

***Caribbean Centre of Excellence for
Teacher Training***

Belize Cluster Evaluation Study

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Executive Summary

This report presents the findings of the evaluation of the Caribbean Centre for Excellence for Teacher Training, a literacy project that was piloted in six project schools in the Belize District between 2003 and 2009. The evaluation was made possible through the Ministry of Education and CCEC. Information gleaned from the evaluation will serve to inform the work of the Belize Literacy Unit and the Ministry's overall initiative to improve the quality of education in Belize.

Overview of the Project

Caribbean Centre for Excellence in Teacher Training's (C-CETT) primary objective was directed at working with teachers from the lower grades to build their capacity to teach literacy effectively. This project provided an opportunity for Belize to test 'best practices' in literacy instruction in its local context to determine what works given the dynamics of Belize's multicultural society. Six schools in the Belize District, with a total of 30 teachers and an estimated nine hundred students were the beneficiaries of this project. The long term goal of the initiative was geared toward learning from this initiative and to use lessons learned to improve the program for implementation in other schools, particularly, those that had a history of low performance.

Students' performance data collected annually from C-CETT schools using a pre and post test model was the only form of evaluation conducted throughout the life of the project. While the test results indicated that the pilot was yielding the desired results, it did not indicate how the input and the processes influenced teachers' and students' performance. In addition to reviewing students' performance data, this evaluation project examined the impact of the inputs and processes from teachers' and principals' perspectives.

The Evaluation Process

The evaluation utilized a mixed method design to collect data from a cross section of stakeholders in an attempt to garner from them their experience of the literacy program; the extent to which program objectives were realized and factors that may have contributed to the success of the program or impeded the overall success of the program. The findings were based on evidence collected from six different sources: rating scale for teachers of language and literacy, focused group interview with principals, archival data, teachers' questionnaires, classroom observation checklists and students' performance records.

Findings

- Based on the Rating Scale for Teachers of Language and Literacy, 12 of the 14 teachers evaluated have developed as effective teachers of literacy in the early graders. The results indicated that these teachers had strong content knowledge of literacy, coupled with the pedagogical skills needed to promote students' achievement in this area. Factors that contributed to the shift in teaching of the language arts program were the ongoing training, support and the materials provided by the project.
- Teachers who transformed classrooms and used a balanced approach, combining explicit teaching with opportunities for group work and individual work, had better results.
- While the resources teachers received were cited as one factor that contributed to the change in their practice, the evaluation results indicated that the schools generally were challenged to maintain equipment and ensure teachers continued to maximize the use of resources.

- The project schools in general showed marked improvement in students' reading performance as reflected by mean scores. Girls appeared to be reading at a slightly higher level than the boys. The challenging areas, as reflected by students' low scores in those sub tests areas were comprehension and language structures. In the cases where comprehension scores were low, scores in phonics were often low indicating that the lack of fluency may have had a negative impact on comprehension.

Recommendations

- Teachers play a critical role in raising students reading level. To increase reading performance, teachers need ongoing training to develop their own level of proficiency in using Standard English and in teaching language and literacy, with emphasis on teaching English to second language learners and strategies to enhance comprehension.
- Teachers need to be encouraged to teach phonics systematically, paying particular attention to vowel sounds. Additionally, fluency instruction needs to be improved and encouraged.
- Develop literacy faculties at the school level to encourage teachers to share best practices and support each other in their professional development as they problem solve to find solutions to the myriads of problems they face within their respective schools. There is a need for more leadership opportunities for teachers who excel, e.g. establish the role of Literacy Coaches in schools.
- Schools should be encouraged to use assessment data as indicators of where they are and what needs to be done to improve. The purpose of assessment should focus more on

improving teaching and learning. Goal setting and monitoring toward school improvement at the school level needs to improve.

- More training is necessary in action research.
- Assist schools in accessing adequate literacy resources, including quality children's literature. This is important to the success and sustainability of the literacy initiative.
- Principals need training in managing change directed at improving the quality of instruction in schools.
- Provide training in proposal writing for principals. This provides principals with a tool to access funding for resources that can help to promote and support high quality teaching.
- Put systems in place to help schools maintain and sustain equipment such as computers can be used and other electronic devices that to support learning.
- Schools have the responsibility to reach out to parents to increase parental involvement. Start with building a positive home school relationship.
- Management should limit the transfer of teachers.

Introduction

The Ministry of Education in Belize, through the church-state system, continues to provide increased access to basic education in keeping with the millennium development goals. As access increases, so does the challenges of quality and equity. Cognizant of these issues, the government of Belize has initiated several educational reform efforts designed to improve the quality of education. One example is the Ministry's effort to increase the number of trained teachers in Belizean classrooms.

Despite the efforts to increase the number of teachers with professional training at the primary level, the current figure indicates that an estimated 50% have no formal training. Consequently, if teachers are to effectively deliver the curricula, they need ongoing support in the form of professional development. The Caribbean Centre of Excellence for Teacher Training was designed specifically to support teachers in schools that had a history of low performance with the ultimate goal of developing these teachers' repertoire of skills to effectively address the literacy needs of their students.

There are several issues that confront the Belizean youth when it comes to the development of reading and writing skills in Standard English. Linguistic differences and vocabulary make comprehension of the language of books and the classroom challenging for many. While children are able to speak their first language, many enter school with very limited or no experience with literacy in the home language. To compensate for these deficiencies, the school program must address students' individual needs including the development of listening skills and oral language in the target language. These prerequisite skills facilitate students' learning to read and write in the second language and improve their chances of academic success.

Background

In 2003, the Government of Belize signed on the Caribbean Centre for Excellence in Teacher Training (C-CETT). C-CETT was a literacy project implemented in six schools in the Belize District. Four of the schools were selected based on their history of low performance in the National Primary School Examination, while two of the schools were average schools chosen to motivate the others and set the pace during the intervention.

The goal of C-CETT was to provide innovative leadership to strengthen reading instruction and increase the reading skills of an estimated nine hundred students in the program. Additionally, C-CETT's principal goal was to improve the quality of instruction in schools, and provide teachers with the necessary tools to assist them in achieving excellence in the teaching of reading and writing. The focus was on upgrading the skills of 30 teachers in infant two through standard II with the knowledge and skills necessary to effectively deliver the language arts curriculum. In addition to supporting teachers, the program was primarily designed to build a culture of reading within these schools and also to ensure that students were reading at or above grade level. Supporting principals was also a critical component, since leadership plays a key role in educational change.

Based on test scores and other ad hoc evaluations conducted through school visits, ministry personnel and other stakeholders in education were of the opinion that the C-CETT project was successful and produced positive results in alignment with the objectives of the program. The only empirical data to validate this claim was students' performance. This left questions regarding the performance of teachers and the effectiveness of the resources available unanswered. Additionally, one critical purpose of the pilot project was to learn from the experience in terms of what strategies and processes were effective and which were not. It was

also critical to understand school context and what factors contributed or inhibited the change process. Similarly, it was essential to determine why certain aspects of the project were successful while others failed. In attempting to answer these questions, the information gleaned from the evaluation is invaluable, since it provides data that will be used to improve the C-CETT Program for implementation on a wider scale.

Now that the project, including external funding, has officially ended, the Ministry of Education is prepared to continue to invest in this initiative to ensure that the methods advocated by the project is sustained and transferred to all schools across Belize. To effectively plan for the expansion of this initiative, the Ministry needs documented evidence to support the claim that the program has made a difference in students' reading performance. Similarly, evidence collected on teachers' practices through the evaluation process can be used to create a profile of what effective language teachers should know and be able to do in the context of Belizean society.

Additionally, in 2010, the Ministry started on a quality school initiative to improve the quality of basic education. All efforts of this intervention are focused on improving students' performance. Since students' ability to read and write affect overall academic performance, ensuring that students master early literacy skill is an important component of the efforts directed at improving the quality of basic education. As a result, the Literacy Unit is mandated to provide guidelines for the improvement of literacy in the early primary grades. While results of this evaluation will be used to inform efforts to sustain and expand the C-CETT model to other schools, it will also contribute to the goal of the quality school initiative.

Research Questions

The following specific research questions guided the evaluation process:

1. What is the level of competence of C-CETT teachers in the teaching of literacy in Infant II, Standard I and Standard II?
 - How many teachers were operating at level three or above?
2. To what extent did the training offered by C-CETT prepare the teachers to teach reading more effectively?
3. How many students achieved the C-CETT benchmarks?
4. To what extent did teachers use the materials and resources in the C-CETT classrooms effectively?
5. What are the Principals' perceptions of the impact the C-CETT program on their respective schools?
 - What elements of the program seem to have had the greatest impact on the teachers and the schools' overall capacity to improve students' reading achievement?
 - What elements of the program are being sustained in the schools?

Purpose of Evaluation

This evaluation is critical because it coincides with the Ministry of Education's goal to improve the quality of education in Belize. The data gleaned from this exercise can be used to improve literacy instruction, which is central to the improvement of quality instruction for students at the primary level. If Belize is to effectively prepare students for the twenty first century, it is incumbent on the Ministry of Education to guarantee all students mastery of the skill of reading, writing and critical interpretation of oral and written communication.

The purpose of the evaluation is to determine if professional development of teachers and ongoing support had any impact on their ability to teach reading. If teachers are better prepared to teach literacy then more students are likely to be reading at or above grade level, which is one of the objectives of the program. The evaluation focused on students' performance and was designed to determine teaching behaviors that support the teaching of reading in the first three grades within the six project schools. The evaluators also attempted to get principals' and teachers' perspectives on the program.

Essentially, the purpose of the evaluation was aimed at determining which inputs and processes contributed to the change process and the limitations of the program. This information is critical, since the evaluation is a springboard geared toward providing insights into what strategies and support structures will be needed to sustain the program and facilitate its expansion to other schools across the country of Belize.

Limitations

There were two major constraints that limited the evaluation process. First, the time of the evaluation was too close to the end of the school year. As such there was limited time to conduct consultations and fully engage stakeholders in the process. For example, it was not

possible to get the children's and the parents input. The second constraint had to do with the timing of the evaluation. The project officially came to an end in June of 2009, which limits the scope of the evaluation mainly to an evaluation of the product, since it is difficult to evaluate the processes of the program when it is not fully running with all the support systems in place. Coupled with this, was the attrition rate of teachers. Some teachers were no longer available to give their input.

Significance

The evaluation provided valuable data to support the sustainability of the C-CETT model by highlighting the strengths of the program and magnifying areas that need improvement. This document is a useful resource for guiding the Ministry of Education's efforts to bring about a paradigm shift that will yield better results in literacy. It will also serve as a guide for future innovations aimed at literacy development.

Procedures

The evaluation utilized a mixed method design to collect data from a cross section of stakeholders in an attempt to garner from them their experience of the literacy program; the extent to which program objectives were realized and factors that may have contributed to the success of the program or impeded the overall success of the program. The findings were based on evidence collected from six different sources: rating scale for teachers of language and literacy, focused group interview with principals, archival data, teachers' questionnaires, classroom observation checklists and students' performance records.

Introduction to Literature Review

In this age of information, the need for all to develop literacy skills is greater than ever. Schools are therefore challenged to improve the reading performance of all students, since inability to read and write can have far reaching effects on one's social and economic status in today's society. Inherent in this challenge is the need to teach higher order thinking skills and develop students who are able to access information and use reading and writing as learning tools (Darling-Hammond & Richardson, 2009). When young children are exposed to the right conditions, they learn that literacy is an integral part of real life experiences in which reading and writing involve similar processes of making meaning for authentic purposes (Tompkins, 2009).

Despite the efforts of the educational systems around the world, learning to read is not a guarantee for all students. Many students continue to struggle with learning to read and the frustration associated with the process has led some to simply abandon this goal. While there are numerous reasons why children are experiencing difficulty in learning to read, some are struggling with reading in school because they are lacking many of the prerequisite skills at the start of school. As a result, there is a gap between experiences prior to school and the beginning of formal literacy instruction. The missing prerequisite skills include, but are not limited to, linguistic elements, exposure to print and cognitive development.

While this can be a daunting situation for teachers, it is not one that is impossible to correct. If educators understand that some children come with a deficit and therefore, their needs are different right from the very beginning, then perhaps schools will be in a better position to address the needs of struggling readers (Bradley, 2003). The review synthesizes the research on the challenges of learning to read and school factors such as teachers' knowledge of the subject matter and school leadership to better understand all the dimensions of what constitute or

contribute to effective literacy instruction. While the review of literature examined ‘best practices’ of literacy instruction in the early grades, it focused on the connection between reading performance and early reading intervention using a diagnostic teaching approach.

Review of Literature

Researchers posited that the fundamental responsibility of schools is to teach students to read (Mathes and Torgesen, 1998). This is a serious responsibility, given that lack of reading skills may have implications for students’ future success. A review of scientific evidence indicated that 95 percent of children can learn to read (Scola, 2002). Notwithstanding, many students are reading below grade level. **A recent assessment of nine hundred standard II** students in Belize indicated that 40% of the students in this group are reading below grade level (Literacy Assessment Report, 2009). According to Mathes and Torgesen 20 to 40 percent of elementary students in the United States of America are reading below grade level. Scola (2002), on the other hand, suggested that in some communities this figure is as high as 60 to 70 percent. The group of nonreaders is often comprised mainly of children from economically challenged families. Students from ‘high risk’ environments are often less prepared for school than other students (Scola, 2002). Cunningham (2006) posited that there is a high correlation between students living in poverty and reading achievement.

Consequently, in schools where the student population is predominantly diverse, the percentage of non readers or students reading below grade level is often high (Cunningham, 2006). According to Mathes and Torgesen (1998) many of these students are having difficulty learning to read because of linguistic factors, while there is no apparent reason why some are experiencing difficulty. Scola, (2002) in her contribution to the discussion on challenges children face in learning to read, stated that while implicit teaching works for some students,

many require direct systematic instruction from a teacher who has a good grasp of the subject matter and the pedagogical skills needed to effectively deliver the content. Another source of the problem comes from the lack of consistency in teaching diverse students. Mathes and Torgesen cited the lack of coordination in reading instruction across levels as another contributing factor.

Given these challenges, the first step towards improvement is to design programs that motivate and convince students that they can learn to read. Students are more inclined to learn when they have the opportunity to collaborate with their peers, and when they are allowed to choose learning materials. This gives them a sense of control over the learning process and a feeling of success. This is a motivating factor that is necessary, especially when working with struggling readers (Scola, 2002).

In an attempt to explain why some students experience difficulty with learning to read, Haager and Windmueller (2001) found that many teachers lack the professional training to teach English language learning students. As a result many of these students were at risk because of reading difficulties and were identified as having a learning disability. In a research on *high-poverty schools that beat the odds*, Cunningham (2006) found that teacher quality, professional development, leadership and ongoing assessment and monitoring of students reading performance were considered important factors in improving literacy instruction within diverse student population.

Characteristics of Effective Teachers of Literacy

According to Rueda & Garcia (1996), teachers' beliefs about their teaching and the students that they teach impact on teachers' practices in the classroom. Teachers often view the problem associated with learning to read among English language learning students as inherent

in the students, rather than with the quality of instruction. As a result, these students' needs are not met because teachers do not feel that they can make a difference (Mathes and Torgesen, 1998). In contrast, Blair, Rupley and Nichols (2007) found in a study conducted to determine the qualities of effective teachers that effective teachers of reading believe that all children can learn to read and write.

In discussing the characteristics of effective teachers, Blair et al. cited teachers' concerns for discerning and responding to the needs of their students as the single most important factor in effective teaching. Walker (2005,) endorsed these ideas and added that the effective teacher of literacy is reflective. When reading instruction is not consistent with the needs of students, it becomes meaningless and a disappointment for both teachers and students (Blair et al. 2007). Knowing what to teach students comes from ongoing assessment (Blair et al.; Mathes & Torgesen, 1998). Walker (2005) stated that reading instruction can be divided into four stages with assessment informing what goes on at each stage. In the first stage the emphasis, according to Walker, should focus on getting students to develop phonological awareness and basic concepts about print.

Mathes and Torgesen indicated that students' knowledge of phonological awareness and their level of vocabulary are predictors of students' level of readiness for reading instruction in the early grades. According to Coyne and Harn (2006), these skills form the foundation on which subsequent skills and strategies are grounded. Since these skills are critical to future reading success in school, Coyne and Harn argued that it is important to assess these skills at an early stage so as to provide teachers with valuable data in terms of where students are in their literacy development and their instructional needs. In so doing, this study found that schools can

significantly improve reading performance by bridging the gap between ongoing assessment and instruction.

In a qualitative study designed to better understand the characteristics of effective literacy instruction, Mandel, Morrow, Tracey, Woo and Pressley (1999) spent 25 hours observing each of the six participants. Results indicated that these exemplary teachers used a balanced approach to literacy instruction, engaging children in reading for meaning across a wide range of literary activities using thematic units that integrated content areas. Classrooms were print rich with materials that were challenging, while simultaneously allowing students to make choices, work independently and in small groups to facilitate social interaction. There was time for explicit teaching that focused on the construction of meaning and problem solving skills. According to the study, participants' philosophies of the way children develop literacy skills were aligned with their classroom practices. Additionally, all the participants worked in schools in which principals were highly motivated and had high expectations for both students and teachers. Teachers in these schools were encouraged to share and plan together by grade level and were exposed to frequent staff development activities.

Endorsing the concept of effective teachers of literacy, Wray and Medwell (2000) found when comparing two samples of teachers that the effective teachers taught a range of literacy skills starting at word level and expanded to text level within the context of meaningful reading. Similarly, these skills were taught explicitly through demonstration and modeling. While the conceptualization of effective teachers of literacy varies, improving students' literacy skills through hands-on activities is the common theme on which effectiveness is hinged (Warrican, Down & Spencer-Ernandez, 2008; Wray & Medwell, (2000).

Differentiated instruction is necessary to improve reading scores of more students. This approach works because teachers design lessons that cater to individual needs of students. Cirino, Pollard-Durodola, Foorman, Carlson and Francis pointed out that differentiated instruction is often not used in the classroom because of the following reasons: 1) teachers' lack of knowledge of how to use assessment data to plan individualized instruction; 2) adapting instructional materials to balance whole class teaching with small group instruction and 3) how to keep all students on tasks during small group instruction, especially those who are not working directly with the teacher at a given time and 4) the absent of teacher support to help them improve in these areas.

Assessment

A critical component of good literacy instruction is continuous assessment to determine instructional needs of students. In making a case for the use of assessment in teaching, Tompkins (2002) stated that assessment should be consistent with the literacy demands of the world and with the way children learn. According to Hasbrouch and Tindal (2006) reading assessment falls into four categories – screening, diagnostic, progress monitoring and outcome measures. Teale (1988) alluded to these categories of assessment and added that assessment must address pertinent questions for educators and stated that the data collected must be used to improve instruction for it to have a positive impact on reading achievement. It is critical to emphasize that an important outcome of assessment should be improved teaching and learning (Coyne & Harn, 2006). In support of this idea, Teale (1988) explained that data derived from assessment is useful for decision making regarding both policies and instruction. However, to yield information that's useful in both these areas, the assessment must be aligned with the curriculum and it must be developmentally appropriate.

According to Marcotte (2006) there are a number of instruments available to determine reading problems. These instruments allow teachers to frequently evaluate strengths and weaknesses in an effort to improve instruction. Coyne and Harn (2006) cited two *Dynamic Indicators of Basic Early Literacy Skills Tests* that can be used to assess and monitor reading skills during the early stages. Walker (2005) identified the *Yopp Singer Test* for phonemic awareness and discussed the role of reading inventories in collecting data.

Hasbrouck and Tindal (2006) used the Oral reading fluency norms test to screen students entering school as a predictive measure and found that the test provided valuable information about the future instructional needs of students. Words read correctly per minute have been systematically declared, according to Hasbrouck and Tindal, as a positive indicator of comprehension especially in younger students. Hasbrouck and Tindal maintained that the objective of teaching and assessing reading fluency is to get children to read in such a way that it flows like language. Some teachers focus on this goal and forget the link between fluency and comprehension, especially when teaching struggling readers. Practice of this nature has led to one general concern raised by researchers in using several of these instruments to test skills in isolation (Hasbrouck & Tindal 2006; Coyne & Harn 2006). While these tests are useful in providing baseline data about students' strengths and weaknesses, it is important for teachers to bear in mind in using these instruments that reading is a complex process that involves a wide range of skills (Hasbrouck & Tindal, 2006).

Notwithstanding the fact that researchers accept the idea that assessment is a critical component of literacy instruction, (Mathes & Torgesen, 1998; Coyne & Harn, 2006) there are some concerns about the use of assessment in early childhood education. These concerns, according to Teale (1988) were based on the fact that the focus of kindergarten is not about

academic performance, but rather on getting children ready for elementary school. Teale argued, however, that the increasing demand for a more structured curriculum in the kindergarten classroom and the emphasis on accountability have given rise to need for the assessment of these young students. In so doing, Teale raised the concern about the difference in function between standardized tests and formal and informal classroom assessment.

More recently, standardized tests have become the main mechanism used to hold teachers and schools accountable because of the ongoing debate across the globe about the quality of public education. Unfortunately, standardized tests do not yield the data that teachers need in order to address individual needs as a means of improving teaching and learning. Yet, these tests in many instances affect teachers' performance in the classrooms, since there is the likelihood of teachers teaching to the test rather than addressing individual weaknesses (Teale, 1998).

Teacher made assessments are more likely to yield data that teachers can use to plan instruction to meet the needs of individual students (Teale, 1998). Tompkins (2002) supported this approach and presented guidelines for authentic assessment that includes the use of a variety of methods and the integration of assessment and instruction. In order to effectively assess literacy, Teale (1988) advised that it should be clear as to how the assessment will be conducted and it should also be clear as to what content and skill will be measured. To compensate for the concerns raised by researchers about testing children in kindergarten and alleviating the stress associated with testing for these students, Teale recommended that much of the assessment be done through observation within several different learning contexts over a period of time and by reviewing performance samples of students' work.

Teaching and assessment according to Teale (1998) should address language development, evidence of emergent literacy, writing ability and the alphabetic principle.

Mathes and Torgesen (1998) stated that all children can learn to read with explicit direct instruction. This premise is hinged on the idea that teachers know what and how to teach literacy skills and that they are able to identify students who are high risk for failure. Cappizzi and Fuchs (2005) hypothesized that teachers who used data collected from diagnostic testing of students to plan for instruction have a higher incident of planning to meet the specific needs of individual students than teachers who do not use diagnostic testing to inform their teaching. The results of this study indicated that teachers who used diagnostic data to plan for instruction focused more on individual needs of students.

Mathes and Torgesen (1998) explained that phonemic awareness is the number one predictor of reading success. Children who exhibit signs of problems in this area should receive assistance immediately. Quick action in the form of intervention saves time and narrows the chances of students lagging behind in reading achievement. In a study with Hispanic students who were behind their peers in reading, it was discovered that after an intervention using a diagnostic approach there was a significant improving in reading performance (Nichols, Rupley, Rickelman & Algozzine, 2004). Similarly, in working with first and second graders, Haager and Windmueller (2001) found that students' reading performance increased in all skills with the participants identified as having a learning disability showing significant improvement.

According to Haager and Windmueller (2001) there are several benefits that came out of using assessment in an early literacy program to improve students' performance. First, teachers developed a new level of consciousness about the reading levels of their students and the challenges that their students were facing in terms of learning to read. One teacher, for example, stated: "This is the first time that assessment data are meaningful." The new awareness led to the second benefit, which had to do with teachers thinking more about planning to meet the needs of

individual students. There was a greater commitment, on the part of teachers, to at-risk students. Finally, grouping students for instruction was a big change that came about as a result of the intervention.

Professional Development

Teachers play a critical role in enhancing students' literacy skills (Progress for International Literacy Survey, 2003). Effective teachers take initiative and are always looking for ways to improve their knowledge and pedagogical skills (Warrican, Down & Spencer-Ernandez). Additionally, the fact that only estimated 50 percent (Belize Education Statistic) of teachers are certified to teach at the primary level is indicative of the need for professional development for Belizean teachers. According to Darling-Hammond & Richardson (2001), Professional development plays a critical role in effecting changes at the school level and more importantly in teachers' practices. Effective professional development does not simply provide teachers with subject specific content, but seeks to integrate the unique aspects of the school context and the way teachers learn and develop new skills. This is necessary if professional development is to have the desired impact on students' performance.

