## The Effects of Classroom Focused Improvement Process on Building Teacher Capacity for Diagnostic Decision-Making and Student Reading Achievement

by

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## **Table of Contents**

List of Tables	i
Abstract	ii
I. INTRODUCTION	1
Statement of the Problem	2
Hypothesis	2
Operational Definitions	2
II. REVIEW OF THE LITERATURE	5
Diagnostic Decision-Making	5
Teacher Reliance on Standardized Test Scores	7
Building Teacher Capacity	11
Summary	13
II. METHODS	15
Design	15
Participants	15
Instruments	16
Procedure	17
III. RESULTS	20
IV. DISCUSSION	24
Relation of the Study Results To the Literature	25
Implications for Reading Instruction	25
Threats to Validity	26
Suggestions for Future Research	28
References	29
Appendix A	31
Appendix B	33
Appendix C	35

# **List of Tables**

1.	Maryland State Assessment Reading Proficiency Levels for students	20
	in 3 <sup>rd</sup> grade in 2007, 4 <sup>th</sup> grade in 2008, and 5 <sup>th</sup> grade in 2009	
2.	Maryland State Assessment Reading Proficiency Levels for students in 3 <sup>rd</sup> grade in 2008 and 4 <sup>th</sup> grade in 2009	21
3.	Results of Teacher Survey, May 2009	21
4.	Responses to Teacher Survey	23

#### Abstract

The purpose of this study was to determine if a yearlong collaborative process, the Classroom Focused Improvement Process, would have a positive effect on elementary teachers' attitudes and abilities to diagnose and remediate student needs in reading instruction and reading achievement for students in grades 3, 4 and 5 on the Maryland State Assessment. This study was both descriptive and quasi-experimental. Descriptive data was collected through a teacher survey, and the quasi-experimental data was determined by comparing student reading scores on the Maryland State Assessment for two consecutive years. Achievement gains were not significant, but teachers' attitudes and capacity to diagnose student needs showed marked improvement. Research in the area of diagnostic reading instruction and the use of formative assessments should continue in order to assist those responsible for building teacher capacity in reading instruction and to determine its effect on student achievement over time.

#### CHAPTER I

#### **INTRODUCTION**

In the last decade reading instruction in the United States has taken an explicit approach and has been assessed using district and state mandated standardized tests. As a result, many teachers, especially those new to the profession, have not developed the diagnostic skills and strategies that can support the struggling reader or move the proficient reader to a higher level of understanding. Since the inception of the No Child Left Behind legislation in January, 2002, schools have also become more reliant on these standardized test scores and textbook programs to assess students' strengths and weaknesses in reading. The limited data provided from these high stakes assessments has a variety of consequences. The results can drive instruction throughout school systems, and they even have the power to label a child as below level or cause him to be referred to a special education program (Snow, Burns & Griffin, 1998). Sometimes the data are published and discussed at school improvement meetings long after the testing period, and teachers do not follow up on it for lack of understanding (Guskey, 2003). Many of the particular measures taken on standardized assessments tend to be lower level reading skills which focus on letter-sound symbols and word reading. Consequently, teachers continue to deliver lower level explicit skill instruction from scripted teacher manuals to satisfy the demands of the assessments (Ediger, 2003; Teale, 2008).

The consequences of the explicit approach and its over-emphasis on low-level skill instruction has brought about concerns by many educators that students are not instructed on how to access text using higher order thinking skills that are required for thoughtful, critical reading. The assessment of basic skills is data that are easy to collect, and most teachers are not compelled to construct alternative methods of assessment (Thomas, 2005). Emphasis on the

collection of data comprised of basic skills assessments has placed the focus of instruction at this lower level. School reliance on standardized test data has consequences as well. Most often the data arrives months after the test was administered and becomes irrelevant by the time it is used in the school improvement plan. When this data is used to group children for instruction, especially in the case of special education referrals, it can lead to inappropriate placement (Teale, 2008; Fiene & McMahon, 2007; Mokhtari, Rosemary & Edwards, 2007; Beswick, Willms & Sloat, 2005).

In an effort to understand how schools respond to the need for accountability while at the same time providing professional development to help teachers understand the implications of assessment, researchers such as Vaughn and Coleman (2004) have looked at models of staff development over the last 20 years to identify features associated with effective approaches to building teacher capacity. Several of these studies have looked at the effectiveness of a variety of mentoring approaches to improve reading instruction and assessment. Another study done by Capizzi and Fuchs (2005) assessed the effects of curriculum-based measurement with and without diagnostic feedback on instructional planning in reading. They found that teachers were able to diagnose learning needs more effectively using curriculum-based measurement with a diagnostic feedback system. Studies done by Pressley, Rankin and Yokoi (1995) at the National Research Center found that 88% of the teachers that supervisors determined to be highly effective in teaching reading used frequent diagnostic and formative assessments. This conclusion was also drawn by Fiene and McMahon in 2007, based on studies done in the late 1990's.

