explore how local Caribbean foods enhance tourism. 3b. Create promotional materials to market food tourism. 3c. Appreciate Caribbean diversity through the enjoyment of making and savouring food.	• Relate how the local cuisine of Caribbean islands enhances visitor arrivals (3.1.1) • Create promotional material, using at least one form of media, to promote food tourism (3.2.1) • Make an appropriate dish to celebrate an island festival (3.2.2) • Comment on the aroma of a variety of Caribbean cuisines (3.2.3) • Create an appreciation of Caribbean diversity through food, using one form of media (3.3.1) • Enjoy making and describing Caribbean dishes (3.3.2, 3.3.3)

Appendix 4

Transcript Interview: Teacher: Palm Ville Government Primary school.

Topic: PCR implementation in the Primary school.

The following questions are designed to garner the perceptions of teachers and administrators (Curriculum implementers) on the use of the PCR at your school. Please answer as honestly and completely as you can.

1. How do you feel/think about the new PCR?

   PROBE: How is it different from the curriculum that was used before?

   PROBE: In your opinion, how useful/beneficial is it to student learning?

2. What do you understand about thematic integration and teaching?

   PROBE: What views do you hold about initially using the PCR?

   PROBE: What are the concepts and skills integrated into the new PCR?

   PROBE: What strengths do you see in these skills adding value to classroom instruction?

3. 'To what extent has the PCR training been beneficial to you for its implementation?'
   PROBES: adequacy, duration, pace, how it was conducted, location.
4. What has it been like for you, implementing the PCR?
   PROBES: preparation, working with teachers, principal support, resources, time, post-training support?
5. To what extent has students' experience of the PCR affected their learning?

Appendix 5

Transcript Interview: Principal/ Senior teacher.

Topic: PCR implementation in the Primary school.

The following questions are designed to garner the perceptions of administrators on the use and management of the PCR at your school. Please answer as honestly and completely as you can.

1. As an administrator how have you viewed the implementation of the PCR at your school**?**

2. Has there been anything that has helped the implementation of the PCR in your school? If yes, what are they?

3. Have there been any hindrances to the implementation of the PCR at your school? If yes, what are they?

   PROBE: teachers' coping abilities, preparation, principal support, resources, time, post-training support?

4. Was there any training administered with respect to the PCR for administrators? Can you tell me about it?
   PROBE: adequacy, duration, pace, how it was conducted, location

5. How did teachers, students and parents receive the PCR?

6. As a curriculum change innovation, how has the PCR affected instruction and student learning in the classroom?

Appendix 6

Participant Information/Consent form

Dear Participant,

Allow me to extend my gratitude to you for willingly accepting to participate in this study. The title of the research project is Perspectives of the PCR implementation in one primary school in Trinidad. The aim of the investigation is to **identify key perspectives of Implementers (teachers and Administrators) who use the PCR and gauge their experience with the new curriculum innovation**. For this purpose, a **Qualitative Research** has been adopted. The findings of the study will be reported in the form of a dissertation, which will be submitted for the award of a Masters in Education, Curriculum Specialization .

The study will be conducted over a period of four (4) days. As a participant you will be required to give your insight and experiences with using the PCR in the classroom and/or overseeing its administration.

I will ensure that this study does not take too much of your time. I will ensure confidentiality of the information retrieved and assure that the data gathered will be solely used to answer the Research questions posed for this research paper.

I recognise that your participation is completely voluntary, therefore interview times are negotiable. I look forward to working with you.

Regards,

____

Ritesh Lyndell Beepot.
Student Researcher

– –

Please read the following and sign to indicate your consent to participating in this study.

- I have read the **Participant Information** and the nature and purpose of the research project has been explained to me.
- I understand the purpose of the research project and my involvement in it.
- I understand that I may withdraw from the research project at any stage without the threat of prejudice.
- I understand that while information gained during the study may be published, identity will remain anonymous and my personal views will remain confidential.
- I understand that I will be digitally recorded during the interview and that information regarding my professional experience will be used for the purposes of the study.

- I understand that data will be stored electronically on portable memory sticks and that both hard and electronic copies of transcripts will be kept. These will be accessible to the researcher, the supervisors and the university's examiners without restrictions.

- I understand that I may contact the researcher or supervisors if I require further information about the research, and that I may contact the Research Ethics Coordinator of the School of Education, University of Nottingham, if I wish to make a complaint relating to my involvement in the research.

- I agree to participate in the outlined study

Signed…… (research participant)

Print name

……**Date**……

Student Research's Contact details: 715-5686, lyndell2@gmail.com

Appendix 7

Principals' request for permission

The Principal

[redacted]

cc. SS1 Caroni Education District.

Date: 20th March, 2017

Re: Permission to conduct research

Dear Miss

I am currently reading for a Master's in Education, Curriculum specialisation at the University of the West Indies. As part of my assessment, I am required to conduct a research and present its findings. My research is entitled: Perspectives of the PCR implementation in one Primary school in Trinidad and Tobago.

I have chosen your school as the site of my study. I would require your permission to interview three teachers and two members of your administration. Thank you in advance for your reply and consent.

Regards,

Ritesh Lyndell Beepot

_____

Assistant Teacher (Primary) #68357
UWI Id: 815007578