In a large scale study conducted with mathematics and science teachers, Garet, Porter, Desimone, Birman and Yoon (2001) identified focus on specific content knowledge, engaging teachers in active learning and making connections with other learning as critical elements of effective professional development. They found that using these three elements helped to align the structure of professional develop to significantly impact teachers' learning. Endorsing this new approach, Birman, Desimone, Porter, and Garet (2001) argued that the traditional one day approach or one size fits all to professional development seldom provide time, or the type of activities or content needed for teachers to develop a profound understanding of the material and

to bring about changes at the classroom level. Similarly, they argued that for professional development to be meaningful, it should be directed at whole schools or at groups of teachers from the same grade or department. In addition to active participation, effective professional development takes place over a period of time with follow-up support at the school level to encourage classroom application.

Leadership

While the concept of instructional leadership does not encompass the full range of leadership responsibilities, it is significant because it puts instruction at the heart of what schools are about. Given the goal of schooling, instructional leadership focuses on teachers' performance in order to achieve the goal which is improved students' achievement (Bush, 2006). From this viewpoint, a major function of principals is to influence teachers' performance such that there is a positive impact on students' learning.

However, educational leaders in North America and Europe have a different perception of their roles from their counterparts in developing countries. Even though the findings are inconsistent, principals' behaviors in developed countries reflected elements of the instructional model and transformational leadership. Practices associated with this perception of leadership included communication of institutional goals, supervision and the evaluation of teaching, directing curriculum, keeping track of students' performance, monitoring time on task, managing by wondering around and supporting teacher development. On the contrary, in his analysis of 27 papers on leadership in developing countries, Oplatka (2004) found common trends such as lack of autonomy, a tendency towards more autocratic styles of leadership, maintaining the status quo rather than focusing on change and a general absence of instructional leadership.

According to Oplatka (2004) the differences in perception of leadership roles stem from contextual and cultural factors. In developed countries, for example, principals have far more resources and autonomy and perceived improving students' performance as a central function of their role. The society places a high premium on education and holds principals accountable for school performance. In developing countries on the other hand, lack of resources is a major challenge for principals. As a result, the objectives of principals in developing countries are focused on meeting the basic needs of the school through fund raising efforts. To this end, principals in developing countries often limit their function to a managerial role neglecting their leadership functions which includes supporting teachers in an effort to improve students' performance.

Northouse (2007) defined leadership as a process in which one individual influences the group to reach shared goals. In the context of education, principals have the responsibility of initiating school reform to improve the educational experiences of their students. The concept of initiating change within the educational systems in developing countries is minimal. Oplatka (2004) found that principals in developing countries focus on routine activities. They are not in the habit of advocating innovation in their schools and are less likely to be agents of change.

Mullican & Ainsworth (1979) purported that there is a strong correlation between leadership behavior and school performance. If good leadership results in better students' performance, then it is important to train principals so that they can improve their leadership behaviors. Leadership is more than maintaining the status quo. Northouse (2007) made the point that the effectiveness of leaders is linked to the leader's capacity to find solutions to difficult institutional problems.

Before addressing the issue of training for principals, it is important to have clearly established criterion for the selection of principals. Olson (2007) alluded to the fact that while training will enhance leadership performance, individuals are more likely to perform if they have leadership traits. Having some leadership inclination will facilitate the training of educational leaders and evidently the transfer of knowledge from training to the school context will be higher. Brown (2006) recommended that those aspiring to be principals should have at least four years classroom experience. This ensures that trainees have some working knowledge of the classroom dynamics. This also facilitates their development as instructional leaders. Candidates must also provide proof of leadership qualities based on previous experiences among other requirements.

In recruiting principals, the question is: Why is it important to select only those who are most likely to succeed as effective educational leaders? According to Glasman & Glasman (1997) today's changes in society places great demands on educational leaders to respond to societal needs. As a result, the standards of educational administration have risen. Currently, the challenge for educational leaders is to better serve a diverse student population including disadvantaged students. In order to adequately prepare principals for this challenge, leadership programs are looking for exemplary candidates who are self aware, highly motivating and committed to self improvement. Moreover, training programs are designed to meet the needs of principals by helping these practitioners to construct their own understanding of leadership in the school context as they work. This approach places the onus for self improvement on principals and requires critical thinking and the ability to deal with abstract concepts.

Conclusion

Research supported the idea that in order to monitor and improve literacy instruction in elementary schools the focus has to be on teachers. This means improving the quality of instruction for all students is critical (Blair et al. 2007). In order to be more effective in the classroom teachers need support and training, especially in the area of teaching English language learning students (Rueda & Garcia, 1996).

For the majority, the problem of reading is related to language and the lack of early stimulation that provides prerequisite skills. This means that the majority, if not all children, can learn to read (Mathes & Torgesen 1998). Screening of all incoming students at the start of the school is one method suggested to address the problems of literacy at the elementary level (Coyne & Harn 2006; Mathes & Torgesen 1998; Hasbrouck & Tindal 2006). To facilitate this process of ongoing assessment there are a number of assessment instruments available (Coyne & Harn 2006; Walker 2005; Hasbrouck & Tindal 2006). Coyne and Harn (2006) maintained that the development of assessment techniques has given educators important information on the process of beginning reading that they can use to make a difference for the majority of students. The use of these instruments to identify and provide adequate support to at risk students is critical given the reality of the number of students reading below grade level. Coyne and Harn recommended that support staff (reading specialists and special education teachers) play a leading role in helping schools to access and use this information to their advantage.

Much of the research on struggling readers focused on students of diverse population. There is a need to look at entry level of these students in comparison to those of other student population. Further research on parental involvement and how the home facilitates the development of reading is also crucial. Because teachers play a critical role in enhancing literacy

skills, a study that looks at teacher development programs in comparison with the pedagogical skills teachers need to effectively teach language and literacy would add valuable insight to this discussion.

Methodology: Data Collection Procedures

Data was collected using both quantitative and qualitative methods through six sources. The Rating Scale for Teachers of Language and Literacy pinpointed the level of competence of C-CETT teachers and the quality of instruction in the teaching of Literacy in Infant II, Standard I and Standard II. The Rating Scale for Teachers of Language and Literacy (RSTLL) developed by Warrican and Leacock (2006) was used to evaluate the teachers' stages of development through review of lesson plans and unobtrusive observation of actual teaching to determine the effectiveness of the delivery. Using this instrument, trained observers evaluated teachers' performance during literacy instruction in four areas: Planning, Execution, Classroom Environment and Reflection (see Appendix 1). The RSTL was used to identify the level of competence of teachers in teaching literacy in Infant II, Standard 1 and Standard 2. Fourteen teachers were observed. In addition to rating the performance of these fourteen teachers, the observers provided anecdotal records on each while observing their teaching in the classroom. The time taken to administer the instrument was recorded by trained observers.

In the Planning section, the lesson plans of the C-CETT teachers were assessed to see if they were well articulated and coherent and if there was sufficient planning being done as it relates to the content, activities, instructional materials, and organization. In the Execution section, the rating scale detected if features of language and literacy were appropriately integrated and tailored to meet the specific needs for various groups of learners. Essentially, the trained observer was able to assert if teachers were knowledgeable of the content and understood effective ways of administering the lesson plans in line with the objectives of the lesson.

The ambiance of the teachers' classrooms was assessed to ensure that it fostered positive teacher-student interaction and a positive climate conducive to learning. Observers were also

keen to ascertain if the students' work was exhibited. Lastly, teachers were asked to reflect and comment on their own teaching in terms of strengths and weaknesses and determine areas in which they needed improvement. They were also asked to identify their students' strengths and weaknesses and possible interventions that could be used to improve students' level of performance. The rating scale employed a four-point rating with one being the lowest score. The sum of all the ratings was divided by the 25 items to calculate the mean rating. The teacher's stage of development was based on the mean rating.

A questionnaire was designed to get teachers' perspective on the usefulness of the training provided during the project (see Appendix 2). In self reporting, teachers had the opportunity to give their perception of the impact of the program based on all the inputs and processes of the project, including the support and materials and the extent to which they were drawing on the content and utilizing the strategies in their practice. All twenty available teachers returned the questionnaire.

Focused group interview was conducted by the reading coordinator with five principals. They represented five of the six C-CETT schools and provided insights regarding the benefits, successes and challenges experienced by the schools as a result of their involvement in the program. The aim of the interview was also to determine how the resources and materials provided through the program helped to facilitate the work of teachers and curriculum goals.

To get an in-depth understanding of the processes and the effect these had on different elements of the program, schools were visited to understand factors that made a difference in program by studying the environment and talking informally to teachers and principals about their experiences during the program. Classroom observations were also conducted using a checklist to collect data on resources used and to determine the extent to which the program was

being sustained. Archival data from previous interviews with teachers were also used in the process of evaluation to better understand the strengths and weaknesses of the program. Students' performance data measured by the Caribbean Reading Standards Achievement Test and collected annually over the life of the project was analyzed and interpreted to determine if there were any significant changes in students' reading performance.

Total Population

Thirty teachers along with the six principals from the respective pilot schools were part of this initiative to improve literacy. Across the six schools, an approximate total of nine hundred students from Infant I to Standard 2 participated in the C-CETT literacy program each year from September 2003 to June 2009.

The sampling method utilized for this research to gather data on the teachers and principals was purposive, since the intent of the researchers was to identify and include all C-CETT teachers and principals in the evaluation process. Of the original thirty teachers, twenty were identified as still in five of the original C-CETT schools. All twenty teachers, representing 67 percent of the total teacher population formerly in the six C-CETT schools were invited to participate in this evaluation along with five available principals. Existing students' performance data over a five year period were used to answer questions related to students' reading achievement.

Instruments

(Table 1) illustrates the method of data collection and the instruments utilized during the evaluation process along with other data sources. The instruments included: Teacher's Questionnaire, Rating Scale for Teachers, Anecdotal Records, School and Classroom

Observation Checklist and Principals' Focus Group. CRSAT scores were also utilized in assessing to what extent the students achieved the benchmarks established by the C-CETT.

Table 1: Method of Data Collection

Instrument	Method
Teachers' Questionnaire	Qualitative and Quantitative
Rating Scale for Teachers	Quantitative
Anecdotal Records	Qualitative
School/Classroom Observation Checklist	Qualitative
Principals' Focus Group	Qualitative
CRSAT Scores	Quantitative

Teachers' Questionnaire

The teachers' questionnaire was comprised of five sections (see Appendix 2). Section I gathered biographical data on the teachers such as level of professional training, total number of years as a teacher and number of years in the C-CETT program. Section II allowed teachers to rate what training delivery method provided by C-CETT they considered most useful and least useful. The instrument also provided an opportunity for them to identify the content area(s) in which they would like to receive further training.

In Section III of the teachers' questionnaire, a rating scale was introduced to gather information on the teachers' perception of the professional development offered and of the type of support and assistance they received from their Principals and the Reading Specialist during the program. This section was also designed to get teachers input on the materials and resources provided by C-CETT and the extent to which they were considered useful. The scale provided five options ranging from strongly agree to strongly disagree.

Section IV of the questionnaire addressed the frequency of activities in the classroom involving reading instruction, specifically highlighting instructional practices and whether activities advocated by the program were used daily, weekly, monthly or never. This data

provided an insight into what strategies were prioritized by teachers and how frequently they were used during literacy instruction. Lastly, Section V presented three basic open-ended questions to give teachers the opportunity to make recommendations for the improvement of the literacy program.

Rating Scale for Teachers

Warrican and Leacock's (2006) scale provided four main categories of teachers and explained the overall performance of teachers of language and literacy at each level. A Level one teacher would be considered as inexperienced, lacking both content and pedagogy. At level two, a teacher is perceived as weak in the execution of the lesson, but has some knowledge and skills of language and literacy instruction. Thirdly, a teacher at mastery level would display strong knowledge and skills of language and literacy instruction, but demonstrates some minor weaknesses that could be corrected with ongoing encouragement and support to foster further development of the knowledge of what to teach and how. An exemplary teacher would be operating at level four. Such a teacher would have a very strong content knowledge of language and literacy instruction and does an excellent job of execution.

Anecdotal Records

Three trained educators from the University of Belize unobtrusively observed C-CETT teachers delivering language arts lessons in their classroom. In addition to using the RSTLL, they recorded important qualitative information as observed during the lesson, relating to classroom management, the learning environment, climate, content and level of engagement of students and teacher students interaction.

Videotaped in-depth interviews provided the opportunity for three teachers and two principals of excellence to share their challenges and successes with the program. This

information, coming from teachers who received local and regional awards for their outstanding performance in the classroom, provided insights on strategies that could be used to improve literacy instruction. Additional documented reports written by three different teachers on classroom transformation were also analyzed and common themes were selected to add variety and value to the data through triangulation (see Appendix 3).

School and Classroom Observation Checklist

The School and Classroom Observation Checklist provided a means of assessing the sustainability of the C-CETT program in the six pilot schools. The checklist was done in twenty-two classrooms in five schools and pinpointed the number of years the respective teachers had been in the program and the number of pupils in each class. The checklist had three main sections (see Appendix 4). Firstly, the Planning/Instruction Section identified if teachers included the literacy block in their planning and determined whether teachers engaged in interventions and action research. This section also signified if principals advocated for action research in their schools. Secondly, the checklist assessed whether materials and resources provided in the C-CETT program were functioning and were adequately used in the classroom. This part of the instrument supported the RSTLL in assessing if the classrooms had a print-rich environment and effective tools for learning provided by C-CETT. Thirdly, the checklist addressed if there were teacher resources and libraries at the C-CETT schools and the frequency of meetings of the literacy faculties. The instrument also provided an opportunity for the observer to detail comments and observations relevant to the study.

Principals' Focus Group Interview

The Principals' Focus Group Interview was conducted by one of the Reading Specialists from the C-CETT program for duration of one hour and nineteen minutes. There were five

principals who participated. The principals and the moderator sat in a circle while the research assistant sat outside the circle and recorded the information. There were eight questions that guided the discussion lead by the moderator (see Appendix 5). These questions were not recorded before since the principals were probed and from their responses the moderator asked subsequent questions. The following represent the questions used:

- What element of the program had the strongest impact?
- What made the training excellent?
- What hindered principals from getting more from the training?
- What component had the least impact in your view?
- What do you consider to be some of the challenges during the program?
- What are some of the benefits that are visible in the school as a result of the program?
- Is the C-CETT program being sustained?

The Moderator allowed each principal to respond to the questions in no particular order.

Caribbean Reading Standards Achievement Test (CRSAT)

The CRSAT was designed to measure reading achievement for pupils in Infant II to Standard II by assessing students' mastery of the standards and benchmarks. The test included two types of items: multiple choice and short constructed responses. The test items focused on the major areas of beginning literacy instruction: phonological awareness, phonics, listening comprehension, language structure and reading comprehension.

CRSAT had five performance levels: Mastery I & II (MI, MII), Approaching Mastery I & II (API, APII) and Non-Mastery (NM). This was based on the grade level expectations as established in the curriculum guides and the Caribbean Reading and Writing Standards (2003) (see Appendix 6). The cumulative grade that students were able to receive for Infant II, Standard I and Standard II were 40, 50, and 60 respectively (see Table I below).

Table 2: Performance Level and Raw Score Equivalent for Three Grade Levels

Grade Level	CRSAT Level	Raw Score Equivalent
Grade 1	Non-Mastery	0 – 13
	Approaching Mastery I	14 – 19
	Approaching Mastery II	20 – 26
	Mastery I	27 – 33
	Mastery II	34 – 40

Grade II	Non-Mastery	0 – 16
	Approaching Mastery I	17 – 24
	Approaching Mastery II	25 – 33
	Mastery I	34 – 42
	Mastery II	43 – 50

Grade III	Non-Mastery	0 – 20
	Approaching Mastery I	21 – 29
	Approaching Mastery II	30 – 39
	Mastery I	40 – 50
	Mastery II	51 – 60

Students operating at the Non-Mastery level did not meet the standards set for their respective grade. They experienced difficulty in identifying basic words and their decoding skills were limited. Additionally, they experienced difficulty with beginning rules of grammar, spelling and word usage. These students were in need of more practice with reading and greater reinforcement in order to decode words and understand what they read.

For Approaching Mastery I & II, the students were still developing, but were close to mastering the standards set for their respective grades. These students had a clear understanding of what they read and were able to think beyond the literal meaning of the material; however, they still needed reinforcement and practice with reading a variety of material in order to develop better reading comprehension and language skills at the respective grade levels.

Students operating at Mastery I met the standard set for students in their respective grades. Students who performed at this level had a clear understanding of what they read and were able to think beyond the literal meaning of the material. They were also able to examine, interpret, and understand the meaning behind what was stated in writing and determine unfamiliar words they read by applying strategies such as dividing the word into syllables, recognizing word families, and considering how the word was used. Those students who achieved excellence in their work and performed above average for their respective grade level were at the Mastery II level.

Presentation of Data

Teachers' Questionnaire

As indicated in the previous section, the teachers' questionnaire was administered to twenty teachers and was comprised of five sections. All teachers in the C-CETT program were females. Forty percent of the respondents have been teachers for six to ten years, whilst six out of the twenty teachers had zero to five years experience in the classroom. Only two teachers had twenty or more years of teaching experience.

Most teachers have spent two years, on average in the C-CETT program (35 percent). Six teachers (30 percent) have benefited from the entire program over the five years, and only two participants were in the program for one year.

When asked about their general educational background, 12 teachers (60 percent) responded that they had Associate Degrees while 7 teachers possessed High school Diplomas and one teacher possessed a Bachelor Degree. In terms of professional training as a teacher educator, 13 (65 percent) held an Associate in Primary Education, six were trained through the level I level II programs, and one teacher had trained teacher's diploma.

In Section II of the teachers' questionnaire, when asked which Style of Training Delivery they considered to have been most important, thirty-two percent said that cluster-level workshops were most effective, followed by twenty-six percent who claimed that training provided through literacy faculties was the next most beneficial mode of delivery. Least important to the teachers was action research which garnered fifty percent.

Thirty-seven percent of the teachers noted that phonological awareness was the most useful content area in the C-CETT program, while 16 percent responded that reading

comprehension was second most useful. Least useful content area was action research as 10 teachers (50 percent) noted that they would need further training in this area.

The benefits of the C-CETT program were many, and in Section III, teachers responded to questions of their comfort level in teaching reading successfully. Admittedly, fifty-three percent of the teachers said that they were continually finding better ways to teach reading comprehension and none of the teachers had difficulty explaining to students the importance of reading. When asked about materials used, eighty-three percent of the teachers noted that the materials and resources received from the C-CETT workshops helped them to become better teachers.

An important element of the C-CETT program was to identify the various needs of students who had difficulty in learning reading. Of the 20 teachers that were a part of the evaluation, 19 teachers (95 percent) noted that they were able to identify and ascertain the level of competence of their students' reading ability using the diagnostic tests and materials provided by the program. Cumulatively, 79 percent of the teachers noted that the program did not influence the level of parental involvement in students' academia, particularly as it relates to their literacy development. Only two teachers felt that the program had a positive impact, while two were uncertain about the level of influence of the program on parental involvement.

Seventy-three percent of the teachers noted that they worked closely with the C-CETT Reading Specialist and found the support and assistance very valuable. Two teachers responded that they disagreed that the Reading Specialist's support and assistance was valuable and five were seemingly uncertain. Overall however, ninety-eight percent of all respondents considered the C-CETT program to be very effective in reading instruction using the components in Language Arts. Additionally, ninety-four percent of the twenty teachers stated that they did

receive feedback from their principals on a timely basis about their level of performance in the program.

90 percent of the teachers read aloud to their students every day. 86 percent of the teachers formed groups for read aloud at least once or twice a month. All respondents noted that their students did silent reading every day, while seventy-one percent taught students decoding strategies once or twice a week.

Open-ended questions in the last section of the questionnaire asked teachers to share what part of the program they found to be the most beneficial, what improvements to their teaching practice have been made as a result of participating in the Caribbean CETT program and what aspect of the program they experienced difficulty. Seven teachers noted that doing read aloud in the classroom everyday was very beneficial and improved students' reading skills and one teacher noted that teaching block and reading comprehension have been an area of improvement for her. All teachers mentioned that the materials provided by C-CETT have helped them to become more creative in teaching reading. Action research, however, was the area of the program that most teachers experienced difficulty with.

Rating Scale for Teachers

Table 3: Rating Scale for Teachers Results

School	Number of Teachers	Level
Fellowes Primary School	3	3 Mastery
Baymen Primary School	2	2 Mastery
Emerson Primary School	3	2 Inexperienced and 1 Mastery
Agnes Primary School	3	2 Mastery and 1 Exemplary
Delta Primary School	2	2 Mastery
Great Primary School	1	1 Mastery

Classroom observations conducted in the C-CETT schools reflected that seventy-nine percent of the teachers were at the Mastery level. These teachers displayed strong knowledge and skills of language and literacy instruction but needed ongoing encouragement and support to foster further development of skills (Warrican and Leacock, 2006). Two teachers, or fourteen percent, performed at the inexperienced level signifying the need for intense training across all areas of language and literacy. Only one teacher (7 percent) was operating at exemplary level.

Table 4: Results of RSTLL by Dimensions

Dimensions	Stage 1 (Beginners)	Stage 2 (Inexperienced)	Stage 3 (Mastery)	Stage 4 (Exemplary)
Planning	0 (0%)	1 (7%)	7 (50%)	6 (43%)
Execution	0 (0%)	2 (14%)	9 (64%)	3 (22%)
Classroom Environment	0 (0%)	1 (7%)	6 (43%)	7 (50%)
Reflection	0 (0%)	2 (14%)	6 (43%)	6 (43%)

Data collected indicated that 93 percent of the teachers were planning at the mastery level and above. 50 percent were at the mastery and 43 percent produced exemplary work in this area as presented in Table 4 above. As it relates to execution of the lesson plans, 86 percent of the teachers performed at Mastery level and above, with fourteen percent of the teachers performing at stage two. Eighty-three percent of the teachers were between Stages 3 and Stage 4 when it came to having a print-rich environment that fostered a positive climate for learning. Most teachers, 86 percent, were able to discuss their strengths and weaknesses and the needs of their students, indicating that they were performing at the mastery and exemplary levels in terms of being reflective.

Anecdotal Record

During the lesson observation, the observers also collected anecdotal data from each classroom. In observing teachers in their classroom context, observers were able to categorize data into strengths and improvements needed using the descriptors on the rating scale as a guide. The observations made are presented in Table 5.

Table 5: General Observations of Teachers’ Performance in C-CETT Schools in Belize

Strengths	Improvements needed
Well prepared to teach. Evidence of research done to prepare for lesson.	Classroom management skills. Very little effort made to alter students’ behavior. Not always cognizant of the students’ level of competence.
Demonstrated very good knowledge of the content.	Content, objectives, and strategies in the lesson plan were not cohesive.
Sound knowledge of the skills of teaching	Lacks effective implementation strategies,

reading.	and needs to practice teaching without using the plan book.
Good voice projection and rapport with the students.	Learning Centers were not used. Improvement needed in questioning technique.
Allows students to speak out in class and they are expected to speak proper English.	Need to build skills in self-evaluation and self-reflection.
Very good choice of reading material	Limited application of phonemic awareness and skills
Use of captivating reading passage that enhanced students' interest. Illustrations were shown as the story progressed.	More independent reading time is needed.

Videotaped Interviews from Teachers and Principals of Excellence

In 2007, three teachers were selected based on performance in literacy instruction and students' performance on the CRSAT for national and regional awards. Two principals were also selected based on their leadership in literacy which propelled their school towards excellence.

In videotaped interviews in their classroom, and school contexts, these individuals shared some of the concrete changes that took place in their classroom environment based on transformations focused around literary themes. Successes ranged from vibrant classroom transformations, diagnostic testing and differentiated instruction, to working together as a team and using a variety of literacy games, strategies and techniques. The documented reports from three additional teachers who modeled effective classroom transformations gave information as to the processes they took to transform their classrooms.

These teachers were motivated to transform their classrooms for different reasons. One teacher since learning about grouping techniques, wanted to use learning centers to “enhance the children’s learning and socialization at the same time”. The use of effective learning centers

inspired creativity and transformation in her class because she wanted to make her students happy. Another teacher since learning about the thematic approach in literacy instruction, consistently worked with themes to get her students involved and excited. She had worked with themes such as oceanography, outer space, fairytale and rainforest to transform her classroom into environments children can relate to. The final teacher was inspired to keep her classroom consistently transformed because she wanted to motivate boys to read. She detailed her creative, yet inexpensive processes towards classroom transformations. This teacher led her school in receiving a regional award for classroom transformation in 2008 - 2009. (See Appendix 3 for detailed transcripts and reports.)