As a reading resource teacher, the researcher of this study noticed the need for teachers to develop diagnostic skills in order to provide appropriate differentiated instruction to their

struggling and advanced readers. Professional support materials and in-service opportunities were not being made available to teachers as they had been a decade ago. Teachers were often at a loss to understand the deficits their students were experiencing in reading. This researcher undertook this study to discover the extent of the problem, how it developed, and how to provide an intervention such as the Classroom Focused Improvement Process, to make a difference in teacher practice and student success.

#### **Statement of the Problem**

Many teachers who entered the profession in the last decade lack the diagnostic and prescriptive skills needed in the teaching of reading. The use of scripted instructional materials and district and state mandated assessments have led to the development of teacher weaknesses in diagnosing needs, providing differentiated instruction and promoting higher level thinking in students. This study seeks to explore the effects of the Classroom Focused Improvement Process on the development of teacher attitudes and practices in diagnostic reading instruction and its overall effect on student reading achievement.

## **Hypothesis**

Elementary reading teachers who participate in the Classroom Focused Improvement

Process will show a positive change in thought and diagnostic practices in teaching reading and
their students' reading comprehension will increase on the Maryland State Assessment.

#### **Operational Definitions**

Diagnostic instructional decision-making can be defined as the careful observation of student reading behaviors by the classroom teacher, and the skills to record and analyze those behaviors to determine the students' needs in order to provide appropriate instruction. For this

study a survey will be used to measure teacher attitude and capacity for developing diagnostic skills.

Change in teacher attitude can be defined as a response on the survey indicating a positive change in thought toward the use of diagnostic practices in teaching reading.

Student reading achievement will be measured by the movement of numbers of students to higher reading levels, such as from the basic level to the proficient level and from the proficient level to the advanced level on the Maryland State Assessment. The Maryland State Assessment was administered to 100 third, fourth and fifth grade students at Riviera Beach Elementary School in March of 2009.

The Classroom Focused Improvement Process is a weekly professional development process which aims to address school improvement at the grade group level and was developed at Towson University by Dr. Mike Hickey. The Classroom Focused Improvement Process is the intervention undertaken for this study at Riviera Beach Elementary School to address the need to develop teacher capacity through the analysis of weekly data, student work and formative assessments.

#### **CHAPTER II**

#### REVIEW OF THE LITERATURE

This review of the literature explores the impact that diagnostic decision-making has on the effectiveness of reading instruction, and the difficulties associated with the lack of teacher capacity to diagnose students' learning needs in the area of reading comprehension. The first part of the literature review provides an overview of the definition and importance of diagnostic decision-making in teaching reading. Section two discusses the difficulties associated with teacher reliance on district designed standardized test scores. Section three highlights current attempts to improve teacher capacity.

#### **Diagnostic Decision-Making**

Diagnostic teaching in reading is characterized as careful and continuous assessment of student performance for the purpose of monitoring student progress and to planning future learning activities. It is instruction in which the teacher's skill and student performance are fused into a single ongoing process that is crucial to each one's learning. The child learns to comprehend what he reads and the teacher learns what the child can do, and what he needs to be taught to achieve that goal. Diagnostic teaching also involves teacher motivation to carefully observe student reading behaviors and the skills to record and analyze these behaviors to determine student needs for follow-up lessons. Simply put, it is assessment of student needs and setting goals for further instruction (Fiene & McMahon, 2007).

The development of diagnostic skills allows the teacher greater and instant access to information about the student without having to wait for periodic standardized test data (Guskey, 2003). Diagnostic teaching enhances teacher self-efficacy and affords the teacher autonomy to advance students' reading success. Good diagnostic teaching can address reading difficulties,

possibly prevent retention for students reading below grade level, and prevent misdiagnosis of learning disabilities (Snow, Burns & Griffin, 1998).