Classroom Observation Checklist

The Classroom Observation Checklist provided a detailed assessment of the six pilot schools and showed what elements of the C-CETT program have been sustained in each of the schools:

Table 6: Results from the School Observation Checklist

School	Planning Instruction	Resources/Listening Center, Library, teacher resource centre	Literacy faculty meets often
Delta Primary School	Only C-CETT teachers plan using literacy block. However, they do not engage in intervention and action research	Resources are kept in the classrooms Listening centers are in the C-CETT classrooms and are functioning. The school is in the process of developing a teacher resource Center/Audio-visual room.	No

		<p>The classrooms have libraries and reading corners</p> <p>The school does not have an library</p>	
<ul style="list-style-type: none"> • Agnes Primary School 	<p>All teachers' plan include the literacy block – both C-CETT and non-C-CETT teachers. Two of the teachers still engage in interventions and the Principal advocates that they do so.</p>	<p>Materials and resources are kept in the office and teachers have access to them when needed. There are listening centers in the classroom and the classrooms have libraries and reading corners.</p>	<p>There is a functioning literacy faculty who meets often.</p>
<p>Baymen Primary School</p>	<p>All teachers plan include the literacy block and teachers do not engage in interventions/action research and the principal does not actively advocate for it.</p>	<p>The materials and resources provided by C-CETT are kept in the office, however, it listening centers in the classrooms are not working properly at Baymen Primary School. Only in two of the classrooms were libraries and reading corners visible. The school does have a library that is updated.</p>	<p>There is a literacy faculty who meets often.</p>
<p>Fellowes Primary School</p>	<p>All teachers' planning includes the literacy block. However, the C-CETT teachers do not engage in interventions/action research, and the principal does not actively advocate for it.</p>	<p>All materials and resources are in the classroom and not kept in the teachers' office and there are listening centers and reading corners in the classroom. The school does not have a teacher resource center and there is no library at</p>	<p>There is a functioning literacy faculty at the school, however, they do not meet often.</p>

		the school.	
St. Castle's Primary School	Only C-CETT teachers plan using literacy block. The teachers still engage in intervention/ action research and the Principal actively advocates for it.	All C-CETT materials and resources are kept in the classrooms. The school library is being used as a store-room and is not functional.	There is not a functioning literacy faculty at the school.
Emerson Primary School	Only C-CETT teachers plan include the literacy block. C-CETT teachers do not engage in interventions/action research although the Principal still advocates for it.	The materials and resources are in the classrooms; however, the listening centers are not functioning. The school has a library but it is not functioning. It is used as a store-room. The resource centre is in the office and is not used a lot during the day	There is not a functioning literacy faculty at the school.

Within three of the C-CETT schools, lesson planning using the literacy block, was limited to teachers who were only in the literacy program, while all other teachers in the remaining three schools were using the literacy block model when it came to planning language arts lessons. In two of the six schools teachers continue to use action research to solve classroom problems.

During the time of the evaluation, Delta Primary School Methodist School was in the process of developing a Teacher Resource Center/ Audio Visual Room. The resources and materials received through the C-CETT program were kept in the classrooms and although the school did not have a library, each classroom had its own reading corner with a surplus of books.

Three of the six schools had libraries – Baymen Primary School, St. Castle's Primary School and Emerson Primary School; however, two were not functional. All schools had reading

corners in the classrooms and for three schools – All Saint’s Primary, St. Castle’s Primary School and Agnes Primary School, the literacy faculties met often.

Principals’ Focus Group Interview

Five C-CETT principals participated in an in-depth focus group interview that lasted for one hour and fifteen minutes (see Appendix 5 for full transcription). Principals expressed that the elements of the C-CETT program that had the strongest impact were the materials and resources; the ongoing monitoring and support provided by the reading specialists and management; the continuous training of principals and teachers, and the use of the pre and post tests which tracked improvements in students’ performance. Elements of the program pinpointed as having the least impact included action research and cluster-level training.

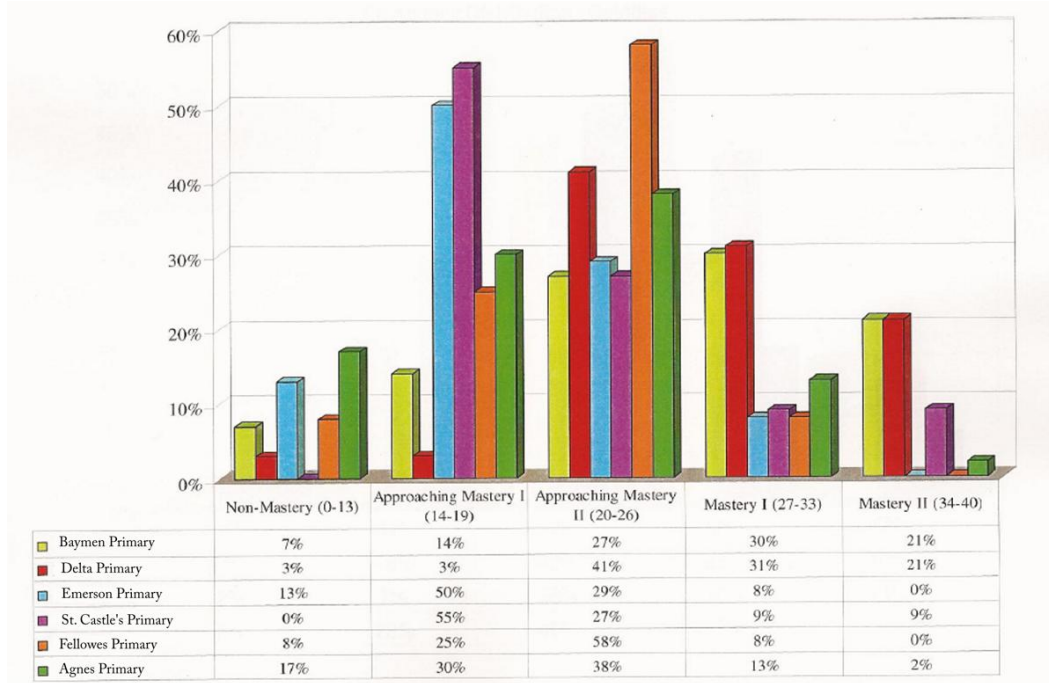
Undoubtedly, for the principals, the program helped to reinforce management’s role in raising the bar of excellence in teaching literacy. Because the program was continuous throughout the year, the principals emphasized that it was a support system for them in the schools. Some factors, however, that hindered the success of the program, according to the principals, were the lack of sufficient support from the Ministry of Education; the resistance of teachers to change; and the sudden implementation of the program without proper sensitization.

The principals shared that that they would have liked to be more involved in the training that teachers received; and that they as leaders could have also been more effective in relaying whatever training they did receive. They noted these comments as shortcomings and felt that more training overall was necessary, especially in the area of phonics instruction. Principals felt that teachers should have taken more ownership of the program and that some lessons that teachers taught in the classroom did not always correspond with the lesson plans.

In general, the principals were enthusiastic and complimentary regarding the C-CETT program and the impact it had. There was increased parental involvement; improved discipline and greater participation in the classroom as children found reading exciting. The classrooms were more child-friendly, inviting and engaging and this encouraged other teachers and students who were not in the C-CETT program to participate and learn more about literacy. Parent-Teacher Associations were formed as a result and the teachers/principals benefited and were encouraged from the tangible awards and honors bestowed for excellent work. Three of the six principals indicated that after the third year of C-CETT, they saw an improvement in their scores on the Belize Junior Achievement Test (BJAT) and the Primary School Examination (PSE).

Caribbean Reading Standards Achievement Tests (CRSAT)

Graph 1: Frequency Distribution: Performance Level by Schools in 2003 – 04 (Infant II)



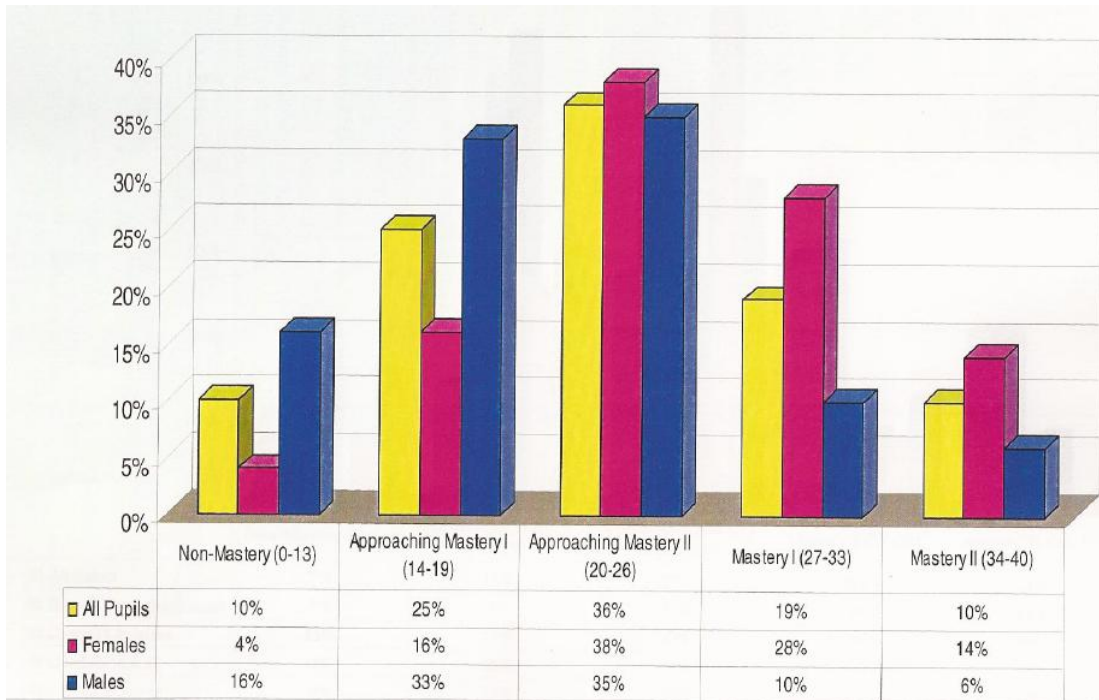
Graph 1 displays the performance level of students in Infant II in all schools in the 2003 - 2004 school year. The school with the most students at the NM level in Infant II was Agnes Primary School (17 percent). St. Castle’s Primary School did not have any students at this level.

Fifty – five percent of the students at St. Castle’s Primary School were operating at the AMI level, while 50 percent of students at Emerson Primary School were performing at this level.

Fellowes Primary School had the most students performing at AMII level with 58 percent followed by Delta Primary School Methodist (41 percent).

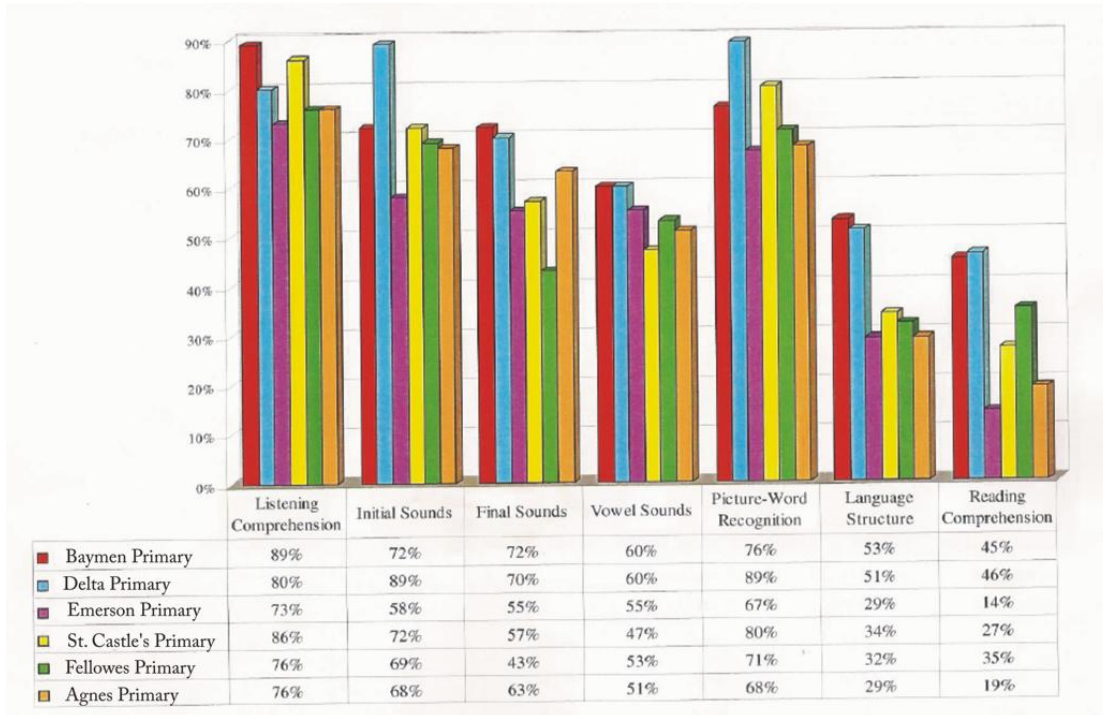
Delta Primary School and Baymen Primary School both had a significant percentage of students operating as MI (30.5 percent average) and MII (21 percent) levels. No students from Fellowes Primary School and Emerson Primary School performed at the MII level in 2003 - 2004.

Graph 2: Frequency Distribution by Gender for Infant II, 2003 - 2004 (All Schools)



Graph 2 pinpoints the performance of boys and girls at each of the CRSAT levels in Infant II for 2003 - 2004. Most students performed at AMII level overall (36 percent). Females performed better than boys at this level (38 percent and 35 percent respectively). Cumulatively, the percentage for females operating at Mastery levels I and II was 42 percent as compared to 16 percent for boys. Forty-nine percent of boys performed at the NM and AMI levels as compared to girls (20 percent).

Graph 3: Mean sub-test percentage scores for Infant II in 2003 - 2004

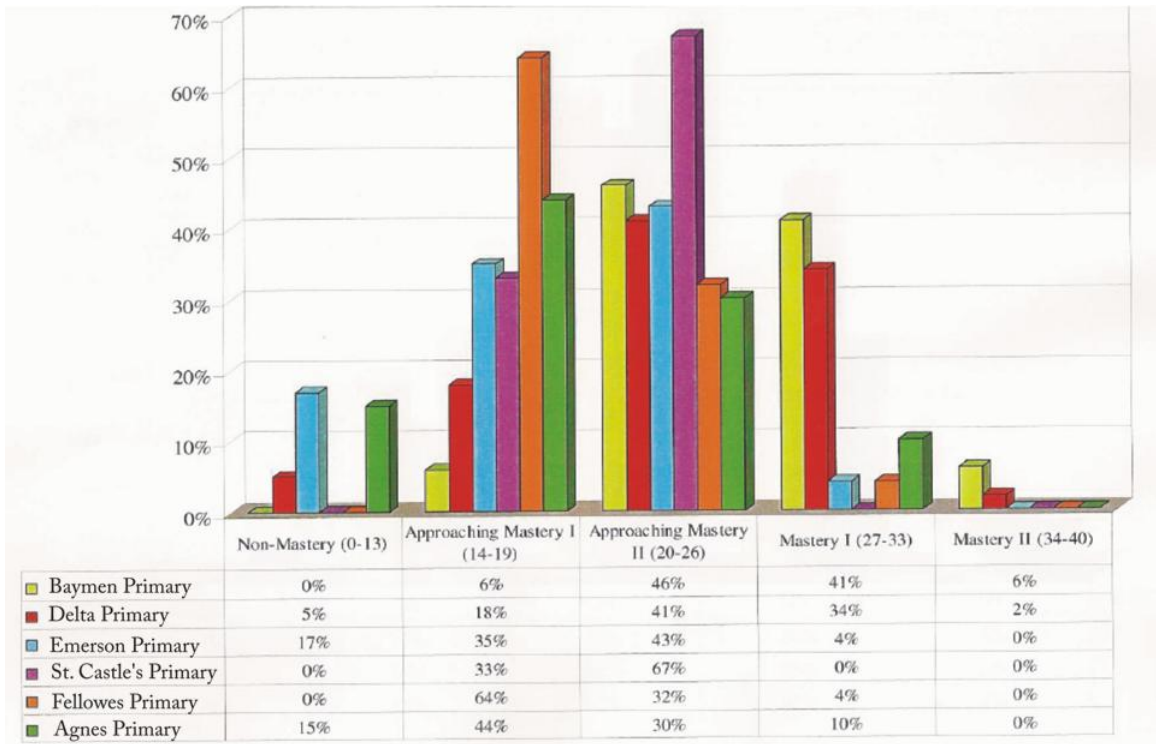


In graph 3, seven different components of the C-CETT students' performance were assessed for each C-CETT school for Infant II. Students achieved 67 percent and more for Picture Word Recognition and Listening Comprehension in all six schools. However, Language Structure and Reading Comprehension received less than 60 percent in all schools. The students at Baymen Primary School performed the best in Listening Comprehension (89 percent) Final Sounds (72 percent) and Language Structure (53 percent) in 2003 - 2004. Delta Primary School has the best percentage for Initial Sounds and Picture Word Recognition (89 percent).

Emerson Primary School and Agnes Primary School had the lowest percentages for Language Structure (29 percent) and Reading Comprehension (14 percent and 19 percent respectively). The students of All Saint's primary had the highest percentage and operated at the

AMI level for Language Structure (53 percent), whilst for Reading Comprehension it was Delta Primary School Methodist that performed the best (46%).

Graph 4: Frequency Distribution: Performance Level by Schools in 2003 – 04 (Standard I)

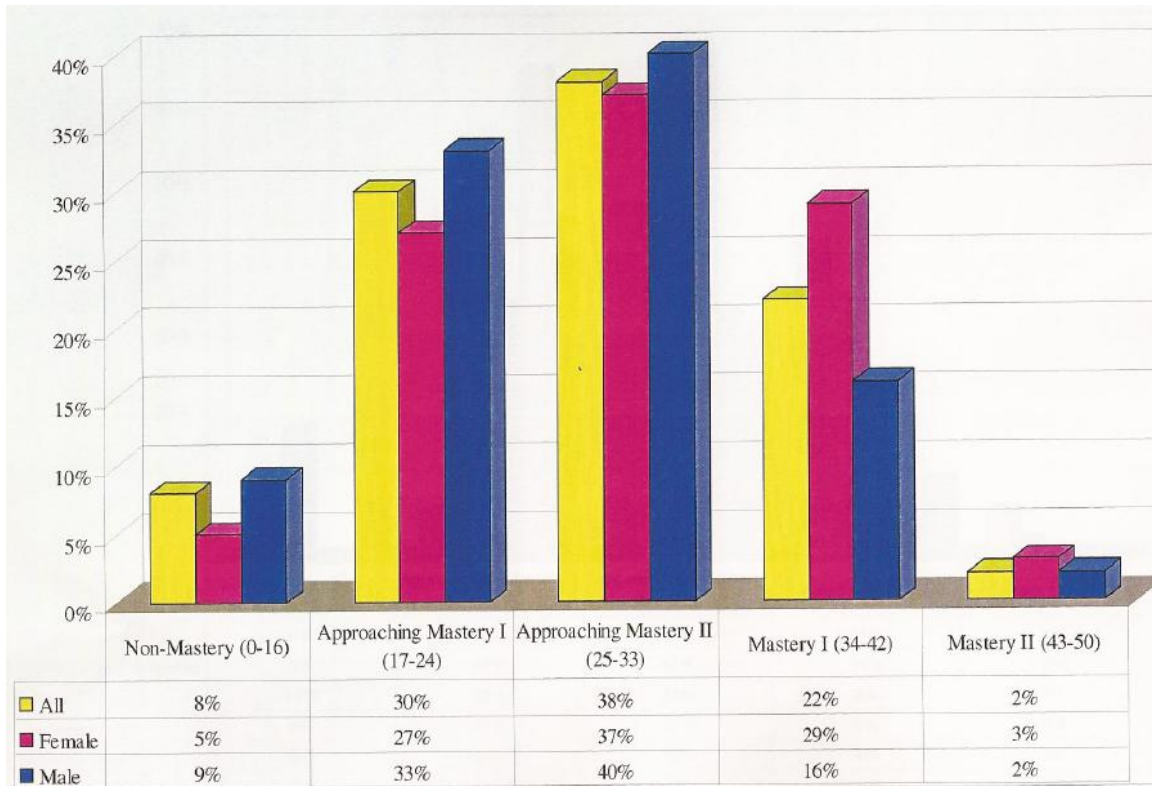


Graph 4 highlights the performance level of students in Standard I in all schools in the 2003 - 2004 school year. The school with the most students at the Non-Mastery level in Standard I was Emerson Primary School (17 percent). No students at Baymen Primary School, St. Castle’s Primary School and Fellowes Primary School were performing at the non-Mastery level in Standard I for the respective year.

Fellowes Primary School had the highest percentage of students performing at AMI at 64 percent followed by Agnes Primary School (44 percent). St. Castle’s Primary School had the most students performing at Approaching Mastery II level with 67 percent followed by Baymen Primary School at 46 percent.

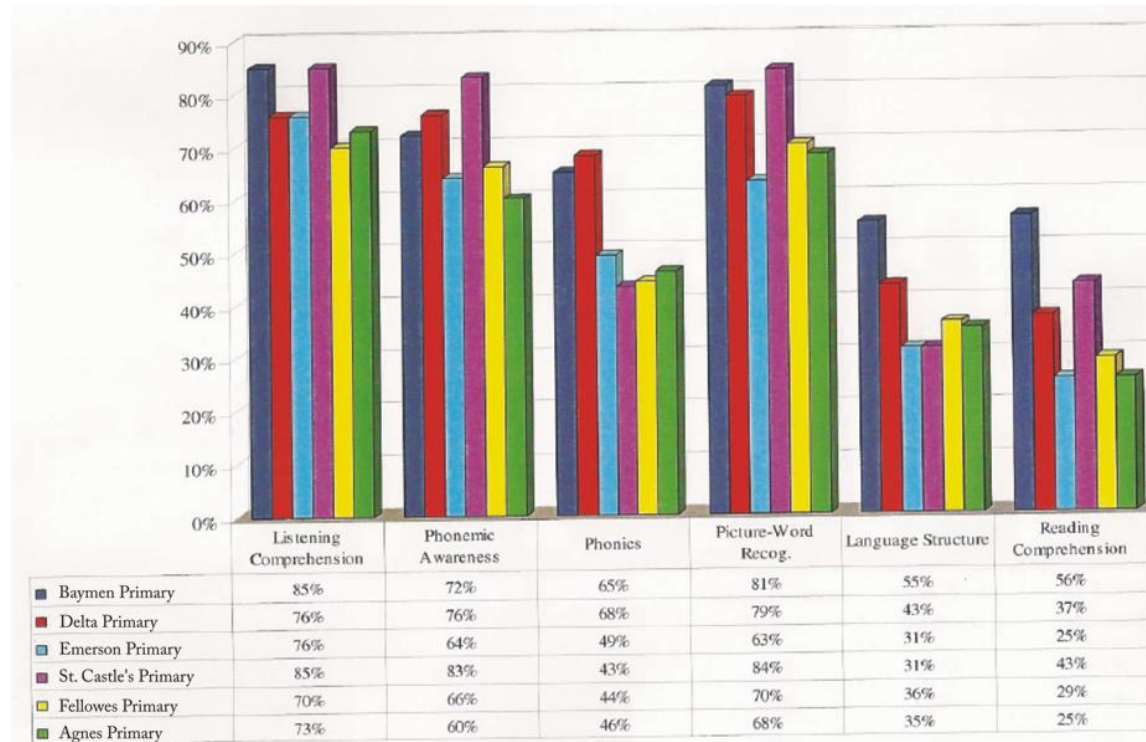
Baymen Primary School had the most students in Standard I performing at the Mastery I and II levels (47 percent) followed by Delta Primary School Methodist (36 percent). No students from St. Castle’s Primary School performed at the Mastery 1 and II levels in Standard I for 2003 - 2004.

Graph 5: Frequency Distribution by Gender for Standard I, 2003 – 04 (All Schools)



Graph 5 illustrates the performance of boys and girls at each of the CRSAT levels in Standard I for 2003 - 2004. Most students performed at Approaching Mastery II level (38 percent). Boys performed better than girls at this level (40percent and 37 percent respectively). Cumulatively, the percentage for females operating at Mastery levels I and II was 32 percent as compared to 18 percent for boys. Most boys performed below the benchmark of 60 percent at the Non-mastery and Approaching Mastery I levels (42 percent) as compared to girls (32 percent).