National reforms in the last decade such as No Child Left Behind (NCLB) in the United States, have challenged the experienced teacher's autonomy and philosophy of teaching with demands for accountability. Teachers who have entered the profession since the NCLB Act of 2001 have been trained to adhere to results-oriented guidelines that meet the annual measurable requirements of No Child Left Behind. Adhering to the school's formal accountability processes has shifted teacher energy and professional development efforts away from professional expertise to raising students' test scores on standardized tests. This presents a tension, even for veteran teachers, between their ethical-professional identities and their desire to prove their competency to their supervisors and their supervisors' definition of their work (Day, Stobart, Sammons & Kington, 2006). These changes and those in the areas of technology and in the social structure of schools present a complex and challenging time for educators to take on the personal responsibility of independently learning how to become diagnostic and prescriptive in their teaching. The commitment to engage in ongoing professional development through study groups or mentoring is not readily welcomed by teachers who have been used to more traditional methods of professional development and have come to rely on scripted instructional materials (Vaughn & Coleman, 2004). However, teachers who understand their professional capabilities and feel successful with students in schools organized to support them are more likely to persevere in a profession that loses 20% of its new talent within the first 3 years (Romano & Gibson, 2006).

This area of professional development that deals with diagnostic teaching has not been researched in depth in the last decade. In the decades of the 1980's and 1990's there were

numerous studies of effective classroom decision-making and authentic assessment in reading (Pressley, Rankin & Yokoi, 1996). Currently, there are studies of professional learning communities, teacher motivation and teacher efficacy in student achievement, but few studies have been done on the development of teacher diagnostic skills for decision-making. Perhaps the research is limited because new teachers are not receiving training and mentoring in this area. A survey performed in 1999 showed that only half of the states required competence in assessment for licensure as a teacher (Guskey, 2003). Some researchers believe that in the first eight years of their careers teachers who persevere in the profession are motivated by their desire to help children become successful. They have higher levels of self-efficacy than teachers in mid to late career who often become disenchanted and less connected with student learning needs. Therefore, teachers need to believe that they can have a positive influence on student success in order to embrace any professional development in diagnostic techniques, whether it is provided by the district or not (Day et al., 2006).

#### **Teacher Reliance on Standardized Test Scores**

Since the implementation of the No Child Left Behind legislation, schools have turned to assessing reading with multiple choice test items in an effort to prepare students for high-stakes state-mandated tests. The variety of authentic responses to reading do not fit into the multiple choice limitations that state mandated tests are using to determine reading achievement. In addition, written responses to reading assessments are subject to interpretation by the scorer. The mental organization, problem solving, questioning and other strategies that good readers utilize during reading are not tested (Ediger, 2003). Consequently, standardized tests are limited in use for monitoring on-going student progress in reading comprehension.

Another concern that points to the need for ongoing diagnostic assessments is the delay in reporting the standardized test data back to the schools. Over the weeks and months it takes to score tests, valuable teaching time elapses, and lack of feedback places limits on the instructional choices teachers can make in addressing student needs. The reported data is information that reflects the school's progress, but is limited in the kind of detail that is needed to target specific improvement for individual students in the area of reading comprehension (Guskey, 2003). Worse yet, students can be labeled as below level or even learning disabled based on the limited information that comes from a standardized test given on one or two days in the child's life (Fiene & McMahon, 2007; Ediger, 2003). Yet, teachers and administrators have come to rely heavily on standardized test scores to determine students' progress, and their success or failure in reading (Fiene & McMahon).

In the last decade connections between literacy instruction and assessment have shifted from being the responsibility of the classroom teacher to being moderated by the district model. These assessments provide the data teachers need to report to the administration. With these prepared assessments in place, many school districts are not committed to finding alternative assessments (Fiene & McMahon, 2007). This affects teacher capacity to diagnose and prescribe appropriate instruction and may limit the desire a teacher has to develop alternative ways to assess and remediate (Mokhtari, Rosemary & Edwards, 2007; Wormeli, 2006). If teachers begin their service as educators without training in diagnosis and remediation, they are reliant on materials that may not meet the needs of their students. In addition to the district assessments, many teachers rely on assessments prepared by textbook publishers, or other commercially prepared sources, whose quality is questionable and which may not match the instruction.

Assessments are used primarily at the end of a unit or set of activities and the results determine

students' grades. Tests, quizzes and written assignments used to test comprehension that are closely matched to the instructional goals can be informative, but the question remains as to how teachers can use these results in a diagnostic way to help students become competent, engaged readers.(Guskey, 2003; Wormeli)

In Anne Arundel County the guidelines for literacy instruction are provided to teachers from the district and state in the form of curriculum pacing guides, scripted teachers' manuals and standardized benchmark assessments, but little is provided in the way of professional development that guides teachers to becoming experts in diagnosing reading difficulties (Thomas, 2005). Collecting data on standardized benchmark assessments may actually misguide teacher decisions about instruction, especially when it comes to reading comprehension. The demand for quantifiable data has created a situation in schools where teachers or reading specialists collect data on the lower -order skills of reading. Readers, even good readers, are being measured in oral reading fluency, phonemic awareness and phonics skills, and the number of known sight words. Unfortunately, what can be measured in numbers ends up being the focus of instruction and other reading skills and strategies are taught to a lesser degree (Teale, 2008).