Graph 6: Mean sub-test percentage scores for Standard I in 2003 - 2004



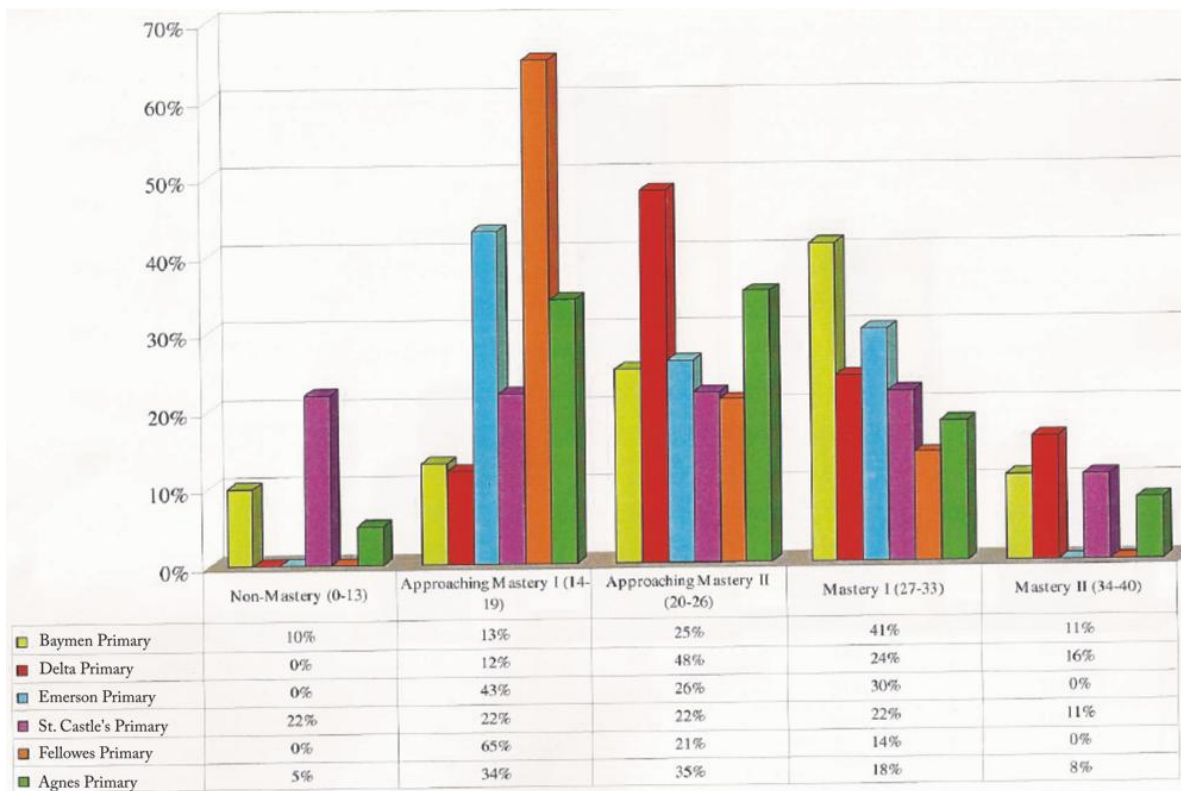
In graph 6, seven different components of the C-CETT students' performance were assessed for Standard I in each C-CETT school. Students achieved 60 percent and more for Listening Comprehension, Phonemic Awareness and Picture-Word Recognition in all six schools. However, Language Structure and Reading Comprehension received less than 60 percent for all six schools.

Four schools performed below the benchmark of 60 percent for Phonics – Emerson Primary School, St. Castle's Primary School, Fellowes Primary School and Agnes Primary School. However, St. Castle's Primary School and Baymen Primary School performed the best in Listening Comprehension with 85 percent respectively, followed by both Delta Primary School and Emerson Primary School with 76 percent each.

Emerson Primary School and Agnes Primary School performed the least in Reading Comprehension (25 percent).

Most students performed at the Non-Mastery and Approaching Mastery I level for Language structure and Reading Comprehension in all schools. Emerson Primary School had the least percentage in both components (31 percent and 25 percent respectively. St. Castle’s Primary School also had 31 percent for Language Structure. The students of All Saint’s primary had the highest percentage and operated at the AMI level for both Language Structure (55 percent) and Reading Comprehension (56 percent).

Graph 7: Frequency Distribution: Performance Level by Schools in 2003 – 04 (Standard II)

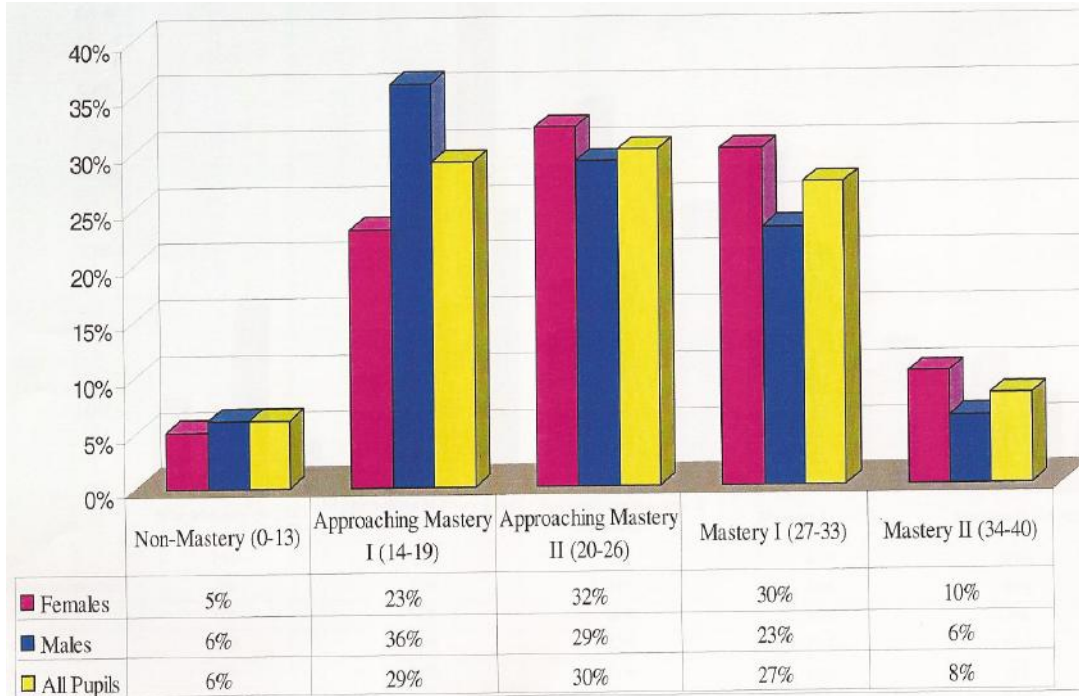


Graph 7, displays the performance level of students in Standard II in all schools in the 2003 - 2004 school year. The school with the most students at the Non-Mastery level in Standard II was St. Castle's Primary School (22 percent).

Sixty-five percent of the students at Fellowes Primary School and forty-three percent of the students at Emerson Primary School were operating at the Approaching Mastery II level. Forty-eight percent of the students at Delta Primary School Methodist were operating at the Approaching Mastery II level, while only 21 percent of students at Fellowes Primary School performed at this level.

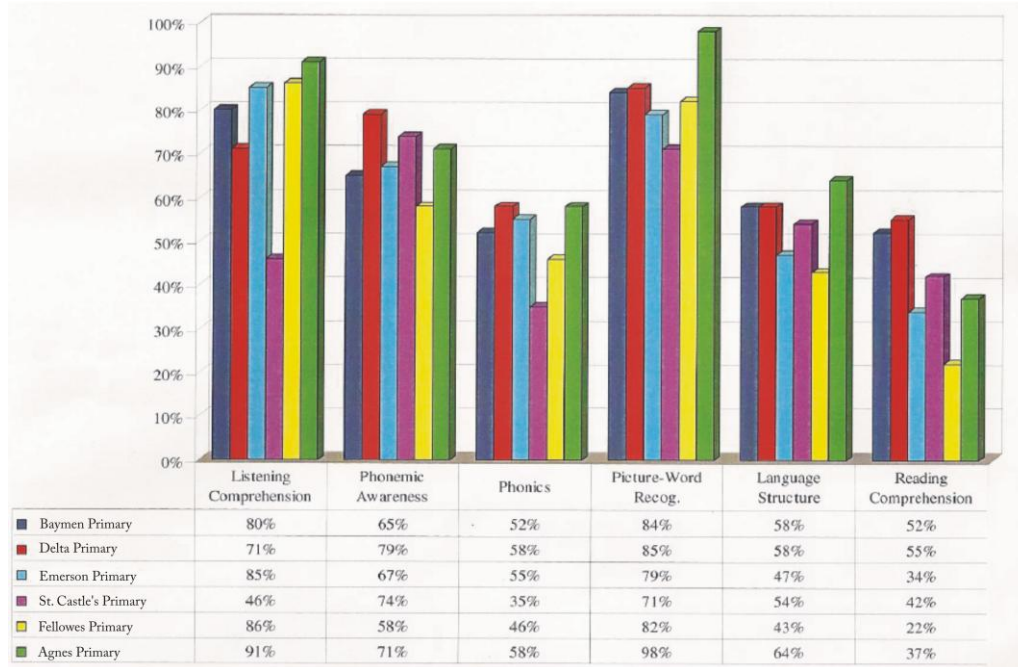
Delta Primary School Methodist, Baymen Primary School and Emerson Primary School had a significant percentage of students operating at Mastery I and Mastery II levels Standard II in this year. Cumulatively, Delta Primary School Methodist accounted for 40 percent, Baymen Primary School accounted for 52 percent and St. Castle's Primary School had 33 percent for the Mastery I and II levels. Central only had three percent less than St. Castle's Primary School in this category.

Graph 8: Frequency Distribution by Gender for Infant II, 2003 - 2004 (All Schools)



Graph 8 shows the performance of boys and girls at each of the CRSAT levels in Standard II for 2003 - 2004. Most students performed at Approaching Mastery II level (30 percent). Females performed better than boys at this level; however, the difference is not significant (32 percent and 29 percent respectively). Cumulatively, the percentage for females operating at Mastery levels I and II was 40 percent as compared to 29 percent for boys. Most boys performed below the benchmark of 60 percent at the Non-mastery and Approaching Mastery I levels (42 percent) as compared to girls (28 percent).

Graph 9: Mean sub-test percentage scores for Standard II in 2003 - 2004



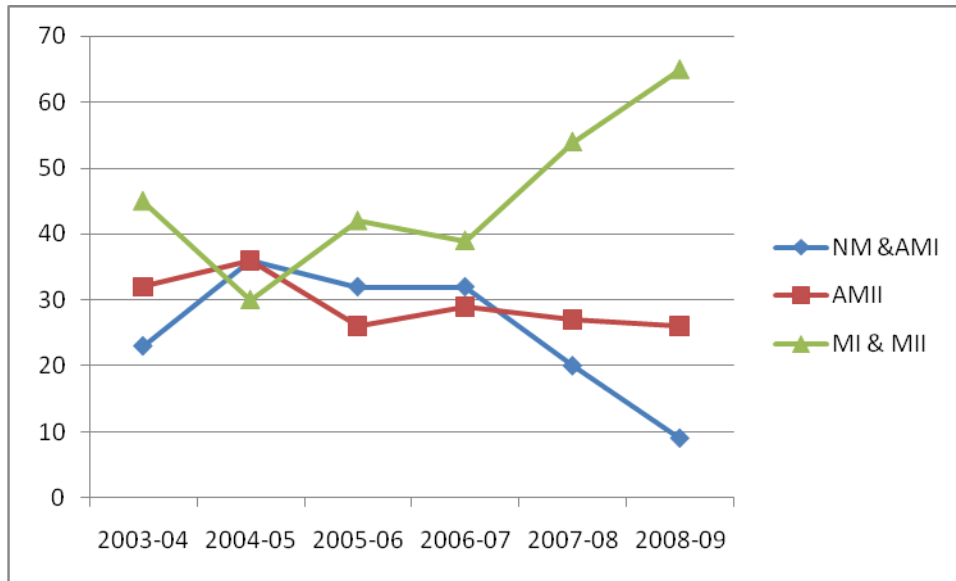
In graph 9, seven different components of the C-CETT students' performance were assessed for Standard II in each C-CETT school. All schools mastered Listening Comprehension except for St. Castle's Primary School RC that had 46 percent. Agnes Primary School had the highest percentage in this category (91 percent).

Approaching Mastery II level and above was achieved for Phonemic Awareness in Standard II for all schools except for Fellowes Primary School (58 percent). The highest percentage was achieved by Delta Primary School Methodist (79 percent), followed by St. Castle's Primary School (74 percent).

Agnes Primary School had 98 percent for Picture-Word Recognition and 64 percent for Language Structure. Reading Comprehension is reflected as the greatest challenge with all schools performing at AMI or below. Delta Primary School and Agnes Primary School achieved

the highest percentage for Phonics (58 percent). Agnes Primary School achieved 64 percent for Language Structure with all the other schools scoring 58 percent or below.

Graph 10: Students' Performance for Infant II, Standard I and Standard II, 2003-09



Data presented in graph 10 illustrates that there was a significant increase in students' performance at the Mastery I and Mastery II levels over a period the six years for all three grades. Interestingly, however, in the 2004 - 2005, which was the first year of intervention, there was a decrease in the number of students at the Mastery level and an increase in the number of students deemed to be At-Risk (blue line). The percentage of students At-risk was at its lowest in 2008 - 2009. Conversely, Mastery I and Mastery II levels had peaked to approximately 65 percent in the given year signifying that the Belize Cluster had cumulatively achieved the benchmark.

Table 7: Mean sub-test percentage scores for Infant II, 2008 - 2009

	Listening Comprehension	Phonemic Awareness	Picture-Word Recognition	Language Structure	Reading Comprehension
Baymen Primary School	75%	69%	87%	65%	56%
Delta Primary School	73%	75%	91%	59%	47%
Emerson Primary School	66%	70%	77%	55%	59%
St. Castle's Primary School	50%	53%	61%	39%	56%
Fellowes Primary School	67%	59%	74%	40%	36%
Agnes Primary School	57%	67%	86%	54%	65%

In table 7, the seven different components of the C-CETT students' performance were assessed for each C-CETT school in 2008 - 2009. All schools achieved benchmark of 60 percent or more for Listening Comprehension except for Agnes Primary School which garnered 57 percent and St. Castle's Primary School RC that had 50 percent. The school with the highest percentage for this category was Baymen Primary School with 75 percent.

Admittedly, although only off by one percent, Fellowes Primary School nearly achieved the benchmark with four other schools in the Phonemic Awareness who were considered Not At-Risk (Baymen Primary School, Delta Primary School, Emerson Primary School, and Agnes Primary School). St. Castle's Primary School, however, had only 53 percent for Phonemic Awareness that placed them at C-CETT's AMI level.

Picture-Word Recognition had the highest level percentage of all components with as Delta Primary School garnering 91 percent, followed by Baymen Primary School and Agnes Primary School with 87 percent and 86 percent respectively.

St. Castle’s Primary School performed the least for Language Structure (39 percent) and was also below the benchmark for Reading Comprehension as well with 56 percent. Only All Saint’s Primary and Delta Primary School were at the AMII level for Language Structure with 59 percent and 65 percent respectively.

Delta Primary School performed its worst in Reading Comprehension with 47 percent as well as Baymen Primary School (56 percent) and Fellowes Primary School (36 percent).

Table 8: Mean sub-test percentage scores for Standard I, 2008 - 2009

	Listening Comprehension	Phonemic Awareness	Phonics	Picture-Word Recognition	Language Structure	Reading Comprehension
Baymen Primary School	90%	65%	67%	91%	59%	72%
Delta Primary School	80%	70%	69%	96%	50%	55%
Emerson Primary School	83%	71%	79%	93%	63%	67%
St. Castle’s Primary School	63%	57%	64%	89%	37%	40%
Fellowes Primary School	86%	72%	69%	91%	52%	54%
Agnes Primary School	93%	70%	73%	92%	54%	63%

Table 8 illustrates the mean sub-test percentage scores for six components evaluated for Standard I in 2008 - 2009. All schools achieved benchmark of 60 percent or more for Listening Comprehension. Both Baymen Primary School and Agnes Primary School performed at Mastery

II level achieving 90 percent and 93 percent respectively. St. Castle’s Primary School had the lowest percentage in this category with 63 percent.

Additionally, St. Castle’s Primary School was the only school below benchmark for Phonemic Awareness with 57 percent. All schools achieved benchmark for Phonics in Standard I with Emerson Primary School having the highest percentage of 79 percent.

Picture-Word Recognition had the highest level percentage of all components with Delta Primary School achieving the highest percentage of 96 percent, followed by Emerson Primary School with 93 percent.

The component that schools performed the least in cumulatively was Language Structure. St. Castle’s Primary’s mean sub-test percentage score was 37 percent as compared to Emerson Primary School who had the highest percentage and achieved the benchmark with 63 percent.

St. Castle’s Primary School, Fellowes Primary School and Delta Primary School had the lowest percentage score for Reading Comprehension with 40 percent, 54 percent, and 55 percent respectively.

Table 9: Mean sub-test percentage scores for Standard II, 2008 - 2009

	Listening Comprehension	Phonemic Awareness	Phonics	Picture-Word Recognition	Language Structure	Reading Comprehension
Baymen Primary School	80%	87%	70%	96%	66%	69%
Delta Primary School	73%	92%	55%	96%	55%	63%
Emerson Primary School	57%	82%	52%	83%	38%	69%
St. Castle’s Primary School	83%	82%	54%	91%	55%	68%
Fellowes Primary School	73%	93%	66%	94%	56%	63%
Agnes Primary School	78%	86%	61%	92%	53%	72%

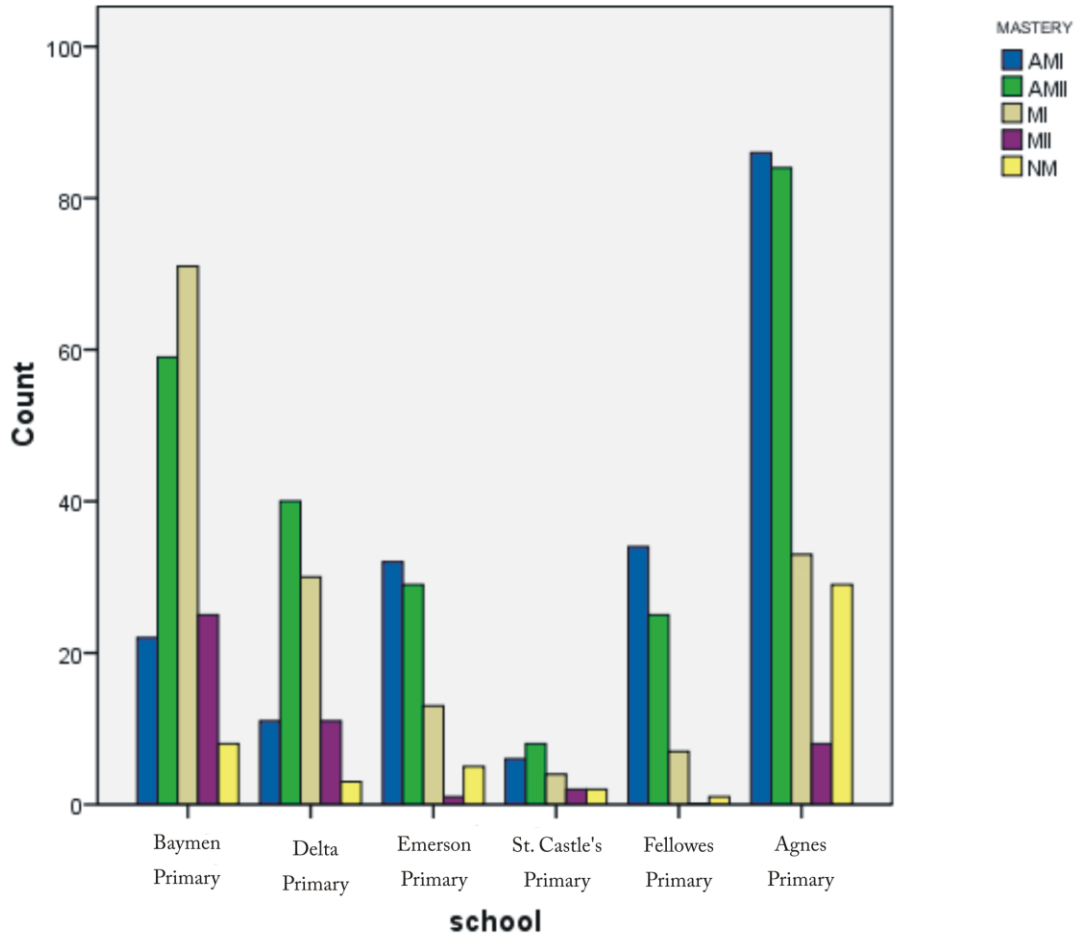
Table 9 highlights the mean sub-test percentage scores for six components evaluated for Standard II in 2008 - 2009. All schools achieved benchmark for Listening Comprehension except for Emerson Primary School with 57 percent. Baymen Primary School and St. Castle's Primary School performed at the Mastery II level for Listening Comprehension as they had a mean percentage score of 80 percent and 83 percent respectively.

All six schools performed at the Mastery II level for Phonemic Awareness with Fellowes Primary School having the highest percentage score of 93 percent. Language Structure had the least percentage scores of all components of the CRSAT. Only Baymen Primary School achieved benchmark with 66 percent for Language Structure. Emerson Primary School had the lowest score of 38 percent for this category.

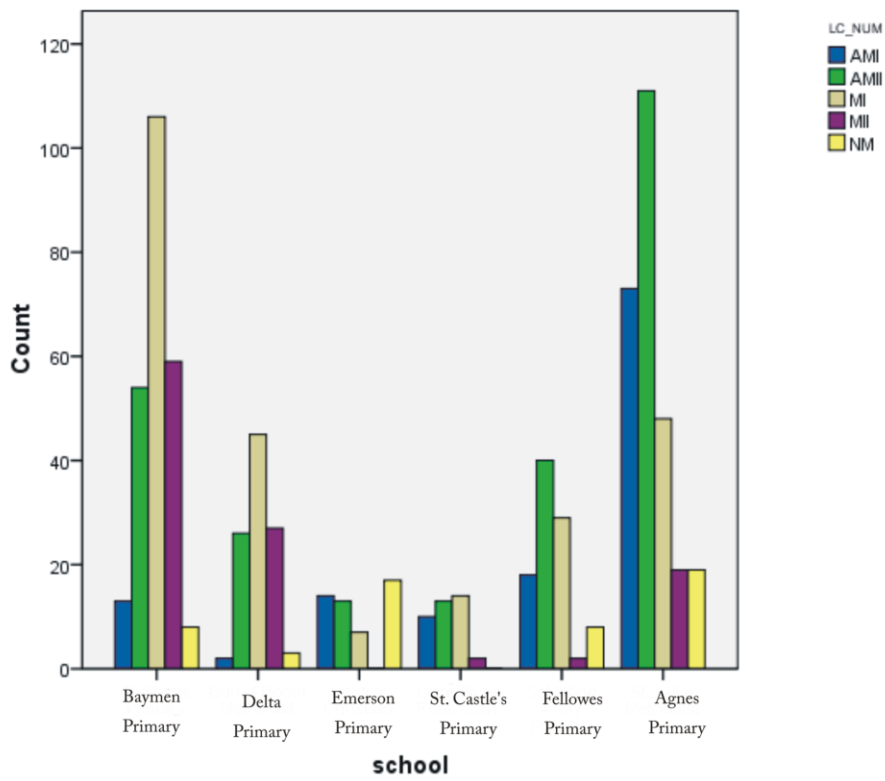
All schools achieved the benchmark for Reading Comprehension and Agnes Primary School had the highest percentage score of 72 percent followed by Baymen Primary School and Emerson Primary School who both had 69 percent. Besides Phonemic Awareness, Mastery II level was achieved for Picture-Word Recognition for all schools.