The purpose of elementary reading instruction is to empower children to access text which they can comprehend. Teale (2008) writes, "The problem is, we wake up around middle school to discover that our students can't develop interpretation, read critically, or write a decent response to a piece of literature "(p 360). Resources, such as textbooks, advanced literature and sources on the Internet that advance student learning in all curricular areas cannot easily be accessed because there has been less of an emphasis on comprehension and higher order thinking instruction. Reading assessment has been largely dictated by measurable goals.

The ones easiest to measure in a teacher's busy day are the lower level skills, and these assessments have "a narrowing effect on teacher practice" (p.360) and development of effective diagnostic skills in literacy instruction.

Another sobering effect of a teacher's reliance on lower-order skill data is the problem that arises when a child is not succeeding or is unmotivated to read. Teacher judgment weighs heavily when it comes to referring a child for intervention and even special education. A child's inability to read a certain number of words per minute or to identify a certain number of isolated phonemes can lead to the child being labeled "at risk", even when the child is capable of comprehending a grade level text. Other factors stemming from a teacher's inability to diagnose reading problems can also lead a child into intervention services. Some studies have found that many well-meaning teachers focus on gender, behavior, cultural bias, family influences and other variables and expectations instead of diagnostic data when referring a student for special education services (Beswick, et.al., 2005; Snow et al., 1998).

As a result of the increased demands for accountability, teachers spend time collecting district designed assessment data only to report it to the administration. School-wide teams analyze aggregated and disaggregated data but often do not follow up on the progress made from the suggestions put forth. Any additional time taken by teachers to perform their own diagnostic assessments that would truly inform classroom instruction are time consuming and rely on the teacher's skill level in constructing them. Many teachers do not understand the deficits they see every day in students' struggles to demonstrate reading comprehension, and quite often teachers do not understand the district data or how to organize and use it to consistently guide their instructional decision-making. Outside of the grade book, most teachers do not have a systematic way of collecting and analyzing data that is specific to

students' instructional needs (Mokhtari, Rosemary & Edwards, 2007). Teachers are being asked to modify instruction for advanced learners and for students with reading difficulties, but they are often at a loss to identify individual students' needs in order to be able to deliver explicit instruction to meet those needs (Wormeli, 2006).

It is well documented that students who are below level in reading by second grade continue to experience problems in comprehension and word reading even after three years of instruction. Even well-meaning teachers can thwart a child's fluency development simply by not being able to identify the child's instructional reading level (Begeny, Eckert, Montarello & Storie, 2008). Ineffective instruction can have negative effects on a child's achievement for years to come, just as early success, if properly monitored, can propel a child to achieve and can open doors of opportunity in our culture (Carreker, Neuhaus, Swank, Johnson, Monfils,& Montemayor, 2007). The first step in early success or early intervention is appropriate assessment and informed analysis of that assessment (Ross, J.A., 2004; Beswick et al., 2005; Berninger et al., 2003).

## **Building Teacher Capacity**

In a study performed in 1995 by the National Reading Research Center, researchers found that teachers who used a variety of diagnostic instructional and assessment methods were considered the most effective at teaching reading. Eighty-eight percent of the primary school teachers, identified by their supervisors as highly skilled at teaching reading, used frequent on-going assessment to guide reading instruction (Pressley et al., 1996). They monitored their students' progress monthly, and sometimes weekly, and reported their progress to parents on a regular basis. They used retelling and questioning in small groups to assess comprehension. Researchers found that these teachers did not stick to the previously ordained

path of delivering only lower-order skill instruction at the letter-word level to the weaker readers but provided enriching reading experiences to motivate them.

Studies done to identify best practices in highly effective schools found that teachers in these successful schools were likely to use frequent formative assessments such as running records to monitor student progress in word reading and retelling to assess comprehension and inform instruction (Ross, 2004; Pressley et al., 1996).

One study suggests that teachers could more accurately estimate student performance when students read above grade level but had more difficulty assessing reading skills at the average or below average range. When presented with a continuum of leveled texts, less than half of the teachers in the study were able to choose the instructional levels that would be appropriate for their students (Begeny et al., 2008). Teachers often overestimated their students' abilities.

Another study undertaken by Fiene and McMahon (2007) in a school district in Wisconsin presented a unified approach to classroom assessment of comprehension which positively influenced instruction. Teachers used alternative ways to examine a variety of student work which encouraged students to make their thinking visible. Through sticky notes and journaling the teacher learned when she did and did not need to focus on activating prior knowledge with her students before reading. During reading her daily assessments provided information on student thinking that channeled her explicit instruction. Student assignments were tailored to reveal the depth of their understanding after reading that standardized tests could not have revealed.

In studies done by Fuchs, Fuchs, Hosp and Hamlett (2003), researchers developed a diagnostic feedback system to measure the effects of curriculum-based measurement while

providing feedback to teachers. Researchers collected data that described student strengths and weaknesses in reading comprehension and helped teachers plan lessons which targeted appropriate skills. When these diagnostic recommendations were given to teachers by the researchers, they were implemented with success. Unfortunately, some teachers did not continue the practices on their own, leading to the conclusion that teachers should be guided into developing their own diagnostic skills (Capizzi & Fuchs, 2005).

#### **Summary**

In the last decade there has been an increasing demand on schools to account for student achievement in reading. Data in the form of standardized test scores, commercially prepared test items and district- prepared benchmarks are used to determine student success or failure. These one-shot tests are not valid representations of a student's ability to comprehend. Popular district-approved measures of fluency, phonemic awareness, phonics and nonsense words target low-order reading skills and do not measure a child's ability to understand what he reads, which the true goal of reading. These tests and the higher-stakes assessments required by the government to monitor school progress do not adequately monitor a child's on-going progress. Some teachers in highly effective schools know how to assess and diagnose a student's reading needs and address those needs in the classroom with appropriate instruction in an on-going process toward reading mastery. However, there are many teachers who have entered the profession in the last decade who have not been trained in diagnostic teaching, or they have been conditioned to rely on pacing guides and commercially prepared curriculum materials in lieu of developing skills that target student needs. The current literature points out the need for teachers to learn how to collect and analyze data that guides appropriate differentiated instruction for struggling readers and for readers who are ready to access text at a higher level. The studies that have been done show that it is difficult for teachers to develop and maintain diagnostic practices on their own while juggling the demands for accountability.

Teachers need support in the way of professional development and mentoring to develop the skills and strategies that will ultimately lead to student achievement in reading comprehension.

#### **CHAPTER III**

#### **METHODS**

The purpose of this action research was to examine the effects of Classroom Focused Improvement Process on building teacher capacity for diagnostic decision-making and its ultimate effects on student reading achievement in grades 3, 4 and 5 at Riviera Beach Elementary School during the 2008-2009 school year.

#### **Design**

The research design for this study was both descriptive and quasi-experimental. The descriptive data was collected through a survey, and the quasi-experimental data was determined by comparing student scores in reading comprehension on the Maryland State Assessment for two consecutive years.

#### **Participants**

The adult participants in this study were 14 language arts instructors ranging in levels of experience from 1 year to 16 years. All of the teachers taught at Riviera Beach Elementary School, a small suburban Anne Arundel County school with a total population of 260 students. Four teachers had taught less than 3 years. Six others had taught for 5 to 8 years. Three had 8 to 10 years of experience and 2 had been teaching for 16 years. Other participants in the study included the principal, a special education teacher and a school based reading resource teacher. All of the teachers who taught kindergarten through fifth grade and special education were chosen in order to provide them support in building skills in diagnostic decision-making and using formative assessments in reading instruction.

Riviera Beach Elementary School is in a relatively small homogeneously Caucasian community in Pasadena, Maryland. The community consists of predominantly working class

families, with a small percentage of parents having attended college. Most of the parents are quietly supportive of their children's elementary education; however, college is not a typical expectation for the students when they graduate from the local high school, Northeast High School. Northeast High School has the lowest percentage in the district of students matriculating to college after high school.

The student subjects at Riviera Beach Elementary included 27 students in the fourth grade, 15 girls and 12 boys. Two of those students received classroom support and pull-out instruction through Individualized Education Plans, and two were identified as needing 504 Plans for learning differences. There were also 27 fifth grade student participants, 14 girls and 13 boys. Five of those students were supported by IEP's and received support in the regular classroom as well as pull-out reading instruction. Of the 54 intermediate student participants in this study only 4 were African American, 2 girls and a boy in fourth grade and 1 girl in the fifth grade.

#### **Instruments**

All of the teacher participants responded to a survey which sought to measure a change in teacher attitude toward diagnostic decision making and the use of formative assessments in reading instruction. The survey also sought to determine the effectiveness of the Classroom Focused Improvement Process (CFIP) in achieving these goals. The researcher developed this survey (see Appendix A) for the purpose of this study and for the purpose of determining the effectiveness of the CFIP intervention for the School Improvement Team at Riviera Beach Elementary. Results from the survey were to be used by the School Improvement Team to decide if the program should continue next year. The CFIP survey was administered in May, 2009, and tallied shortly thereafter to determine the results.