Graphs 11 – 16 below illustrate an ordinal ranking of the CRSAT levels of NM, AMI, AMII, MI and MII in each of the C-CETT schools from 2003 - 2004 to 2008 - 2009:

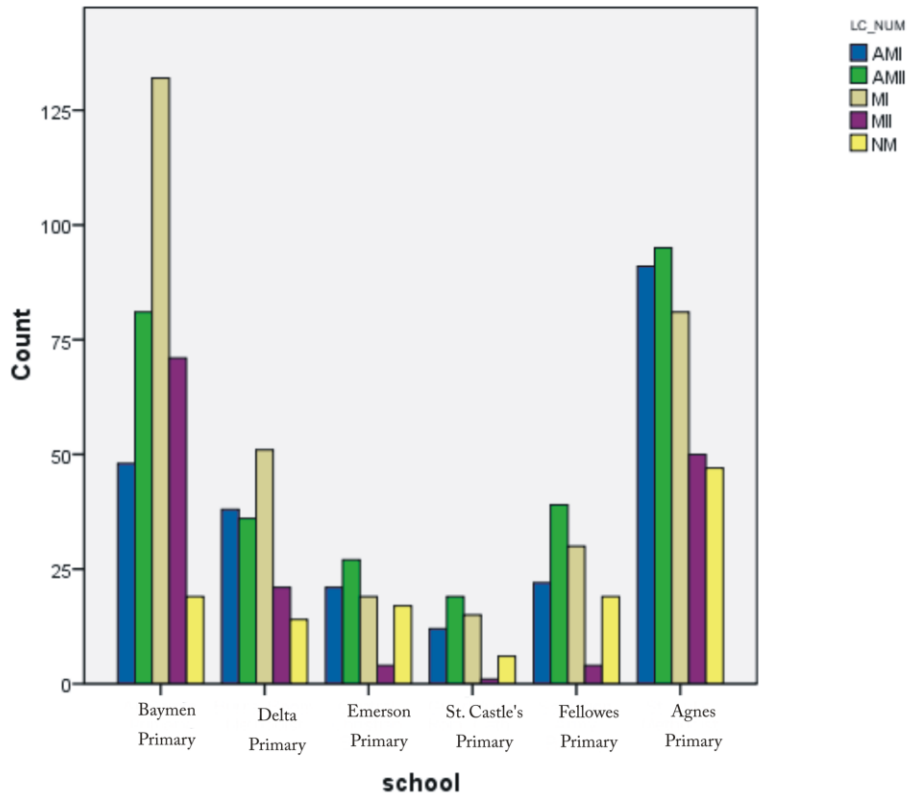
Graph 11: Performance of C-CETT Schools by Mastery Level, 2003 - 2004



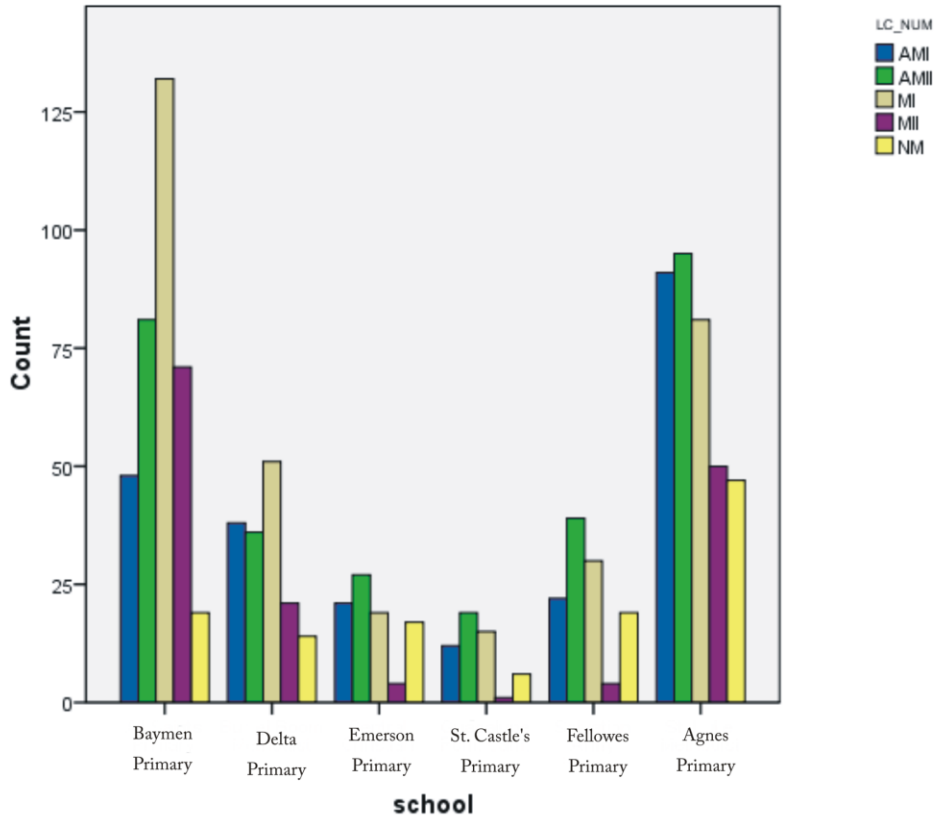
Graph 12: Performance of C-CETT Schools by Mastery Level, 2004 - 2005



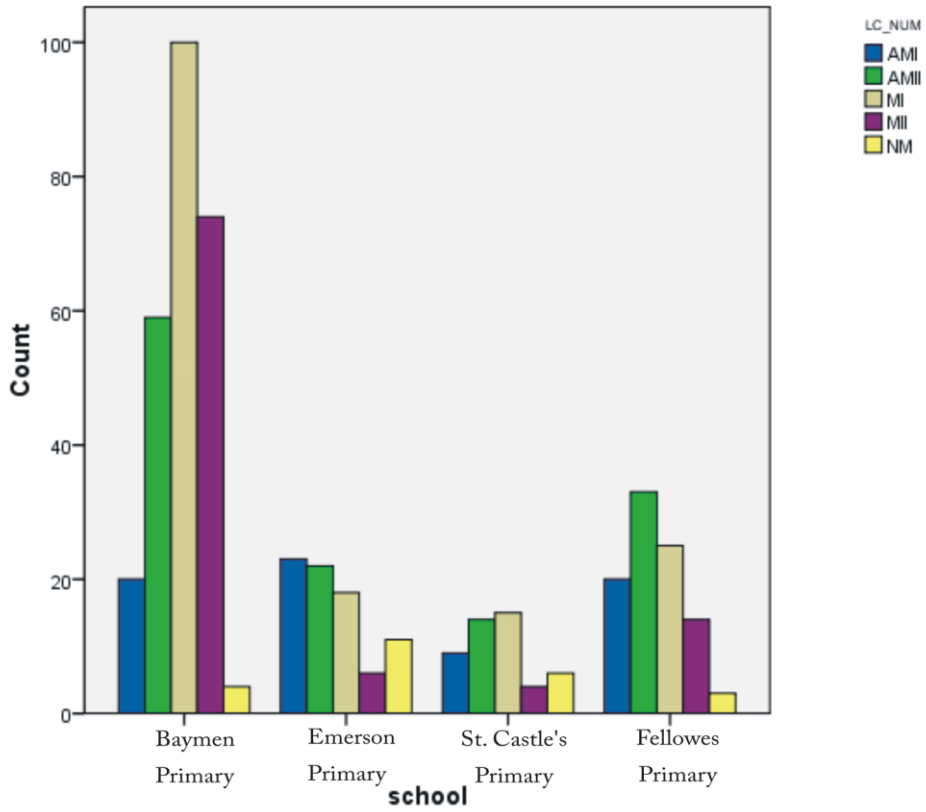
Graph 13: Performance of C-CETT Schools by Mastery Level, 2005 - 2006



Graph14: Performance of C-CETT Schools by Mastery Level, 2006 - 2007

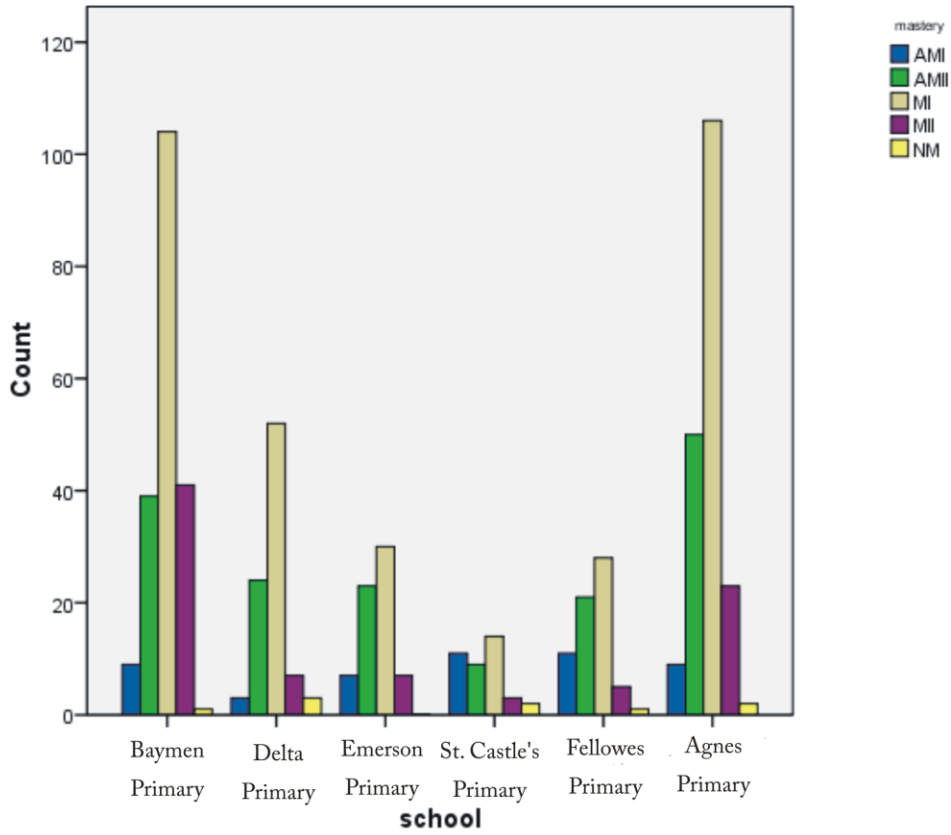


Graph 15: Performance of C-CETT Schools by Mastery Level, 2007 - 2008



****Missing data for Delta Primary School and Agnes Primary School.**

Graph16: Performance of C-CETT Schools by Mastery Level, 2008 - 2009



In tables 10 – 27 below, mastery levels, categorized by gender, are highlighted for Infant II, Standard I, and Standard II for each C-CETT school in 2008 - 2009.

Table 10: Mastery Levels by Gender for Baymen Primary School Infant II, 2008 - 2009

	Non - Mastery (0-13)	Approaching Mastery I (14-19)	Approaching Mastery II (20-26)	Mastery I (27-33)	Mastery II (34-40)
All	2.3%	4.7%	32.6%	34.9%	25.6%
Female	4.0%	0.0%	36.0%	32.0%	28.0%
Male	0.0%	11.1%	27.8%	38.9%	22.2%

In Infant II for Baymen Primary School, 61.1 percent of boys were operating at MI and MII, while for girls, the percentage was 60 percent. There was a difference of 8.2 percent between boys and girls who performed at the AMII level. Overall, there were only 7 percent of students operating at the NM and AMI levels.

Table 11: Mastery Levels by Gender for Baymen Primary School Standard I, 2008 - 2009

	Non - Mastery (0-13)	Approaching Mastery I (14-19)	Approaching Mastery II (20-26)	Mastery I (27-33)	Mastery II (34-40)
All	0.0%	9.6%	20.5%	50.7%	19.2%
Female	0.0%	2.2%	13.3%	66.7%	17.8%
Male	0.0%	21.4%	32.1%	25.0%	21.4%

In table 11 for Standard I of Baymen Primary School, only 9.6 percent of both boys and girls were at AMI level. There was a significant difference between boys and girls at the MI level as 66.7 percent of girls achieved MI as opposed to 25 percent for boys. However, 21.4 percent

of boys were operating at MII level as compared to 17.8 percent of girls. Most overall percentage for this grade was at the MI level.

Table 12: Mastery Levels by Gender for Baymen Primary School Standard II, 2008 - 2009

	Non - Mastery (0-13)	Approaching Mastery I (14-19)	Approaching Mastery II (20-26)	Mastery I (27-33)	Mastery II (34-40)
All	0.0%	0.0%	12.8%	66.7%	20.5%
Female	0.0%	0.0%	9.3%	60.5%	30.2%
Male	0.0%	0.0%	17.1%	74.3%	8.6%

In Standard II, the most overall percentage for performance was also at the MI level (66.7 percent) followed by MII level (20.5 percent). Boys performance was significant at the MI level with 74.3% as compared to girls. There were no students at-risk in this grade.

Table 13: Mastery Levels by Gender for Delta Primary School Infant II, 2008 - 2009

	Non - Mastery (0-13)	Approaching Mastery I (14-19)	Approaching Mastery II (20-26)	Mastery I (27-33)	Mastery II (34-40)
All	4.2%	4.2%	16.7%	62.5%	12.5%
Female	0.0%	0.0%	18.8%	68.8%	12.5%
Male	12.5%	12.5%	12.5%	50.0%	12.5%

As for the Infant II class for Delta Primary School in 2008 - 2009, most students performed at the MI level (62.5 percent). There was not a significant difference between boys and girls in this category. There were no girls that were At-Risk in this grade, however, the boys At-Risk totaled 25%.

Table 14: Mastery Levels by Gender for Delta Primary School Standard I, 2008 - 2009

	Non - Mastery (0-13)	Approaching Mastery I (14-19)	Approaching Mastery II (20-26)	Mastery I (27-33)	Mastery II (34-40)
All	4.5%	4.5%	31.8%	52.3%	6.8%
Female	4.5%	4.5%	22.7%	54.5%	13.6%
Male	4.5%	4.5%	40.9%	50.0%	0.0%

In Standard I at Delta Primary School, 40 percent of the boys were operating at the AMII level as opposed to 22.7 percent of girls. Fifty-nine percent of the students achieved MI and MII while 9 percent were below the benchmark at the NM and AMI levels.

Table 15: Mastery Levels by Gender for Delta Primary School Standard II, 2008 - 2009

	Non - Mastery (0-13)	Approaching Mastery I (14-19)	Approaching Mastery II (20-26)	Mastery I (27-33)	Mastery II (34-40)
All	0.0%	0.0%	28.6%	66.7%	4.8%
Female	0.0%	0.0%	8.3%	83.3%	8.3%
Male	0.0%	0.0%	55.6%	44.4%	0.0%

In Standard II at Delta Primary School, 71.5 percent of the students were operating at MI and MII levels. There were no At-Risk students in this class. Boys accounted for 55.6 percent of those performing at the AMII level in comparison to 8.3% of girls.

Table 16: Mastery Levels by Gender for Emerson Primary School Infant II, 2008 - 2009

	Non - Mastery (0-13)	Approaching Mastery I (14-19)	Approaching Mastery II (20-26)	Mastery I (27-33)	Mastery II (34-40)
All	0.0%	9.1%	45.5%	31.8%	13.6%
Female	0.0%	6.7%	40.0%	46.7%	6.7%
Male	0.0%	14.3%	57.1%	0.0%	28.6%

At Emerson Primary School, there were 45.5 percent of students performing at the AMI level in Infant II. Only 9.1 percent were at the AMI level and a cumulative percentage of 45.4 percent performing at MI and MII. Boys at MII level equaled 28.6 percent as opposed to 6.7 percent of girls.

Table 17: Mastery Levels by Gender for Emerson Primary School Standard I, 2008 - 2009

	Non - Mastery (0-13)	Approaching Mastery I (14-19)	Approaching Mastery II (20-26)	Mastery I (27-33)	Mastery II (34-40)
All	0.0%	4.5%	27.3%	50.0%	18.2%
Female	0.0%	0.0%	20.0%	60.0%	20.0%
Male	0.0%	8.3%	33.3%	41.7%	16.7%

In Standard I, most students were operating at the Mastery 1 level in 2008 - 2009 (50 percent) – 60 percent of which were girls and 41.7% of which were boys. There was only 4.5% of all students operating at the AMI level and 27.3 percent operating at the AMII level.

Table 18: Mastery Levels by Gender for Emerson Primary School Standard II, 2008 - 2009

	Non - Mastery (0-13)	Approaching Mastery I (14-19)	Approaching Mastery II (20-26)	Mastery I (27-33)	Mastery II (34-40)
All	0.0%	17.4%	30.4%	52.2%	0.0%
Female	0.0%	14.3%	28.6%	57.1%	0.0%
Male	0.0%	22.2%	33.3%	44.4%	0.0%

Most students of Standard II were also within the Mastery I level. There was not a significant difference between students at the AMII level. No students were at the NM level and only 17.4% were at the AMI level.

Table 19: Mastery Levels by Gender for St. Castle’s Primary School Infant II, 2008 - 2009

	Non - Mastery (0-13)	Approaching Mastery I (14-19)	Approaching Mastery II (20-26)	Mastery I (27-33)	Mastery II (34-40)
All	0.0%	66.7%	16.7%	8.3%	8.3%
Female	0.0%	50.0%	25.0%	25.0%	0.0%
Male	0.0%	75.0%	12.5%	0.0%	12.5%

At St. Castle’s Primary School, all students were performing at approaching mastery level and above in the year 2008 – 2009. As presented on the table above, 66.7 percent were at AMI level. Cumulatively, only 16.6 percent performed at that MI and MII levels. Twenty-five percent of those at the AMII level were girls while on 12.5 percent were boys.

Table 20: Mastery Levels by Gender for St. Castle’s Primary School Standard I, 2008 - 2009

	Non - Mastery (0-13)	Approaching Mastery I (14-19)	Approaching Mastery II (20-26)	Mastery I (27-33)	Mastery II (34-40)
All	14.3%	14.3%	50.0%	14.3%	7.1%
Female	14.3%	14.3%	57.1%	14.3%	0.0%
Male	14.3%	14.3%	42.9%	14.3%	14.3%

In Standard I, most students were performing at the AMII level. The total number of students below the benchmark was 28.6 percent as compared to 21.4 who were at MI and MII levels. Girls performed better than boys at the AMII level by 14.2 percent; however, both sexes had 14.3% operating at MI.

Table 21: Mastery Levels by Gender for St. Castle’s Primary School Standard II, 2008 - 2009

	Non - Mastery (0-13)	Approaching Mastery I (14-19)	Approaching Mastery II (20-26)	Mastery I (27-33)	Mastery II (34-40)
All	0.0%	7.7%	0.0%	84.6%	7.7%
Female	0.0%	0.0%	0.0%	85.7%	14.3%
Male	0.0%	16.7%	0.0%	83.3%	0.0%

In Standard II at St. Castle’s Primary School, most students performed at the MI level(84.6%). There were no students performing at the NM and AMI levels. Only 16.7 percent of boys were at the AMI level and 83.3 percent were at the MI level. All girls in this grade were operating at the MI and MII levels.

Table 22: Mastery Levels by Gender for Fellowes Primary School Infant II 2008 - 2009

	Non - Mastery (0-13)	Approaching Mastery I (14-19)	Approaching Mastery II (20-26)	Mastery I (27-33)	Mastery II (34-40)
All	0.0%	29.6%	51.9%	18.5%	0.0%
Female	0.0%	11.1%	66.7%	22.2%	0.0%
Male	0.0%	38.9%	44.4%	16.7%	0.0%

Most students were performing at the AMII level in Infant II at Fellowes Primary School (51.9 percent). Forty-four percent of boys were operating at the AMII level and 16.7 percent at MI. Nine point three percent more boys than girls were at the AMI level and 5.5 percent more girls than boys were at the MI level.

Table 23: Mastery Levels by Gender for Fellowes Primary School Standard I, 2008 - 2009

	Non - Mastery (0-13)	Approaching Mastery I (14-19)	Approaching Mastery II (20-26)	Mastery I (27-33)	Mastery II (34-40)
All	5.6%	16.7%	16.7%	38.9%	22.2%
Female	12.5%	0.0%	12.5%	62.5%	12.5%
Male	0.0%	30.0%	20.0%	20.0%	30.0%

In Standard I of Fellowes Primary School, most students performed at MI and MII levels (61.1 percent). There were 16.7 percent of students at the AMI and AMII levels respectively. There were no boys at the NM level as opposed to girls (12.5 percent).

Table 24: Mastery Levels by Gender for Fellowes Primary School Standard II, 2008 - 2009

	Non - Mastery (0-13)	Approaching Mastery I (14-19)	Approaching Mastery II (20-26)	Mastery I (27-33)	Mastery II (34-40)
All	0.0%	0.0%	19.0%	76.2%	4.8%
Female	0.0%	0.0%	14.3%	85.7%	0.0%
Male	0.0%	0.0%	21.4%	71.4%	7.1%

All students in Standard II at Fellowes Primary School were operating at AMII and above. Most students were at the MI level (76.2 percent). Females accounted for 85.7 percent of students at MI, while for boys 78.5 percent were at MI and MII levels.

Table 25: Mastery Levels by Gender for Agnes Primary School Infant II, 2008 - 2009

	Non - Mastery (0-13)	Approaching Mastery I (14-19)	Approaching Mastery II (20-26)	Mastery I (27-33)	Mastery II (34-40)
All	0.0%	12.0%	36.0%	40.0%	12.0%
Female	0.0%	7.1%	28.6%	57.1%	7.1%
Male	0.0%	18.2%	45.5%	18.2%	18.2%

At Agnes Primary School, there were no students at the NM level. Only 12 percent were at the AMI level and 36 percent at the AMII level. Forty-five point five percent of boys were at the AMII level as compared to 28.6 percent of girls. The total number of students at MI and MII levels was 52 percent.

Table 26: Mastery Levels by Gender for Agnes Primary School Standard I, 2008 - 2009

	Non - Mastery (0-13)	Approaching Mastery I (14-19)	Approaching Mastery II (20-26)	Mastery I (27-33)	Mastery II (34-40)
All	2.3%	6.9%	28.7%	43.7%	18.4%
Female	0.0%	3.9%	23.5%	52.9%	19.6%
Male	5.6%	11.1%	36.1%	30.6%	16.7%

Eighty-three point four percent of males were operating at AMII level and above and only 16.7 percent were at the NM and AMI levels. For girls, 90.8 percent were performing at AMII and above, which leaves a remainder of 9.2 percent for NM and AMI.

Table 27: Mastery Levels by Gender for Agnes Primary School Standard II, 2008 - 2009

	Non - Mastery (0-13)	Approaching Mastery I (14-19)	Approaching Mastery II (20-26)	Mastery I (27-33)	Mastery II (34-40)
All	0.0%	0.0%	20.5%	74.4%	5.1%
Female	0.0%	0.0%	18.9%	73.0%	8.1%
Male	0.0%	0.0%	22.0%	75.6%	2.4%

No students performed below the benchmark in Standard II at Agnes Primary School. Most students were operating at the Mastery I level (74.4 percent) and boys had more percentage than females at the MI level – a difference of 2.6 percent.

Interpretation and Discussion

The findings of this study are presented in the context of the research questions that were posed for the evaluation.

What is the level of competence of C-CETT teachers in the teaching of literacy?

Of the fourteen teachers that were observed using the Rating Scale for the Teaching of Literacy and Language (RSTLL), eleven achieved a rating of mastery, one received a rating as exemplary and two received ratings of inexperienced. From the data presented, 86 percent displayed strong knowledge and skills of language and literacy instruction.

The results of the RSTLL by dimensions demonstrated that Planning was a strong area of competence by teachers as 50 percent were at the mastery level and 43 percent produced exemplary work. This data is complemented by the anecdotal records of observers who noted that teachers were well prepared to teach and that there was adequate evidence of research done to prepare for lessons. One teacher also noted in the questionnaire that the use of the literacy block helped to improve planning for instruction. One teacher of excellence from 2007 stated it this way:

“Basically what the C-CETT program encourages teachers to do is to um... depart from the um... text based approach to literacy instruction and to embrace more of the literature based approach to literacy instruction not necessarily departing from entirely from the text based but to be able to strike a balance between the text and the literature based instruction but with much more emphasis on the literature based instruction that was not there before. So basically what the literature does in the classroom in the literacy classroom is to um... give children

authentic experiences that they can relate to. It's like bringing the world into their classroom, help them make connections between the things they speak, between the things they hear, between the things they read and write and that way as they do all that they do it in a fun filled environment with a lot of enjoyment and fun which also lends itself to the child centered approach. So with that, where I am at now at SJC, we encourage a lot of balanced approach to literacy instruction. And what I ... what I tell my student is that in the past we are used to using um... text books. It's not like you should use the text books but now teachers need to bring a lot of literature into the classroom, do a lot of read aloud with their children, encourage group instruction in the classroom, most importantly, teacher organizing an instructional routine. That would help improve student's performance in the classroom" (Teacher of Excellence, 2007) (see Appendix 7).