Student reading gains were assessed using the Maryland State Assessment (MSA) given in March, 2009. This data was readily available to the researcher through access to school records. The Maryland State Assessment is the most significant assessment data recognized by the Anne Arundel County Public School system. The data from the MSA is used to plan reading and math instruction and interventions throughout the district.

#### Procedure

In August of 2008, before the 2008-2009 school year began, the principal, Kathleen Panagopulos and this researcher designed a way to meet with each grade level team on a weekly basis specifically to conduct data dialogues regarding student work and progress in reading and mathematics. They wanted to use fresh data that was collected by the classroom teachers weekly. The data was collected from a variety of assessments which were measures of student learning and were based on the learning objectives of the Maryland Voluntary State Curriculum.

The half-hour meetings were held at the beginning of the school day, and the instructional schedule was rearranged school-wide so that one teacher's students were assigned to the media center for an integrated arts lesson with a member of the cultural arts team. The other group of students from the grade level would meet with the guidance counselor for a guidance lesson. The following week the groups would switch so that the students received approximately two guidance lessons and two integrated arts lesson during the month. This model proved to be effective, thanks to the cooperation and enthusiasm of the faculty members involved. Other benefits that flowed from this arrangement included a proactive guidance program and student enthusiasm for the background knowledge they acquired through the integrated arts lessons.

The members present for each CFIP meeting were the grade level team members, the principal, a cultural arts teacher, the special educator for the intermediate grades and the researcher. For the first few months of the CFIP meetings the team discussed the data from student learning measures such as commercially prepared classroom assessments from the Open Court Reading program, Dynamic Indicators of Basic Early Literacy Skills assessments, district prepared language arts assessments, report card grades, MSA scores from the previous year, student work, and fluency assessments. They also discussed data from mathematics assessments. The goal was to analyze the data, determine if the assessment was an adequate measure of the objective, and to determine the needs of those students who did not succeed. Alternative measures for the objective and ways to support the struggling learners was discussed. After the measurable objective for the following week was targeted, possible ways to assess it were considered. The discussions were never routine, and the half hour was used efficiently to meet the desired goals. Many valuable questions were raised by each participating faculty member with respect to instruction, meaningful assessment and student achievement.

In August, the researcher created a targeted checklist of reading objectives for each classroom teacher from the Maryland Voluntary State Curriculum (VSC). The VSC checklist was organized by phonics, word knowledge, comprehension, fluency, and vocabulary. As part of the CFIP, teachers used this checklist throughout the year to plan and provide differentiated instruction in reading. The checklist was designed to guide the teacher in making decisions based on student needs and to help them avoid spending valuable instructional time on skills already mastered. Each person at each CFIP meeting took notes on a specifically designed form which targeted the weekly objective that would be measured and the means of assessing that objective (see Appendix B). That assessment is the one targeted at the following meeting.

As the school year progressed teachers were coached in observing student performance in small group reading instruction, and they were encouraged to create alternative assessments for the objectives. Their initial reluctance began to dissipate as they became more comfortable with writing their own assessments. Teacher record keeping became more important because of the expectation to discuss teacher-chosen specific data each week. Outside of the mandated district assessments, teachers collected their own anecdotal reading records. Within a few months teachers abandoned the commercially prepared assessments and opted for teacher-made assessments or informal checklists of performance. As a result of the arts integration influence, teachers also sought alternative and creative ways of assessing student reading comprehension.

In March of 2009, students in grades 3, 4 and 5 participated in the Maryland State

Assessment which assessed word knowledge, vocabulary, comprehension and mathematics. The

Maryland State Assessment is a state-mandated assessment.

In May of 2009, teachers were given a survey consisting of 8 questions related to the CFIP and its impact on reading instruction and student success in reading (see Appendix A).

#### **CHAPTER IV**

#### **RESULTS**

The purpose of this study was to determine the effects of the Classroom Focused Improvement Process on building teacher capacity for diagnostic decision-making and its ultimate effects on student reading achievement in grades 3, 4 and 5 at Riviera Beach Elementary School during the 2008-2009 school year.

The number of students at each proficiency level was compared for two cohorts: students who were in 3<sup>rd</sup> grade in 2007, 4<sup>th</sup> grade in 2008 and 5<sup>th</sup> grade in 2009, and students who were 3<sup>rd</sup> graders in 2008 and 4<sup>th</sup> graders in 2009. The results were analyzed using a Chi Square analysis and are presented in Tables 1 and 2.

The results of the survey taken by 14 teachers at Riviera Beach Elementary School are displayed in Table 3.

Table 1
Maryland State Assessment Reading Proficiency Levels
for students in 3<sup>rd</sup> grade in 2007, 4<sup>th</sup> grade in 2008, and 5<sup>th</sup> grade in 2009

		Reading Proficiency 4 <sup>th</sup> grade 2008			Readir	ng Proficience 2009	cy 5 <sup>th</sup> grade
	Basic Proficient Advanced I				Basic	Proficient	Advanced
Reading	B= 5	1	4	0	1	3	1
Proficiency 3 <sup>rd</sup> grade 2007	P=21	1	17	3	0	8	13
2007	A=1	0	0	1	0	0	1
Totals							
27	27 2 21 4		1	11	15		

B = Basic

P = Proficient

A = Advanced

Table 2
Maryland State Assessment Reading Proficiency Levels for students in 3<sup>rd</sup> grade in 2008 and 4<sup>th</sup> grade in 2009

		Reading Proficiency 4 <sup>th</sup> grade		
		2009 Basic	Proficient	Advanced
D 11	B=0	0	0	0
Reading Proficiency 3 <sup>rd</sup> grade	P=23	5	13	5
2008	A=4	0	1	3
Totals				
27		5	14	8

B = Basic

P = Proficient

A = Advanced

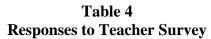
A Chi Square analysis of the percentage of students in each cell proved *no* statistical significance. Cross-tabulation of the reading proficiency scores from both cohorts fell within the 0.09 range, but not close enough to 0.05 to achieve significance.

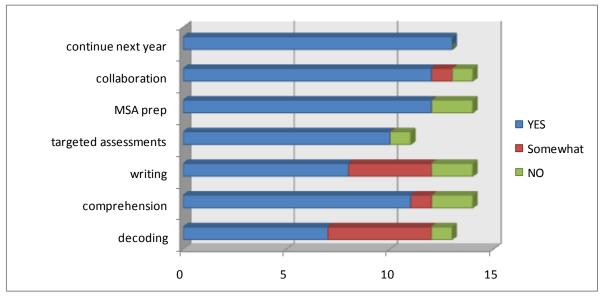
The hypothesis that the application of the Classroom Focused Improvement Process during the 2008-2009 school year would have a significant effect on student reading achievement on the Maryland State Assessment is not supported by the data.

Table 3
Results of Teacher Survey
May 2009

		n=1	.4
Questions	Yes	Somewhat	No
1. Do you feel as if CFIP has helped you build your own capacity to diagnose student needs in decoding?	7	5	1

2. Do you feel that CFIP has helped you build your own capacity to diagnose student needs in reading comprehension?	11	1	2
3. Do you feel that CFIP has helped you build your own capacity to diagnose student needs in writing?	8	4	2 (I am already comfortable.)
4. Did you feel comfortable in creating your own targeted assessments this year?	10	0	I (I prefer county prepared assessments in reading.)
5. Do you feel as if CFIP has improved your capacity to collaborate in instructional planning and assessment at the team level?	12	1	1 (I am satisfied with team planning.)
6. Do you think that your participation in CFIP has helped you prepare your students for success on the Maryland State Assessment?	9	0	2 (I teach at the primary level.)
7. Would you prefer to participate in CFIP again next year?	13	0	0
8. Teacher Comments	a. CFIP helped address areas where instruction could improve. b. CFIP helped focus on assessing what I teach. c. CFIP helped me look at data critically and in a timely manner. d. CFIP helped me respond to student needs in a timely manner. e. CFIP was beneficial and gave me a better understanding of classroom data. f. Sharing and getting feedback were benefits. g. It helped me gauge levels of student performance. h. It raised my awareness of student strengths and needs. i. It helped me be more effective in challenging students beyond the literal level in reading. j. Time is needed to create assessments. k. I grew more comfortable using a variety of materials. m. I felt accountable for diagnosing student needs. n. I gained ideas for differentiated instruction.		





#### **CHAPTER V**

#### **DISCUSSION**

Although the MSA data from the Chi Square analysis showed that the percentage of students at each of the proficiency levels between years was not statistically significant, and even though the hypothesis was not supported, the results show that a number of students in the first cohort moved to higher reading proficiency levels each year from 2007 to 2009. For example, 4 out of the 5 students in the first cohort (Table 1) who scored basic in reading on the MSA in 2007 moved into the proficient range, and three students moved from proficient to the advanced level in 2008. In 2009, after the CFIP collaboration, 3 students who were among the 5 who scored basic in 2007 scored proficient, and one student previously at the basic level scored advanced. Of greater importance is the result that 13 of the students who scored proficient in 2007 scored advanced in 5<sup>th</sup> grade reading in 2009. In addition, there was no regression back to the basic level in 26 out of 27 students originally assessed in 3<sup>rd</sup> grade in 2007.