Another dimension of the RSTLL is Execution. Eighty-six percent of the teachers performed at Mastery level and above. Phonemic awareness and phonics instruction were the strong points. Teachers were using strategies like graphic organizers and concept maps to help students expand vocabulary knowledge. All teachers scored three and above in these areas. The techniques of many teachers varied as it related to the amount of time given to students to participate in activities. Some teachers were keen on listening not only to students' ability to read well but also their pronunciation of words and their ability to break words into syllables. One teacher observed received an excellent based on knowledge and application of the content to classroom practice. She incorporated centers time throughout the lesson and used guided reading instruction with one group, while others used the library.

In a documented report by one of the observed teachers who received a rating of mastery, the teacher shared that planning for the use of learning centers helped in the execution of effective lessons (see Appendix 7).

“The learning centers are put in my classroom because these enhance children's learning and socialization at the same time. Centers help your students to be more focus and responsible all at the same time. My centers are reading, writing, arts, listening, word building and game centers. After completion of class activities the students can go to these areas and work on activities from past and present lessons. This helps to widen their knowledge on the lessons taught and this make your work as a teacher a lot easier. The sight words wall is on the front wall beside the blackboard because these are words that they will learn from sight and not by sounding out. This wall helps the students to develop their writing and at the same time spell the words correctly. The vocabulary wall is placed in the area where the writing, listening, word building and library centers are because these words will help to widen their vocabularies and also help them to learn how to use different choice of words when writing and expressing themselves on papers.”

According to the RSTLL, 83 percent of the teachers were between Stages 3 and 4 when it came to having a print-rich environment that fostered a positive climate for learning. It was observed that most classroom settings were well-organized, bright and inviting. On average, however, children's writings, poems and songs were not on display in most classrooms which was one element encouraged through the C-CETT program.

Although most teachers noted that the materials and resources received from C-CETT helped them to become better teachers, based on the questionnaire and video-taped interviews, the classroom observation checklist revealed that the upkeep for specific equipment was

wanting. Moreover, some the materials/resources were kept in the principals' office. It must be noted then, that based on the RSTLL and anecdotal records, teachers who performed between stages 3 and 4 for classroom environment, were creative and attentive to the literacy-rich environment that was needed to meet the needs of their students. One grade one teacher, who was rated at Mastery overall, summed it up this way: "Transformation of your classroom brings forth changes in your students' behavior-it improves their attitudes towards work and fosters a more manageable environment."

Most teachers, 86 percent, were able to discuss their strengths and weaknesses and the needs of their students, indicating that they were performing at the mastery and exemplary levels in terms of being reflective. These reflective practitioners have a more sophisticated understanding of children's development towards literacy. They use all the important components of literacy instruction and integrate them well, within the language arts and across the content areas. The teachers cater to the individual needs of the students by using a variety of approaches. See Figure 1 for a typical example of the C-CETT teacher who achieved the overall rank of Exemplary.

Figure 1: A C-CETT Teacher Achieves Exemplary

In July 2007, Belizean teacher, Ms. Sarah Neal, received Grade 1 Teacher of the Year Award for her consistent and exceptional performance in literacy instruction in Infant II at Agnes Primary School. She was a young inexperienced teacher who started the C-CETT program in 2003. The reading specialist witnessed excellence in the students' performance in her Infant II class which has been a result of the success of her planning and execution of lesson plans. This teacher was also rated as Exemplary by a trained observer for the C-CETT evaluation, 2010.

With an average of 40 students in her classroom, Sarah worked consistently at implementing the C-CETT values and diligently with each child to get the best academic performance. In an effort to improve the overall class average from 51 percent to 75 percent in 2007, the teacher taught strategies in phonological awareness, language structure and reading comprehension. At the regional award ceremony, Sarah presented a typical literacy block instruction as such:

Before Recess: Comprehension using arts; Calendar Drill/Basic Instruction Drill; Phonemic Awareness Drill; Pre-Activity using Arts; Introduce the content vocabulary; Oral picture discussion; Question/answer; Post-activity – Whole Class/Guided Group.

She was able to successfully adapt strategies learnt and improve her teaching method and classroom environment to meet the needs of her students. Furthermore, she moved to Exemplary in the use of features for effective instruction, the development of oral language and the understanding of written language, the use of strategies for teaching comprehension, the teaching of fluency, writing, level of questioning and use of resources. Because of her outstanding ability to effectively teach reading, she has been used as a Resource Person at different Literacy Trainings for C-CETT.

Using arts and games in the classroom were successful tools that improved her ability to engage students in learning. She said, *"I gave my students guided practice reading in the form of games. The children, they really enjoyed the card games [in the reading corner]. I also used arts to improve comprehension skills. I took the art pieces that I created myself and used it boost the competition level [of the students]. I asked them questions pertaining to the art that they observed and from that the children expressed themselves, thought critically and were able to answer the questions...this really helped with the slower ones."*

Ms. Neal also attributed her success to being committed to utilizing the tools and resources of the program as she said, *"Improving literacy in the classroom is a very hard task, but with the many different teaching styles and strategies of the program [along] with commitment, it can be done...taking one child at a time can make a great difference in their lives."*

One teacher that had more than 20 years in teaching experience and two years in the C-CETT program was rated as inexperienced on the RSTLL. The other inexperienced teacher had accomplished a Bachelor's Degree in Primary Education and had four years' experience in the C-CETT program. It is important to note that teachers who may have experience in teaching, or may have advanced degrees, may not have the capacity to teach reading or be a teacher. The teacher that ranked exemplary, according to the RSTLL, had only 0-5 years in teaching experience, but was in the program for 4 years. This teacher's success is also supported by the fact that her class average was at or above 70 percent on the Caribbean Reading Standards Achievement Tests (CRSAT). For a teacher to receive a regional award of excellence, as did Sarah Neal in Figure 1, he/she must have been rated by the reading specialists as having reached Exemplary (level 4); and his/her class must have been at or above 70 percent on the CRSAT. Hence, it can be asserted that the training provided by the C-CETT program increased teachers' competence and development in teaching reading.

To what extent did the training offered by C-CETT prepare the teachers to teach Language Arts and Reading more effectively?

C-CETT teachers received training in different components of literacy and employed a range of instructional practices that promoted high student engagement. Teachers were positive about the training delivered at the cluster-levels and most thought that the professional development training done at the literacy faculties were effective. The literacy faculty was the term used to describe the coming together of all C-CETT teachers at their school to support each other in training and mentorship at a bi-monthly forum.

According to Darling-Hammond & Richardson (2001), professional development plays a critical role in effecting changes at the school level and more importantly in teachers' practices. In support of the literature, most teachers (seventy-three percent) noted that the constant monitoring and support of the reading specialist was valuable. The provision of content is not enough if teachers are to improve and effect change in the classroom. The literacy faculty also allowed these teachers to discuss observations and best practices, and engage in problem solving where necessary. In consistency with the literature, professional development is most meaningful when directed at a group of teachers from the same grade or department, as was the literacy faculty.

Teachers in the C-CETT program received continuous training over the duration of the program in five areas: phonological awareness and phonics instruction, fluency, vocabulary development, language structure and comprehension. Ninety-eight percent of all teachers considered the C-CETT program to be very effective in reading instruction using the above listed components in Language Arts. The majority of the teachers indicated that the training on phonological awareness was most useful to them. The teachers found that the application of knowledge on phonological awareness was easier to impart.

Phonological awareness instruction develops the awareness that words are composed of sounds and that those sounds can be manipulated. Phonics instruction helps students develop the knowledge that spoken sounds can be mapped onto printed letters or letter clusters. This knowledge is necessary for both reading and spelling. Teachers felt that training in all the areas was useful but that they needed further training in the areas of reading comprehension and vocabulary development. The principals, however, indicated that more time was needed on training for phonics instruction.

Consistent with what teachers gathered from the C-CETT training, the majority of C-CETT teachers provided instruction that developed students' phonological awareness. In their anecdotal record the trained observers commented that teachers' strengths were manifested in the sound knowledge of the skills of teaching reading that was demonstrated. The teachers demonstrated excellent knowledge and application of the skills of beginning reading instruction.

Effective teachers of reading believe that all children can learn to read and write (Blair, Rupley and Nichols, 2007). These teachers advocate for practices that promote the development of oral language and comprehension skills. These practices include participation in discussions; giving and following directions; listening to books read aloud; and learning games, songs, and poems. In the questionnaires, the teachers commented on some of these everyday activities that were done with their classes. Most teachers shared that doing read-aloud and sustained silent reading with the students everyday, was very beneficial to their teaching practice.

From the general observations, it can be asserted that the teachers were very knowledgeable about the content of their lesson plans and demonstrated preparedness during the time of instruction. The observers noted that there were sufficient activities for students that were interactive and appropriate and that the children participated in class, whether by reading aloud, or by forming groups to complete specific tasks. The teachers chose effective reading material and used captivating reading passages that held the students' interest. The observations, which correspond with the high percentage of teachers rated at the mastery level, highlighted that teachers were creative and possessed the skills necessary in teaching reading.

Apart from training in content, teachers in the program received training in instructional strategies that would have a positive impact on reading achievement. These strategies involved the use of a lesson cycle that has been associated with improved outcomes for students, using

such techniques as modeling, explicit language, scaffolding, and corrective feedback. These practices provide students with the instructional support they need to develop skills in an academically appropriate and supportive environment. To teach effectively, teachers should integrate assessment with instruction. The use of on-going formative evaluations and progress monitoring is critical for planning instruction that is responsive to individual students' needs and to ensure that teachers are aware of student progress toward benchmark goals. Teachers who provide differentiated instruction create a climate in which all students are motivated and engaged in learning tasks (Aguirre International, 2005).

Although the literature speaks to continuous assessment as a critical component of literacy instruction, fifty percent of the teachers shared that the training they received in action research was the least important. The principals confirmed this view as they shared that the training in action research was not successful and that this was attributed to the non-existent culture of research in schools. Sixty percent of the teachers, however, did indicate that they would like to receive further training in conducting action research and summative evaluations. In contrast, a majority of the teachers also indicated that they were effectively able to identify the needs of each student in their classes. This corresponds with the anecdotal record from the observers that the strengths of the teachers came out in their ability to group students according to their levels. Tasks were set appropriately for each learning level. It is critical to emphasize that an important outcome of assessment should be improved teaching and learning (Coyne & Harn, 2006). In support of this the principals noted that the pre and post tests used in diagnostic and summative evaluations effectively tracked the improvements in students' performance and highlighted the importance of reading assessment and the impact it has on reading achievement. This improved record-keeping and provided the teachers with a clear indication of what were the strengths and

weaknesses of the students. The assessment helped teachers to plan instruction that was focused on the needs of students. As with effective literacy instruction, the vast majority of C-CETT teachers were observed to use strategies to promote a positive learning environment for their students. An estimated 50 percent of the teachers said that they were continually finding better ways to teach as a result of the program. The observers recorded that teachers had good voice projection and rapport with the students. The students were allowed to engage actively in class discussions and they were expected to speak in Standard English. Some sessions, however, appeared to be more teacher-centered and observers noted that some teachers needed more training in classroom management skills. There was very little effort made to alter students' behavior.

The overall findings revealed that the training offered by the C-CETT program did effectively prepare teachers to a very large extent for the teaching of language arts and reading. This is supported by the regional honors and awards received by teachers and principals of excellence, (as shared by the principals), and the improvement of students' performance in the CRSAT scores.

How Many Students Achieved C-CETT Benchmarks?

One primary goal of the C-CETT Program was directed at getting students in the pilot program to read on or above their grade level. The achievement of this goal was measured in terms of the number of students that were performing at the mastery I and mastery II levels. At the end of 2004, one year into the intervention, none of the schools met the criteria of having 60 percent of the students reading at this level. Baymen Primary School and Delta Primary School students came close with an overall mean for Infant II of 51 and 52 percent respectively reading

at their appropriate level (graph 1). The standard I and Standard II reflected a similar trend with the standard I reflecting the lowest scores (graph 4 and graph 7). Overall performance at the end of year one was a reflection of the criteria used to select the pilot schools.

Of the six pilot schools, four were selected because they had a history of low performance and two were average (included to motivate the others and the reading specialist) based on National Examinations. The four schools that had a history of low performance were serving mainly students of low economic background. At the start of the project, absenteeism was high and there was an air of helplessness in these four schools in particular. These same schools had limited resources to work with initially, traditional classroom setting and limited parental involvement, which explains why teachers and principals' responses to parental involvement were contradictory. Teachers from these four schools, generally, did not get the level of parental involvement as was the case in the other two project schools. Notwithstanding the challenges students reading performance increased in all schools over the six years, with a drop in grades during 2004 – 2005 (graph 10).

Although Agnes Primary School started out as a low performing school, it made quantum leaps and by the end of 2009, the vast majority of their students were reading above the criteria established by C-CETT with the standard II students' averaging 72 percent in the area of comprehension. Note that the 2008 – 2009 results indicated that Agnes Primary School was performing just as well as Baymen Primary School and in some areas, such as comprehension, they were doing better, despite challenges such as lack of parental support and large class sizes. This was a major accomplishment for this school, given that students' scores collected

throughout the intervention continued to indicate that the teaching of comprehension persisted as an overall weakness.

The success of the program in Agnes Primary School can be attributed to changes in teachers teaching behaviors and their renewed commitment to students' learning. During the program, teachers in this school worked collaboratively to plan and share resources. They consistently used more engaging hands-on activities. Teachers read daily to students and modeled comprehension strategies. Students were given time to work independently on reading and writing activities. These teachers used data from diagnostic tests to plan interventions that addressed individual needs and consistently grouped the students for more effective instruction. All three teachers from Agnes Primary School developed overtime to reflect effective teaching skills. Two were at the mastery level, meaning they had strong content and pedagogy in literacy instruction and one was an exemplary teacher by the C-CETT standards (Rating Scale for Teachers of Literacy, see Figure 1).

Reading Comprehension, which had proven to be a challenge in 2003-2004, showed marked improvement in 2008 -2009 results. Standard I students within three of the schools achieved the benchmark for this particular component, 60 percent or above (Table 8). Similarly, the results indicated that the Standard II students were performing better with all students achieving C-CETT benchmark for reading comprehension (Table 9). In part, this achievement can be attributed to the teachers' improvement in teaching comprehension. Training emphasized the teaching of comprehension strategies as opposed to just giving children questions to answer after reading. Teachers noted comprehension as one of the areas they found most useful in training.

Notwithstanding, there was a marked difference between students' performance in the listening comprehension and reading comprehension that required them to read on their own and respond to multiple choice items and as well as open ended questions (Table 8 and 9). Based on the results, most of the students across the board did well on the listening comprehension from the onset, meaning that they did not have a problem with understanding the material when the passages and the questions were read to them. The only exception was Standard II class at Guadalupe RC during the 2003 – 2004 with a mean score of 46 percent for listening comprehension.

The problem with comprehension is twofold. Note that the results also indicated that students were struggling with phonics, especially vowels sounds. This in turn has a negative impact on their ability to read fluently. Research found that there is a positive relationship between fluent reading and comprehension. Rather than concentrating on constructing meaning during reading, students who have problems with decoding focus their cognitive abilities on trying to sound out the words (Allington, 2009).

The overall weakness in comprehension can also be attributed to the linguistic ability of the students as demonstrated by the scores in this area. According to Strickland and Riley-Ayers (2006), oral language development is a prerequisite of literacy development. Oral language skills provide students with the background needed to develop phonological awareness in the target language. Limited vocabulary, semantic and syntactic knowledge in the target language is obviously having a negative impact on reading comprehension in this case. The fact that the comprehension required inferences and higher level thinking and open ended written responses posed problems for those students who struggle with speaking, reading and writing in the second

language. Teachers, as in the case of Agnes Primary School (Standard II 2008 -2009), who read to children on a daily basis, gave students opportunities to discuss topics in groups, incorporated lots of writing in the classroom and encouraged students to work in centers independently had better results.

Similarly, the results for Fellowes Primary School also indicated major improvement in their approach to language and literacy instruction, specifically in Standard II. In 2003 – 2004, 65 percent of students in this grade were At-Risk performing at the Approaching Mastery I level, 21 percent at the Approaching Mastery II level, and 14 percent at the Mastery I and II levels. In 2008 – 2009, however, there were no students At-Risk and 81 percent were performing at Mastery I and II levels – an increase of 67 percent over the six year period. This can be attributed greatly to the teacher for this grade in 2008 - 2009 who had been with the program from its inception and who possessed an open and positive attitude to the program. Ms. Cabral was a Mastery teacher, according to her RSTLL assessment that is confirmed by the excellent performance of her students in the CRSAT (see Appendix 3).

Results for 2003 -2004 indicated that girls consistently performed better than the boys (graphs 2, 5 and 8). In Infant II, for example, 42 percent of the girls were performing at mastery I and above compared to 14 percent of the boys. Standard I reflected a similar pattern with 32 percent of the girls at mastery level and above compared to 18 percent of the boys. In Standard II, 40 percent of the girls were at mastery I and above as compared to 20 percent of the boys. With intervention and training in gender sensitive material, reading scores for boys increased dramatically. Nonetheless, the girls continued to perform better than the boys. While the data indicated that a larger percentage of the boys were reading at approaching mastery and above,

more girls were performing at the mastery I and mastery II level – getting the higher scores (Tables 16 through 17). There was one exception. The data revealed that Guadalupe RC School, for Standard I the boys had overall higher reading scores. Similarly, in Infant II, 12.5 percent of the boys were reading at mastery II level compared to 0 percent of the girls at mastery II level.

All schools experienced changes in their approach to literacy instruction and as a result more of the students were reading at their appropriate grade level. The resources given to the schools and the support and monitoring by the reading specialist had a significant impact in bringing about the desired changes.

To what extent did teachers use the materials and resources in the C-CETT classrooms effectively?

Based on responses from the teacher questionnaire, all teachers agreed that the material and resources provided by the C-CETT program were beneficial. The teachers noted that the materials helped them to become better teachers. The use of these materials and resources such as: listening centers, magnetic letters and word tiles, flip charts and stands, and more importantly, classroom libraries, puppets and other games/manipulative-helped the teachers to be more creative in the teaching of reading and language arts.

The C-CETT materials were clearly an important factor in the successful implementation of the project. All principals reported receiving materials from C-CETT, and expressed gratitude for them. These included training materials for teachers, texts and teaching materials for classroom use. This is emphasized by the anecdotal record of the observers who shared that teachers chose very good reading materials and used activities that captivated the students. The

principals shared that the materials and resources provided were one of the elements that had the strongest impact of success in literacy instruction. These materials contributed to the print rich environments of the C-CETT schools which research shows, help to aid effective literacy instruction.

Data from the school/classroom observation checklist showed that most of the materials and resources were kept in the classrooms. In two schools out of the six observed, the materials were kept in the principals' office but these were readily accessible by teachers. Most classrooms had libraries and reading corners that were being used; but sixty-seven percent of the schools had school libraries or teacher resource rooms that were not in use or functional. The checklist showed that the majority of the materials were present but some of the listening centers in the classrooms were not working properly.

The use of materials and resources is important in any balanced literacy instruction program as research suggests that exemplary teachers adapt instructional materials to balance whole class teaching with small group instruction. The principals were so cognizant of the impact that the resources had on students' performance that they noted the need for the Ministry of Education to support schools more in purchasing resources/materials, while sustaining the equipment provided by the C-CETT program.

What are the Principals' perceptions of the impact the C-CETT program had on their school?

The majority of the C-CETT schools chosen for the study were in poor and disadvantaged areas. Teachers indicated that parental involvement at these schools were minimal; however, in the

Focus Group Interview principals noted that the C-CETT program increased the level of parental involvement. Although seventy-nine percent of the respondents from the teacher's questionnaire had disagreed that the students' parents were greatly involved in their academia, the principals shared that parents' involvement increased by fifty percent.

This parental participation helped to change the culture of the school; more student discipline was observed and there was better communication between teachers and parents. Two principals shared that the impact of the C-CETT program helped to form parent-teacher associations at their schools. Parents saw the school "as a part of them" and the payment of school maintenance fees improved since more parents contributed. Some parents contributed in supplying materials for the C-CETT classes and there was an improvement in general classroom appearance and upkeep. The parents supported teachers in the activities sponsored by C-CETT such as the literacy fair. They were excited about the program because they saw the tangible changes in classroom appearance which were more child-friendly, inviting and engaging; and in the students' grades/performance.

Another aspect of the principals' perception of the program's success was gleaned when principals shared that the program helped to reinforce managements' role in raising the bar of excellence in teaching literacy. The program was a support system for principal who felt that they carried the burden of instructional leadership and monitoring and evaluation on their own. Mullican & Ainsworth (1979) purported that there is a strong correlation between leadership behavior and school performance. Northouse (2007, p.39) made the point that the effectiveness of leaders is linked to the leader's capacity to find solutions to difficult institutional problems.

In light of this, the principals shared that insufficient support from the Ministry of Education and managements was a limitation that hindered further success of the program. The

principals wanted to be more involved in the training that teachers received and thought the teachers should have been a part of all principal's training as well. The principals further shared that they were not as effective as they could have been in relaying information that they received in training to the teachers in their respective schools. The principals echo the research which shows that training for principals can improve leadership behaviors which in turn is directly correlated to students' performance.

Principals stated that the most useful impact of the C-CETT program was the training provided for principals and teachers. Principals were appreciative of the direct instruction provided in literacy components along with the coaching that teachers received. Another reason for this impact, as noted by principals, was that the training was continuous throughout the years. This supports the literature that shows that in addition of active participation, effective professional development takes place over a period of time with follow-up support at the school level to encourage classroom application.

Although changes in students are the desired outcome of the project, such changes evidently also served as a motivating factor in promoting continued successful implementation. The principals mentioned that the children showed mastery in concepts and did well on the Belize Junior Achievement Tests (BJAT) taken in grade four, and on the Primary School Examination (PSE) tests taken in grade eight. Both teachers and principals were motivated by the vast improvements made by students on the Caribbean Reading Standards Achievement pre and post tests. These results were tangible evidence to support the fact that all students can learn to read and write.

Some shortcomings that the principals recounted involved getting some of the teachers involved as some teachers did not take ownership of the program. The fact that the program was

introduced suddenly without proper sensitization may have aided to the lack of ownership on the part of the teachers. The principals also shared struggles in terms of teachers' attitudes towards training; some teachers who had many years of experience were resistant to change and kept traditional views of how to teach reading. Principals shared that some teachers also had the perception that the C-CETT program was a lot of "heavy" and "extra" work. Principals also noted that the high staff turnover of teachers caused a problem as C-CETT trained teachers were transferred so the training received did not profit the school over a period of time.

Overall, the principals were enthusiastic about the C-CETT program and shared positive perceptions of its success on their schools. There was increased parental involvement; improved discipline as children were more interested in learning; inviting and child-friendly classrooms; and greater participation overall of management, the community and other teachers and students from the school who were not directly involved in the C-CETT program. The principals shared that there was healthy competition between C-CETT schools and classes to perform better on the CRSAT and that the rewards, honors and travelling opportunities gained were encouraging and great incentives for sustained success.

Conclusions

The evaluation found that teachers in the C-CETT program were very successful in improving their skills in the teaching of reading and writing. Based on the standards and criteria established the program can be deemed a success. First, at the end of 2007, more than 70% of the children were reading at or above grade level. Teachers also showed a significant improvement based on the literacy competency rating scale for teachers. There are some concerns when it comes to the sustainability of the project in the schools. Many teachers have been trained through this program and are encouraged to continue professional development at the school

level by sharing best practices and supporting each other. Only one of the six schools reported that they continue to engage in this practice of collaborating and sharing best practices. There are also some concerns about the use and upkeep of equipment including libraries that were donated to the schools to support instructions. Schools are not fully utilizing these resources as they should now that the program has ended.

Positive Outcomes

- Teachers and principals were enthusiastic about the C-CETT, stating that it had changed their practice and that it had a positive impact on students' attitudes and learning.
- Teachers were motivated, proud to be in C-CETT, and many expressed gratitude for it.
- There was much informal "spread" of the project, as principals extended it to upper grades and teachers shared materials and strategies with colleagues in the upper grades as well, especially during the implementation phase
- Favorite topics of instruction mentioned by teachers included: comprehension, writing, phonological awareness and planning.
- Teachers particularly appreciated training that was focused on actual classroom practice, with opportunities for them to work collaboratively, practicing the new learning. They found modeled lessons by trainers especially helpful.
- Teachers and principals were appreciative of the C-CETT as it had transformed their classrooms and schools into child-friendly environments that encouraged learning.
- They reported positive changes in the attitude and learning of their students.

- The materials and resources provided played an important role in the C-CETT program; some C-CETT practices will be difficult to sustain without the provision of adequate materials.
- Suggestions were received for the expansion of the C-CETT to other grades, other subjects and other schools

Recommendations

To improve the quality of teachers there is a need for more efficient quality teacher training that is focused on the development of content and pedagogy. When working with diverse students, especially those at risk for reading, teacher quality has to be a high priority (Scola, 2002). Teacher training must incorporate programs that are designed to help teachers develop the skills needed to pinpoint the various needs that students have when learning. Ongoing assessment plays a critical role in helping teachers to discern the needs of the students. There is a dire need for better evaluation and monitoring of students' learning for the purpose of improving the quality of instruction. Teachers need to better understand the value of assessment and record keeping and how this links back to planning, instruction and accountability. Some teachers thought ongoing assessment simply meant more work. Part of the C-CETT initiative focused on developing diagnostic tools to enable teachers to identify and address students' weaknesses as it relates to decoding skills and reading comprehension. The annual pre test post mode utilized by the program helped to target struggling readers. This practice contributed to the improvement of reading performance. Training in the use of the diagnostic tools has to be incorporated into the teacher training program and into professional development sessions.

Given that language structure and comprehension are reflected as areas that continue to pose problems for students, there is need for ongoing support to teachers in this area to ensure that comprehension strategies are taught explicitly. With an estimated 50 percent of teachers in Belizean classrooms untrained, there is need for ongoing professional development. This is consistent with the literature review that indicated that professional development plays a critical role in effecting changes at the school level and more importantly in teachers' practices (Darling-Hammond & Richardson, 2001). Effective professional development does not simply provide teachers with subject specific content, but seeks to integrate the unique aspects of the school context and the way teachers learn and develop new skills. This is necessary if professional development is to have the desired impact on students' performance. Professional development must be ongoing and focus on whole school effort to change school culture to improve teaching and learning.

Research supports the fact that the quality of leadership provided by principals impacts school effectiveness. If principals' leadership skills determine the academic climate of their schools, investing in their professional development is a positive step in the right direction. Principals need training to foster the development of attitudes and skills needed to deal with the complexity of the job and the level of responsibilities that come with being an administrator. With training, principals are more likely to use strategies that promote motivation to increase both teachers and students' performance (Whitaker, 2001).

Based on the findings the following key recommendations are also important:

- Develop a training manual to safeguard against practices and methodologies of the program being abandoned when new staff replaces C-CETT teachers and principals.

- There is a need for improvement and targeted instruction for teachers in key literacy areas such as in the teaching of language structure, comprehension and writing.
- There is a need for more leadership opportunities for teachers who excel, e.g. establish the role of Literacy Coaches in schools.
- More training is necessary in action research; increased awareness in assessment based teaching to develop/encourage a culture of assessment for the purpose of improving learning.
- Management should limit the transfer of teachers.
- Put systems in place to help schools maintain and sustain equipment such as computers and other electronic devices that can be used to support learning.
- Develop literacy faculties at the school level to encourage teachers to share best practices and support each other in their professional development as they problem solve to find solutions to the myriads of problems they face within their respective schools.
- Provide English language classes for teachers.
- Increased parental involvement must be a direct objective for the success and sustainability of literacy in our schools.
- Provision of adequate resources, including quality children's literature, is important to the success and sustainability of literacy in our schools.

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Appendix 1 – Warrican and Leacock’s Rating Scale for Teacher

S. Joel Warrican

Instructions: Please rate the teacher on the given profiles.

Profiles	Rating			
	Little evidence of planning	Some evidence of planning but incoherent	Coherent plan, but can be improved	A Well articulated plan
PLANNING				
- Objectives (based on previous assessment / reflection)	1	2	3	4
- Content (good match for objectives; appropriate for level of the students)	1	2	3	4
- Activities for differentiated instruction (appropriate language and/or literacy strategies)	1	2	3	4
- Instructional materials (appropriate materials identified and/or prepared to meet various needs)	1	2	3	4
- Organisation for instruction (key features of language and/or literacy integrated in the language block)	1	2	3	4
- Assessment (appropriate diagnostic / formative activities planned)	1	2	3	4

Total for Planning: _____

Effective Training for Caribbean Teachers

APPENDIX H: RATING SCALE FOR TEACHERS*

Date: _____

Name of School: _____

Teacher's Name: _____

Grade: _____ No. of Students: _____

Time Lesson Started: _____ Time Lesson Ended: _____

Name of Evaluator: _____

COMMENTS:

Evaluator's Signature: _____

* Designed by S. Joel Warrican and Coreen J. Leacock (2006)

Effective Training for Caribbean Teachers

Profiles	Rating		
	Not clearly evident	Evident, but poorly executed	Very well executed
- Teaching in harmony with objectives	1	2	4
- Knowledge of content demonstrated	1	2	4
- Administering assessment appropriately – both formal & informal assessment	1	2	4
- Making decisions about content based on assessment outcomes – both formal & informal assessment	1	2	4
- Making instructional decisions based on assessment outcomes – both formal & informal assessment	1	2	4
- Integrating appropriate features of language and/or literacy ¹	1	2	4
- Using appropriate language and/or literacy strategies for various groups of learners	1	2	4

1. Listening, Speaking, Reading, Writing, Viewing, while covering skills such as grammar and spelling
 2. Phonological awareness, word recognition, fluency, vocabulary, comprehension

S. Joel Warrican

- Using materials appropriately with various groups of learners	1	2	3	4
- Allotting time adequately for various activities	1	2	3	4
- Using appropriate classroom management strategies	1	2	3	4

Total for Execution: _____

Profiles	Rating			
	Not clearly evident	Evident but not well demonstrated	Fairly well demonstrated but room for improvement	Very well demonstrated
CLASSROOM ENVIRONMENT				
- Fostering positive classroom climate	1	2	3	4
- Providing appropriate feedback	1	2	3	4
- Establishing a print-rich environment	1	2	3	4
- Exhibiting students' work	1	2	3	4
- Fostering positive teacher-student interaction	1	2	3	4

Total for Classroom Environment: _____

S. Joel Warrican

Explanation of Stages of Development

1. Beginner	The teacher is displaying very little knowledge and few skills of a language and literacy teacher. There is need for intensive training across all areas.
2 Inexperienced	The teacher is displaying some knowledge and skills of a language and literacy teacher, but these are weakly demonstrated. There is need for continued encouragement and further training across all areas.
3 Mastery	The teacher is displaying good knowledge and skills of a language and literacy teacher, but there is still room for improvement. There is a need for ongoing encouragement and support, along with training in targeted areas to foster further development of these skills.
4 Exemplary	The teacher is displaying very good knowledge and skill of a language and literacy teacher. Can be used as a resource person in his/her school to encourage and support his/her colleagues.

1. The teachers can be situated on the continuum after each observation session.
2. To gauge the teacher's overall progress over the entire observation period (e.g. the end of term, or the end of academic year), find the MEAN of all the Mean Ratings obtained during the period.

Effective Training for Caribbean Teachers

Profiles	Rating			
	Little evidence of reflection	Some evidence of reflection but incoherent	Good signs of reflection, but can be improved	Well thought out and articulated reflection
- Identifying strengths and weaknesses of the lesson	1	2	3	4
- Identifying students' strengths and needs	1	2	3	4
- Identifying personal strengths and needs	1	2	3	4
- Identifying appropriate follow up actions	1	2	3	4

Total for Reflection: _____

Overall Total Score (Sum of all Ratings) = _____
 Mean Rating (Sum ÷ 25) = _____
 Stage of Development Based on Mean Rating = _____
 (See descriptions below).

Appendix 2 – Teachers’ Questionnaire

Caribbean Centre for Excellence in Teacher Training
Belize
Teachers’ Questionnaire



Number - Code

		-			
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For Official Use Only

Thank you for participating in this questionnaire. Your responses will contribute to our overall assessment of the effectiveness of the C-CETT Program in Belize. Please answer this questionnaire honestly and frankly.

Section I

Place tick to indicate correct response.

1. Sex
 Male Female

2. Years as Teacher
 0-5 6-10 11-15 16-20 20 and above

3. Years as Teacher in the Caribbean CCET Program.
 1 2 3 4 5

4. Highest level of Education
 High School Diploma
 Associate Degree
 Bachelor’s Degree
 Master’s Degree
 Other (please specify)

5. Professional Education
 Level I
 Level II
 Associate in Primary Education
 Trained Teacher’s Diploma

6. Grade(s) you taught during program _____

Section II a

The following table contains the various types of training delivery that characterize CETT. After this table there are four questions. Thinking about the training delivery methods listed in the table, please answer the following questions.

Choose only one letter for each question please.

C-CETT	
Style of Training Delivery	
a	Cluster-level Workshops
b	School-level Workshops
c	Literacy Faculties
d	In-classroom coaching/demonstration visits
e	Independent Study, Teacher-initiated Professional Development: TCHR Resource Rooms

1. Which training delivery method do you consider to have been most important? _____
2. Which has been the second most important? _____
3. Which has been the third most important? _____
4. Which has been the least important? _____

Section II b

Following the table, there are four questions. Thinking of the different content areas reviewed throughout your CETT training; please answer the questions according to the instructions below.

Content areas	
a.	Creating a print-rich environment
b.	Oral language skills
c.	Oral comprehension
d.	Reading comprehension
e.	Teaching writing, or the production of texts
f.	Phonological awareness
g.	Teaching vocabulary
h.	Applied research in the classroom/intervention
i.	Promotion of student self-esteem
j.	Promotion of a democratic classroom

k.	Conducting process evaluations of reading and writing
l.	Conducting and using diagnostic evaluations
m.	Conducting and using summative evaluations
n.	Introducing project-based learning in my classroom
o.	Planning classes
p.	Differentiated instruction

a) Which content area has been most useful to you? *Please select only one.*

b) Besides the one selected for question, which other content areas do you consider to have been useful? *Please select all topics that apply:*

c) Which of the contents listed do you consider to have been least useful? *Please select all that apply:* _____

d) On which of the content areas listed above would you like to receive further training? *Please select all that apply* _____

Section III

Please indicate the degree to which you agree or disagree with each statement below by ticking the appropriate box to the right of each statement:

SA = Strongly Agree; A = Agree; UN = Uncertain; D = Disagree; SD = Strongly Disagree

Item	Statement	SA	A	UN	D	SD
1	I am continually finding better ways to teach reading and comprehension.					
2	I know all the necessary steps to teach reading effectively.					
3	I find it difficult to explain to students why reading is important					
4	The material and/or content I received at the workshops helped me become a better teacher.					
5	When students have difficulty understanding comprehension, I know how to help them understand it better					
6	I am able to identify the literacy needs of each of my students					
7	The student's parents were greatly involved in their academia, particularly as it relates to their literacy					

	development.					
8	I worked closely with the Caribbean CETT Reading Specialist and found her support and assistance very valuable.					
9	I received feedback from my Principal on a timely basis about my level of performance in the Program.					
10	I consider the Caribbean CETT Program to be very effective in reading instruction using the components in Language Arts.					

Section IV

Please indicate the degree to which you agree or disagree with each statement below by ticking the appropriate box to the right of each statement:

Statement	Every day or almost everyday	Once or twice a week	Once or twice a month	Never or almost never
Read aloud to the class				
Ask students to read aloud to the whole class				
Ask students to read aloud in small groups or pairs				
Ask students to read silently on their own				
Teach students strategies for decoding sounds and words				

Section IV

Provide concise feedback to the following questions.

Which (if any) aspects of the Caribbean CETT program have you found to be particularly beneficial?

What (if any) improvements to your teaching practice have been made as a result of participating in the Caribbean CETT program?

Which (if any) aspects of the program have you had difficulty with?

Appendix 3 – Videotaped In-Depth Interview Transcription

Sheree Baptist

Teacher, Fellowes Primary School Primary

Um, within the class room some of the things that I do to help my students to improve in literacy are basically just to create an environment that is welcoming and warming for the students. Also to create activities that are hands on that the students can not only hear when you're teaching but they can manipulate things and to give them things that they are interested in; things that they can relate to. So those are some of the things. Also giving them ample opportunity to read and reading to them every day to encourage them to read. So those are just a few things that we do in the classroom to get the children to read to improve literacy.

I've seen improvement in the children academically and also in their attitude towards school. I've found that students come to school early, they are in the classroom getting books, using some of the activities that we have prepared for them. Also academically they have improved in other subject areas, not only language arts. They have improved in maths, social studies, and science as well. So the program has really worked for me in all areas of the academic field. For my fellow peers I think that working together as a team getting together not only CETT teachers but as teachers on a staff. Working together you form like a support group so you can share materials and it becomes easier for you to work with the program. And that is just my main advice for us – working together as a team because team work helps to minimize the work load. Sharing all the information and the materials that you gather, you know, it helps you to not be stressed out trying to find materials that somebody else might have. So sharing is the key thing to it.

Sarah Neal

Teacher, Agnes Primary School

To improve literacy in the classroom, there are many different strategies and approaches that I use to improve the literacy in my classroom. Most of my teaching strategies are in form of games, guided practices, working centers, um... guided discussions. When I first received my students in infant 2, I immediately give them a pretest from the CETT reading program and from then I... I assess the children and from that I know where an which direction I need to take the children. Um with that I will group them according to their abilities and from grouping them I would take some the slower children and... work with them individually and doing that I would give them pho... lot of phonemic awareness drill. I gave them guided practice reading in the form of games. The children, they really enjoy the card working in the corners. Um... They work at their own pace and they have fun while they doing it while I have a set of children who works along with the teacher that is the guided reading. Another strategy that I have lately started from

a workshop that I... I had attended is using arts to improve comprehension skill. This is where I take my art pieces that I created myself... by myself and I use it to boost the comprehension level. I ask them questions pertaining to the art that they're observing and from that the children they really um... express themselves, they think critically, and they're able to really answer questions pertaining to the picture and that really helps especially with the slower children. That gives them a chance to express themselves and think critically. Improving literacy in the classroom is a very hard task but with many different teaching styles and strategies and commitment, it can be done. taking one child at a time will make a difference in the life... in their lives. The great reward comes when you see your child move from one level to the next and remember great teachers inspires the world.

Bessie Parker

Principal, Fellowes Primary School

In the C-CETT program, I had to work on the classroom and the environment. We had to transform the classrooms completely so that they were child friendly first of all; the children want to be in their classrooms which meant that we had to get parents involved, have them come in help us to paint. We had to change the furnitures. We had to do a lot of things with this program. And um... also... I also had to work on changing the teacher's attitude towards the program. The C-CETT involves a lot of hard work. Itssss... a challenging program therefore some of the teachers the minute they heard about it OOO I don't want to be in that, I don't want to be in that and therefore I had to work on the teachers changing their attitude and then I work on the children who became receptive to the program. They became so receptive that... after a while they didn't even want to stay outside and play. At break time instead of going outside they prefer to sit in the classroom taking out a book and read.

Man... that program has been a life savior for us because before I took over as principal we were having a lot of reading problem; our children could not read. They would be in standard 6 and could not read and I... it was like a... like a weight upon my shoulders and therefore when I was approached with when the um... the C-CETT program begun by Mrs. Bradley and asked if I would want my school to take part, man I gladly accepted because um... after she explained what I would be, would be doing and so on, I knew that it would benefit my children. And therefore I accepted gladly um... Since then we have seen a vast improvement in our children's reading. The... even the little ones in infant... infant one right now they are reading. They come up here in the office. They would say "teacher you want me to read for you?" You know, and then I feel so good because then I know that from infant 1 going into infant 2 and moving upward it means it would be smooth sailing for them and therefore the program has really, the C-CETT program has really been a great benefit to the Fellowes Primary School School.

Well my advice to them is just to stick in there. We know that we can't have the everything going a hundred percent but as principals we also need to stick together especially small school principals; we need to stick together. We can help each other because we can share ideas. Also, we need to try to be um... to... show a lot of love for our children, show them that love because um... sometimes they don't get that at home and our parents, when they come in to visit us, we need to make them feel welcome; let them realize that well... any problem that they have they can come to... you as the principal and you would be there to share with ant to help them with whatever way they can. That is what I try to do with my parents as much as possible.

Oprah Akinkoulie

Teacher, Baymen Primary School

As a professional, C-CETT has brought out the best in me. And that's the best way to put it because I remember that before C-CETT I had my Bachelor of Arts degree in English Language and I was in the primary classroom. I knew that my students were not performing but I just didn't know what to do. Then came the advent of the um... C-CETT reading program that, you know, opened my eyes to the things I could see. And since I joined or since I became apart of the C-CETT program, everyday there was something within me, there was quest, you know, I started seeking... solutions to more problems that, you know, came about in my classroom. So after a year or two, then I was working with Ms Bradley, she would come in, stay with me in my class, observe, evaluate my lessons. She facilitated workshops. She encouraged me to do a lot of research. We sat together in the CETT library trying to, you know, prefer solutions to problems as they came. Cause just when you think that you're solving one problem you notice another student. And that was how we went on back and forth until one day Ms Bradlet told me that "you know what Oprah you are doing so well and there is going to be a Masters degree in literacy development. Why don't you do that to seal the deal" you know. And it looked interesting so I decided to go and do my masters in literacy development. So working with C-CETT, doing the literacy program it was like a walk over for me because I was already used to um... approaches, instructional techniques in literacy development and all that. So going into the masters degree program and being in the classroom, I was more of a resource tool to colleagues in the classroom. And two years after the masters degree, I crossed over to SJC and now I'm in the primary education department and basically the courses I teach... I teach the foundations of literacy course methods for teaching language arts reading in the multilingual classroom and I have worked closely with Denise since I took on the next job. So professionally, C-CETT has helped me from ground zero... ha ha if I may use that term... from ground zero to probably like... I don't know what to... but I'm... I see myself up there now. Basically what the C-CETT program encourages teachers to do is to um... depart from the um... text based approach to literacy instruction and to embrace more of the literature based approach to literacy instruction not necessarily departing from entirely from the text based but to be able to strike a balance

between the text and the literature based instruction but with much more emphasis on the literature based instruction that was not there before. So basically what the literature does in the classroom in the literacy classroom is to um... give children authentic experiences that they can relate to. It's like bringing the world into their classroom, help them make connections between the things they speak, between the things they hear, between the things they read and write and that way as they do all that they do it in a fun filled environment with a lot of enjoyment and fun which also lends itself to the child centered approach. So with that, where I am at now at SJC, we encourage a lot of balanced approach to literacy instruction. And what I ... what I tell my student is that in the past we are used to using um... text books. It's not like you should use the text books but now teachers need to bring a lot of literature into the classroom, do a lot of read aloud with their children, encourage group instruction in the classroom, most importantly, teacher organizing an instructional routine. That would help improve student's performance in the classroom.

You have to be determined to succeed. You have to be um... you must have student success at the center of what you do in the classroom. It's a lot of work I must confess. It's like you don't have any life because when you leave the classroom you are thinking about the students. You are thinking about strategies to use for your next class on probably Monday morning or Tuesday morning but my advice to them is that they stand to gain a lot being a part of CETT. You know, from my own experience, these days I have people calling me, my brothers call me from Nigeriam, friends call me from the States seeking advice on how to help their children that are struggling readers. I have colleagues right here in Belize who call me. I have parents that I left behind who still call me to find out that there is a problem with this child Miss Toyin. I know you did it when this child was in your classroom. What can we do? And I want my colleagues to know that at the end of the day, what matters is the child. I mean these children they're our future and we cannot afford to fail them. So I'm encouraging teachers... what I benefited from CETT, I would never have gained from the four walls of an institution. The experience, the practice, the everything, has made me what I am today and I must give that credit to CETT. So I am encouraging my colleagues out there to um... develop the positive attitude toward CETT methodology and have some kind of enthusiasm towards helping the children in the CETT classroom and children all over the school to succeed. And I know that sky is not a limit it is only a stepping board for our children in Belize.

Jaime Crawford

Vice Principal, Baymen Primary School

For here, there are several things that's here at Baymen Primary School. We try work with the teachers and students and I would say the training. We had continuous training sessions with the teachers whereby we had to um... em... train them or... give them support so that they would be

able to deliver quality teaching in their classroom. And also we have the... the constant monitoring and supervision of teachers. As an administrator, I work diligently with the teachers helping them... it's not only supervising but assisting them in areas that they really need to teach language arts in their classroom. Well the students we monitor their... their learning through assessments. They would um... find out... we would monitor them by doing some assessment em... using diagnostic test to see their level of comprehension, their level of phonics, and then from there we move on. And the children are actively involved in the classroom. They... There we use an integrated approach where we use the student experiences which we found were very meaningful to them. And they enjoyed being in the classroom with their read alouds and all the strategies that teacher have implemented so far.

Question: What are some of the challenges or obstacles along the way?

I would start with the teacher's attitude, with the teacher's per... perspective towards the CETT program. At the beginning, the teachers needed the training and they... they had little knowledge of teaching language arts in the classroom. And eh... that was the major one we had to help them, assist them to see that this em... CETT reading program will em... it's a program that definitely will help students develop their skills in reading and writing. So although the teachers saw that it was um... more work as it is more work but at the end they were able to see the results. The school has benefited from that program in several ways. One, the teachers are more knowledgeable about the on the different methods and strategies in teaching language arts. They have been trained and the CETT office has offered training sessions in writing, reading, in comprehension and I can say that the teachers now have a knowledge on to how to deliver good quality teaching in their classroom. The entire school has also... we have benefited the different... the... the... the way how we teach the language arts has been um... extended to the other classes. So now, here at Baymen Primary School, it's not only infant 2 to standard 2, that it's not only the CETT classes but has been eh...the... the program has been extended from standard 3 up to standard 6. At least for the formats of writing the integrated plan using the literature based approach. So that... that has been extended.

Appendix 4 – School Observation Checklist

**Caribbean Centre for Excellence in Teacher Training
School/Classroom Environment/Observation Checklist**

Name of School	Teacher	
Grade.....	Years in Program.....	No. of Pupils
Date.....	Time (From/To).....	Subject.....

Tick the appropriate response in the box provided.

Section 1: Planning/Instruction

Item	Statement	YES	NO
1	All teachers planning include the literacy block.		
2	Only C-CETT teachers plan using the literacy block		
3	C-CETT teachers do not plan using the literacy block		
4	C-CETT teachers still engage in interventions/ action research		
5	Principals advocate that teachers do action researches.		

Section 2: Materials and Resources

Item	Statement	YES	NO
1	The materials and resources are kept in office.		
2	The materials and resources are kept in classrooms.		
3	The observer can see the listening centres in the classroom.		
4	Only CETT classrooms have libraries and reading corners.		
5	The teachers in CETT classrooms know about the CETT program or are fully aware of what the CETT program is.		

Section 3: School

Item	Statement	YES	NO
1	The school has a teacher resource centre.		
2	The school has a library that is updated, attractive and welcoming.		
3	The library and resource centre is used during the day.		
4	There is a functioning literacy faculty at the school.		
5	The literacy faculty meets often.		

Comments/Observations:

Appendix 5 – Principals’ Focus Group Interview (Transcription)

Principals’ Focus Group Interview

The Principals’ Focus Group Interview lasted for one hour and nineteen minutes and involved five principals from five of the six C-CETT Schools (see appendix _ for transcription).

The responses from the Focus group interview are outlined below:

Elements of the C-CETT Program that had the strongest impact

- Materials and resources provided by C-CETT
- Constant monitoring by the Research Specialist and Management
- Training of Principals and Teachers
- Literacy coaches for teachers
- The pre and post-test system tracked improvements in students’ performance

Reasons why the program was successful in the C-CETT schools

- Program was continuous throughout the year
- Program helped to reinforce management’s role in raising the bar of excellence in teaching literacy – the program was a support system for Principals

Elements of the C-CETT Program that had the least impact

- Action research
- Training at the cluster-level

Limitations that hindered the success of the program in the C-CETT Schools

- Some teachers who had many years of experience were resistant to change and kept traditional views of how to teach reading
- Procrastination by teachers resulted in late lesson planning

- Insufficient support from the Ministry of Education
- Some teachers taught that the C-CETT program had a heavy work load and were resistant to adapt
- Program was introduced abruptly and “suddenly dropped on the teachers’ laps” without proper sensitization

Shortcomings of the C-CETT program

- Principals wanted to be more involved in the training that the teachers received and thought that the teachers should have been a part of their training as well (cross-training)
- Principals noted that maybe they could have been more effective in relaying information they received in their training to teachers in their respective schools
- Some teachers who received training had left the school; hence the training received did not profit the school over a length of time
- More time needed to train teachers how to teach phonics
- Teachers did not take ownership of the program – it was seen as a project
- Lessons that teachers taught in the classrooms did not always correspond with their lesson plans
- Action research was not successful and this was attributed to the non-existent culture of research in schools (teachers did not find action research as a necessary component – it was seen more as a responsibility and not a need)

Benefits of the C-CETT program

- Increased parental involvement
- Improved discipline as children were more interested in learning
- Classrooms were more child-friendly, inviting and engaging
- Greater participation in the classroom as children found reading exciting
- Other students in the school who were not in the C-CETT program desired to be a part of the program – increased desire for learning literacy

- Parent-Teacher Association (PTA) meetings were more informed
- The honors, rewards, and travelling opportunities received by teachers and principals at the end of the year were very encouraging
- Healthy competition between C-CETT schools to improve students' performance
- Improvement in Belize Junior Achievement Test (BJAT) scores

Is the C-CETT program being sustained?

- High turnover of teachers
- Some equipment were not working and schools do not have sufficient funds to pay for repairs
- While only three C-CETT schools have functional literacy faculties, they are not meeting regularly
- Teachers use what they have learnt in doing their lesson plans

Recommendations

- Program should be introduced gradually and proper sensitization should be done before the school year begins
- Conduct consultations with principals and teachers before program commences
- Literacy fair should be done earlier in the school year and not in May, since teachers are preparing for exam
- Cross-training for principals and teachers
- Need for the Ministry to support the schools more in purchasing resources and maintaining the equipment provided by the C-CETT program.

Appendix 6 – Caribbean Reading Standards Achievement Test Information

Introduction

The Caribbean Reading Standards Achievement Test (CRSAT) is designed to measure achievement in reading for Caribbean pupils in grades 1 through 3 by assessing students' mastery of the standards and benchmarks/learning outcomes identified in the Draft Caribbean Standards for Reading and Writing: Grades 1-3 (2003).

The format of the CRSAT was proposed at the Barbados workshop of Caribbean educators specializing in testing and measurement from the Ministries of Education in Barbados, Belize, Guyana, Jamaica, St. Lucia, St. Vincent and the Grenadines and Trinidad and Tobago. The specifications for each grade level were developed by Joan Spencer of the Caribbean Centre of Excellence in Teacher Training and were aligned to the Draft Caribbean Standards for Reading and Writing: Grades 1-3. The Caribbean standards document was developed from the curriculum guides and standards documents submitted by the Barbados participants and the Bahamas.

Using the standards document as a guide, item writers were commissioned to develop all original items. In addition, they were given vocabulary lists taken from basal readers used in the Caribbean.

Types of Passages

The purpose of the CRSAT is to measure students' achievement in constructing meaning from a wide variety of texts. Passages for reading were either literary or informational texts. For grades 1-3, the ratio of literary to informational is 50:50. Below are examples of informational and literary text that may be represented on the CRSAT reading tests.

Every attempt was made to ensure that items were relevant to Caribbean pupils.

Forms of Informational Texts	Forms of Literary Texts
Content area text (e.g. social studies, science)	Short stories
Advertisements	Poems
Magazine and Newspaper articles	Fables and folk tales
	Plays

Biographies and autobiographies	
Consumer materials	
Tables and graphical presentation of text	

The CRSAT reading test includes two types of test items: multiple choice and short constructed response tasks.

Caribbean Reading Standards Achievement Test (CRSAT) Performance Level Descriptors – An Interpretation Guide for Teachers

This score interpretation guide is intended to assist teachers and principals to understand the report for each student, class and grade.

General Terms and Concepts

- **Raw Score:** This is the total number of correct items.

- **Mean:** the arithmetic average of a set of scores. It is found by adding all the scores in the distribution and dividing by the total number of scores. This has been calculated for each class and the grade within a school.

- **Performance Level Descriptor:** A short verbal statement describing each performance level in terms of what the student at the time of testing has demonstrated that he/she has learned to do.

- **Performance Level:** A range of scores that define a specific level of performance as articulated in the Performance Level Descriptors. The CRSAT has five performance levels: Mastery I & II (MI, MII), Approaching Mastery I & II (API, APII) and Non-Mastery (NM). This is based on the grade level expectations as established in the curriculum guides and the Caribbean Reading and Writing Standards (2003).

CRSAT Grade 1	
<p>Non-Mastery</p> <ul style="list-style-type: none"> ▪ Student does not meet the standards set for grade 1 ▪ Student achieved an overall raw score of 0 – 13 	<p>The student’s overall performance in reading a variety of first-grade materials and in understanding simple language structures does not meet the standard set for students in grade 1.</p> <p>Students functioning at this level have a limited understanding of what they read. They have difficulty in identifying basic sight words and word decoding skills may be limited. As a result, they may not be able to identify and understand new or unfamiliar words in a passage. They may not recall basic grade 1 high frequency (sight) words and there may be a tendency to focus on the literal or basic meaning of a passage. They may find it difficult to locate, recall, and use information to answer questions. They have difficulty with beginning rules of grammar, spelling and word usage.</p> <p>Students performing at this level will need continued systematic instruction at the grade 1 level in all or most areas of reading and language arts. They will need assistance and practise with reading a variety of materials, both fiction and nonfiction.</p>
<p>Approaching Mastery I</p> <ul style="list-style-type: none"> ▪ Student is still developing and is close to mastering the standards set for grade 1 ▪ Student achieved an overall raw score of 14 - 19 	<p>The student’s overall performance in reading a variety of first-grade materials is approaching standards for mastery. They are however, at the lower end of the scale and are therefore functioning closer to the level of Non-Mastery.</p> <p>Students functioning at this level have a limited understanding of what they read. They are able to identify some basic sight words and word decoding skills are limited. As a result, they may experience difficulty in understanding new or unfamiliar words in a passage. They may have difficulty recalling basic grade 1 high frequency (sight) words and there may be a tendency to focus on the literal or basic meaning of a passage. They may find it difficult to locate, recall, and use information to answer questions. They have difficulty with beginning rules of grammar, spelling and word usage.</p> <p>Students at this level will require reinforcement and distributed practice at the grade 1 level before beginning the early grade 2 level.</p>
<p>Approaching Mastery II</p>	<p>The student’s overall performance in reading a variety of first-grade materials is approaching standards for mastery. Students show evidence that they are close to meeting the standards for mastery. There is evidence that they are beginning to understand what they read and are applying word decoding skills although</p>

<ul style="list-style-type: none"> ▪ Student is still developing and is close to mastering the standards set for grade 1 ▪ Student achieved an overall raw score of 20 – 26 	<p>somewhat inconsistently. Some are able to think beyond the literal meaning of what they read. They locate, recall, and use information from reading to correctly answer questions. They often determine unfamiliar words they come across in a passage by dividing the word into syllables, recognizing word families, and/or considering how the word is used.</p> <p>The student’s overall performance in language arts is close to meeting the standard set for first grade. Students performing at this level may apply some beginning rules of grammar, punctuation, spelling, and word usage correctly, as appropriate for first grade. They may demonstrate an understanding of how to construct simple sentences using nouns, verbs, and adjectives, although control may be inconsistent.</p> <p>They will require reinforcement and distributed practice at the late grade 1, early grade 2 level.</p>
<p>Mastery I</p> <ul style="list-style-type: none"> ▪ Student meets or exceeds the standard set for students in first grade ▪ Student achieved an overall raw score of 27 - 33 	<p>The student’s overall performance in reading a variety of first-grade materials meets the standard set for students in the first grade.</p> <p>Students performing at this level have a clear understanding of what they read and are able to think beyond the literal meaning of the material. They are able to examine, interpret, and understand the meaning behind what is stated in writing. They effectively locate, recall, use, and think about information to answer questions. They determine unfamiliar words they read by applying strategies such as dividing the word into syllables, recognizing word families, and considering how the word is used.</p> <p>They appear to be ready for instructions at the grade 2 level.</p>
<p>Mastery II</p> <ul style="list-style-type: none"> ▪ Student meets or exceeds the standard set for students in first grade 	<p>The student’s overall performance in reading a variety of first-grade materials meets or exceeds the standard set for students in the first grade.</p> <p>Students performing at this level have a clear understanding of what they read and are able to think beyond the literal meaning of the material. They are able to examine, interpret, and understand the meaning behind what is stated in writing. They effectively locate, recall, use, and think about information to answer</p>

<ul style="list-style-type: none"> ▪ Student achieved an overall raw score of 34 - 40 	<p>questions. They determine unfamiliar words they read by applying strategies such as dividing the word into syllables, recognizing word families, and considering how the word is used.</p> <p>They appear to be ready for instructions at the grade 2 level. Some may be more advanced and will require enrichment and/or acceleration type activities in grade 2.</p>
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CRSAT Grade 2	
<p>Non-Mastery</p> <ul style="list-style-type: none"> ▪ Student does not meet the standards set for grade 2 ▪ Student achieved an overall raw score of 0 – 16 	<p>The student’s overall performance in reading a variety of second-grade materials and in understanding simple language structures does not meet the standard set for students in grade 2.</p> <p>Students functioning at this level have a limited understanding of what they read.</p> <p>They have difficulty in identifying basic sight words and word decoding skills may be limited. As a result, they may not be able to identify and understand new or unfamiliar words in a passage. They may not recall basic grade 2 or even grade 1 high frequency (sight) words and there may be a tendency to focus on the literal or basic meaning of a passage. They may find it difficult to locate, recall, and use information to answer questions. They have difficulty with beginning rules of grammar, spelling and word usage.</p> <p>Students performing at this level will need continued systematic instruction at the grade 1 or 2 level in all or most areas of reading and language. They will need assistance and practice with reading a variety of materials, both fiction and nonfiction. An informal reading inventory should be administered to assess their instructional reading level.</p>
<p>Approaching Mastery I</p> <ul style="list-style-type: none"> ▪ Student is still developing and is close to mastering the standards set 	<p>The student’s overall performance in reading a variety of second-grade materials is approaching standards for mastery. They are however, at the lower end of the scale and are therefore functioning closer to the level of Non-Mastery for the grade.</p> <p>Students functioning at this level have a limited understanding of what they read, and may have difficulty identifying basic grade 2 sight words. Their word decoding skills may be limited, and as a result, they may not be able to identify and understand new or unfamiliar words in a passage. They may not recall basic</p>

<p>for grade 2</p> <ul style="list-style-type: none"> ▪ Student achieved an overall raw score of 17 - 24 	<p>grade 2 or even grade 1 high frequency (sight) words and there may be a tendency to focus on the literal or basic meaning of a passage. They may find it difficult to locate, recall, and use information to answer questions. They have difficulty with beginning rules of grammar, spelling and word usage.</p> <p>Students performing at this level will need reinforcement and distributed practice initially at the grade 1 level and gradually moving up to beginning grade 2 level in all or most areas of reading and language. They will need assistance and practice with reading a variety of materials, both fiction and nonfiction. An informal reading inventory should be administered to assess their instructional reading level.</p>
<p>Approaching Mastery II</p> <ul style="list-style-type: none"> ▪ Student is still developing and is close to mastering the standards set for grade 2 ▪ Student achieved an overall raw score of 25 - 33 	<p>The student’s overall performance in reading a variety of second-grade materials is approaching standards for mastery. Students show evidence that they are close to meeting the standards for mastery. There is evidence that they are beginning to understand what they read and are applying word decoding skills although somewhat inconsistently. Some are able to think beyond the literal meaning of what they read. They locate, recall, and use information from reading to correctly answer questions. They often determine unfamiliar words they come across in a passage by dividing the word into syllables, recognizing word families, and/or considering how the word is used.</p> <p>The student’s overall performance in language arts is close to meetings the standard set for second grade. Students performing at this level may apply some beginning rules of grammar, punctuation, spelling, and word usage correctly, as appropriate for first grade. They may demonstrate an understanding of how to construct simple sentences using nouns, verbs, and adjectives, although control may be inconsistent.</p> <p>They will require reinforcement and distributed practice at the late grade 2 early grade 3 level. An informal reading inventory may be useful in determining the student’s instructional reading level.</p>
<p>Mastery I</p> <ul style="list-style-type: none"> ▪ Student meets or exceeds the standard set for students in 	<p>The student’s overall performance in reading a variety of second-grade materials meets the standard set for students in the second grade.</p> <p>Students performing at this level have a clear understanding of what they read and are able to think beyond the literal meaning of the material. They are able to</p>

<p>second grade</p> <ul style="list-style-type: none"> ▪ Student achieved an overall raw score of 34 - 42 	<p>examine, interpret, and understand the meaning behind what is stated in writing. They effectively locate, recall, use, and think about information to answer questions. They determine unfamiliar words they read by applying strategies such as dividing the word into syllables, recognizing word families, and considering how the word is used.</p> <p>They appear to be ready for instructions at the grade 3 level.</p>
<p>Mastery II</p> <ul style="list-style-type: none"> ▪ Student meets or exceeds the standard set for students in second grade ▪ Student achieved an overall raw score of 43 - 50 	<p>The student’s overall performance in reading a variety of second-grade materials meets or exceeds the standard set for students in the second grade.</p> <p>Students performing at this level have a clear understanding of what they read and are able to think beyond the literal meaning of the material. They are able to examine, interpret, and understand the meaning behind what is stated in writing. They effectively locate, recall, use, and think about information to answer questions. They determine unfamiliar words they read by applying strategies such as dividing the word into syllables, recognizing word families, and considering how the word is used.</p> <p>They appear to be ready for instructions at the grade 3 level. Some may be more advanced and will require enrichment and/or acceleration type activities in grade 3.</p>

CRSAT Grade 3	
<p>Non-Mastery</p> <ul style="list-style-type: none"> ▪ Student does not meet the standards set for grade 3 ▪ Student achieved an overall raw score of 0 – 20 	<p>The student’s overall performance in reading a variety of third-grade materials and in understanding simple language structures does not meet the standard set for students in grade 3.</p> <p>Students functioning at this level have a limited understanding of what they read. They have difficulty in identifying basic sight words and word decoding skills may be limited. As a result, they may not be able to identify and understand new or unfamiliar words in a passage. They may not recall basic grade 3, 2 or even grade 1 high frequency (sight) words and there may be a tendency to focus on the literal or basic meaning of a passage. They may find it difficult to locate, recall, and use information to answer questions. They have difficulty with beginning rules of grammar, spelling and word usage.</p> <p>Students performing at this level will need continued systematic instruction at the grade 1, 2 or 3 level in all or most areas of reading and language. They will need assistance and practice with reading a variety of materials, both fiction and nonfiction. An informal reading inventory should be administered to assess their instructional reading level.</p>
<p>Approaching Mastery I</p> <ul style="list-style-type: none"> ▪ Student is still developing and is close to mastering the standards set for grade 3 ▪ Student achieved an overall raw score of 21 - 29 	<p>The student’s overall performance in reading a variety of third-grade materials is approaching standards for mastery. They are however, at the lower end of the scale and are therefore functioning closer to the level of Non-Mastery for the grade.</p> <p>Students functioning at this level have a limited understanding of what they read. They have difficulty in identifying basic sight words at the grade 3 level and word decoding skills may be limited. As a result, they may not be able to identify and understand new or unfamiliar words in a grade 3 passage. They may not recall basic grades 3, 2 or even grade 1 high frequency (sight) words and there may be a tendency to focus on the literal or basic meaning of a passage. They may find it difficult to locate, recall, and use information to answer questions. They have difficulty with beginning rules of grammar, spelling and word usage.</p> <p>Students performing at this level will need reinforcement and distributed practice at the grade 2 level in all or most areas of reading and language. They will need assistance and practice with reading a variety of materials, both fiction and nonfiction at grade level. An informal reading inventory should be administered to assess their instructional reading level.</p>

<p>Approaching Mastery II</p> <ul style="list-style-type: none"> ▪ Student is still developing and is close to mastering the standards set for grade 3 ▪ Student achieved an overall raw score of 30 - 39 	<p>The student’s overall performance in reading a variety of third-grade materials is approaching standards for mastery. Students show evidence that they are close to meeting the standards for mastery. There is evidence that they are beginning to understand what they read and are applying word decoding skills although somewhat inconsistently. Some are able to think beyond the literal meaning of what they read. They locate, recall, and use information from reading to correctly answer questions. They often determine unfamiliar words they come across in a passage by dividing the word into syllables, recognizing word families, and/or considering how the word is used.</p> <p>The student’s overall performance in language arts is close to meetings the standard set for third grade. Students performing at this level may apply some beginning rules of grammar, punctuation, spelling, and word usage correctly, as appropriate for first grade. They may demonstrate an understanding of how to construct simple sentences using nouns, verbs, and adjectives, although control may be inconsistent.</p> <p>They will require reinforcement and distributed practice at the late grade 3 early grade 4 level. An informal reading inventory may be useful in determining the student’s instructional reading level.</p>
<p>Mastery I</p> <ul style="list-style-type: none"> ▪ Student meets or exceeds the standard set for students in third grade ▪ Student achieved an overall raw score of 40 - 50 	<p>The student’s overall performance in reading a variety of third-grade materials meets the standard set for students in the third grade.</p> <p>Students performing at this level have a clear understanding of what they read and are able to think beyond the literal meaning of the material. They are able to examine, interpret, and understand the meaning behind what is stated in writing. They effectively locate, recall, use, and think about information to answer questions. They determine unfamiliar words they read by applying strategies such as dividing the word into syllables, recognizing word families, and considering how the word is used.</p> <p>They appear to be ready for instructions at the grade 4 level.</p>
<p>Mastery II</p>	<p>The student’s overall performance in reading a variety of third-grade materials meets or exceeds the standard set for students in the third grade.</p>

<ul style="list-style-type: none">▪ Student meets or exceeds the standard set for students in third grade ▪ Student achieved an overall raw score of 51 - 60	<p>Students performing at this level have a clear understanding of what they read and are able to think beyond the literal meaning of the material. They are able to examine, interpret, and understand the meaning behind what is stated in writing. They effectively locate, recall, use, and think about information to answer questions. They determine unfamiliar words they read by applying strategies such as dividing the word into syllables, recognizing word families, and considering how the word is used.</p> <p>They appear to be ready for instructions at the grade 4 level. Some may be more advanced and will require enrichment and/or acceleration type activities in grade 4.</p>
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Appendix 7 – Teachers’ Perspectives

The Teacher’s Word

By: Samantha Charles—Baymen Primary School, Grade 1

University of Belize Cluster

I am a grade 1 teacher at Baymen Primary School and I enjoy working with the younger students. I have been using the thematic approach in the classroom ever since I was introduced into the CETT program. I enjoy using the thematic approach because it helps with getting students involved in the class and it creates an invitation for learning. Children of all ages enjoy learning in a comfortable environment which they can relate to. Some of the themes used in the classrooms are: Oceanography, Outer Space, Fairytale, Rainforest and many more pertaining to the topics taught in the classroom. I choose my topics to teach in the classroom by the theme chosen so as to enhance integration in the different subject areas. This has enabled me to plan more effectively in the class and focus on students’ learning around the themes. Because of the thematic approach, there is an increase in students’ involvement as well as performance in grades.

I have observed the interest in the classrooms when the themes change. The children look forward to learning more and they respond better in the class. I see reasons to believe that the environment around you makes a difference. An attractive classroom adds new life and the children respond positively in their work. Creating themes in my class is also fun for me as well as the students. This also helps me to focus on new ideas for planning.

When a theme is chosen, I have to think about all the students’ needs. A perfect example is having both female and male students who respond differently in the class. Having been to a workshop concerning gender sensitivity, I am fully aware of the needs of both genders and focus my thematic planning around this. By doing this, I have seen improvements in both genders and I try my best to address each in the classroom setting. I look forward to working with the thematic approach as well as with the students. I believe it helps with adding new meaning to a classroom and will help all students to appreciate learning.

The Teacher's Word

By: Danesha Barry—Delta Primary School, Grade 1

University of Belize Cluster

As the school year came to close in June 2007, I had the opportunity to reflect on what worked and did not work for my students. One of the most pressing issues was to motivate boys to read. I knew that I had to transform my class to make it more appealing to all children and at the same time, empower and inspire them so that when they walked in the classroom, you will hear awe and wonders in students and visitors. This I believed would motivate everyone.

In July, I was informed that the ceiling in my class would be repaired. I knew right away that was the stepping stone for transfixing my class. So I requested that the ceiling be painted sky blue. I then painted the clouds and the sun in one of the corners. Two weeks later a church group came in and requested to paint the walls. I requested that they painted the bottom with some waves since my theme was “Under the Sea”. I had an old, wooden, large wire roll that looked like a small round table. I thought it would be perfect for children to sit and relax at the beach while writing. So I bought a beach umbrella and created a writing center. I was fortunate to find sea turtles, and whales to put on top of the writing materials as well as writing papers.

I surfed the internet and dialogued with my colleagues for ideas to develop my theme and bingo! We found that we could use a pool for the reading area! To my surprise, I actually found a whale pool. I hung a slogan over it. “Come in we are having a whale of a time.” This was done in January.

I also posted positive reading slogans around the classroom to make it bright and rich and yes, even Mrs. Corrine Richards jumped in my pool where it was nice and cool to read! I have a reading slogan outside my class and a nursery rhyme. Yes, the whole school is interested in the Caribbean CETT program. The other classes are also doing great things.

Ms. Rose, the other grade 1 teacher, did not request help. I asked her if she would like for the other teachers to help her because her children would always be in my class during break and lunch. We had a literacy faculty meeting in her class and brainstormed a theme based on the posters she had up. We thought that a Fairyland would be perfect. This was the theme we used for our first literature day so we had the materials to create the castle and we used some bus seats we had in the storeroom. We also used empty Clorox bottles to create crowns. The total cost of transformation was \$8.00. This was done after classes over a period of two evenings. It was completed over the weekend of February 16th.

We enjoy what we do because our students are happy. At Delta Primary School, all of our C-CETT classrooms are transformed.

The Teacher's Word

Dacia Martinez—Agnes Primary School, Grade 1

University of Belize Cluster

My name is Ms. Dacia Martinez. I am a grade one teacher at Agnes Primary School in Belize City. My classroom consists of 13 boys and 20 girls. First of all, I divided my students into groups of six. I have four groups of six and one group of nine. This group of nine is the group I work with on a daily basis. After grouping the students, I view the available space and decided how I will share it equally into learning centers. I also looked at the availability of wall space because I need to know where the students' work will be on display, where the vocabulary and sight word walls will go, which are the most important and so on.

The learning centers are put in my classroom because these enhance children's learning and socialization at the same time. Centers help your students to be more focus and responsible all at the same time. My centers are reading, writing, arts, listening, word building and game centers. After completion of class activities the students can go to these areas and work on activities from past and present lessons. This helps to widen their knowledge on the lessons taught and this make your work as a teacher a lot easier. The sight words wall is on the front wall beside the blackboard because these are words that they will learn from sight and not by sounding out. This wall helps the students to develop their writing and at the same time spell the words correctly. The vocabulary wall is placed in the area where the writing, listening, word building and library centers are because these words will help to widen their vocabularies and also help them to learn how to use different choice of words when writing and expressing themselves on papers.

An attractive, unique, print rich and energetic classroom brings out the best in your students. Their attendance is more regular and they are more eager to learn. They want to be in the class at all times and protect whatever aids are made for them. It attracts other students to the class and even passersby who want to see what is happening on the inside. Transformation of your classroom brings forth changes in your students' behavior- it improves their attitudes towards work and fosters a more manageable environment.

My ideas that are presented to you come from within because I put myself in these students' shoe. I think about what I would want at their age and what is also fun and educational at the same time that will attract me more. Seeing or visualizing helps a lot in children's learning. Sometimes I would even surf the web and get ideas from other teachers and add my own twist to it. I am a person who loves creativity and that is why I am good at what I do and try to bring out the best in my little world of learning.

Last but not least, our students should be our number one priority and whenever they are happy, you are happy. Learning comes out in a healthy, clean and attractive environment because I have experienced it with my students and students from other classes. This makes me feel so great and I want to push at all times for the best, whenever it comes to my students.