Since student numbers at each proficiency level were less than 7, Chi Square became more conservative in the calculation and, perhaps, may have missed a true trend. Another indication of a possible trend was the data showing that there were no students in the second cohort (Table 2) scoring in the basic range in the 3<sup>rd</sup> grade in 2008, nor in the following year, 2009, when the students were in 4<sup>th</sup> grade. The Classroom Focus Improvement Process was only in effect for the 2008-2009 school year, but the trend toward teacher collaboration and diagnostic teaching and assessment was gradually taking place. This was especially evident in the teacher survey.

The most significant change that appears as a result of this study is the change in attitudes that teachers developed over the course of the Classroom Focused Improvement Process

intervention. The teacher survey revealed that teachers experienced a positive shift in beliefs about their abilities to diagnose student needs and adjust their instruction and assessment based on those needs. Teacher attitudes were also reflected in the majority of positive responses and comments about the process itself.

#### Relation of the Study Results to the Literature

The Classroom Focused Improvement Process provided to the faculty the benefits of moving away from the traditional top-down model of staff development toward a more on-site coaching model of professional development. Teachers preferred the collaborative approach of targeting strategies of instruction and assessment over traditional workshops (Vaughn & Coleman, 2004). According to the responses on the survey, teachers found that student reading performance improved with diagnostic feedback on curriculum-based assessments, and their ability to diagnose student needs in order to differentiate instruction also improved (Capizzi & Fuchs, 2005).

During the year that the CFIP was in effect there was a marked difference in the level of collaborative planning among team members. The principal also observed the effectiveness of the implemented targeted strategies that had been discussed at the CFIP meetings. The frequent use of a variety of formative assessments improved teachers' abilities in creating focused assessments, and also encouraged them to pay closer attention to student performance on alternative forms of assessment (Pressley, 1996).

#### **Implications for reading instruction**

This study indicates the positive effects of focused teacher collaboration for the purpose of moving students toward higher reading achievement. The time allotted in the Classroom Focused Improvement Process meetings each week allowed teachers to discuss the important

student data that they had gathered through work samples, a variety of formative teacher-made assessments, and summative assessments. They felt that the discussions based on true and relevant data helped them to deepen their own understanding of how to diagnose student needs in reading. This led to more comfortable attitudes toward stepping away from the textbook published assessments and a willingness to create authentic assessments that focused on what they had taught. Since teachers were bringing data that they had collected to the CFIP meetings every week, they became more conscious of a variety of ways to formatively assess. Being able to discuss student data on a regular basis helped the teachers develop a greater capacity for analyzing their own sets of data, and the ability to explain it to others.

The analysis of student MSA data from 2007 to 2009 shows a change in the number of students moving toward advanced levels in reading. If this trend continues it may indicate that the Classroom Focused Improvement Process is having a positive impact on reading achievement. Data-informed reading instruction that is provided with a variety of methods and materials and is assessed in authentic ways could lead teachers away from dependency on prepackaged reading programs and assessments and toward a sustainable capacity to address student strengths and weaknesses in reading. Student data that is collected frequently, and as a matter of routine, is more likely to guide instructional decisions that will benefit the child today, rather than a single test at the end of the school year.

#### Threats to Validity

Possible threats to the validity of this study may include the mobility of students into and out of each cohort between 2007 and 2009. The specific assignments of individual teachers over

the three year period may have affected the students' reading results on the MSA. The first cohort started 3<sup>rd</sup> grade in a class where the teacher was distracted with management issues. Instruction and assessment were strictly taken from the Open Court Reading Program. When the same cohort was in 5<sup>th</sup> grade, the teacher used a variety of reading materials and formative assessments to determine student readiness to move to an advanced level in reading. This could account for the increases in student achievement and the increased number of students scoring advanced on the MSA.

Another possible threat to validity is the small non-random sampling of 27 students used for the study, which was done as a convenience sampling. If a larger sampling had been used, then the results in the MSA scores may have shown a greater change in the year that the CFIP intervention was implemented. The small sampling, in particular, may have been responsible for the lack of significance in the Chi Square analysis of the data.

The proficiency levels from the Maryland State Assessment include a variety of reading test scores, and do not strictly measure comprehension. Items on the MSA are not directly taught, but generally address some of the many reading objectives in the Maryland State Curriculum. These objectives may or may not have been taught consistently over the three years reflected in the results. In addition, some of the scoring on the MSA is relatively subjective due to the nature of written responses; therefore, a student's comprehension score may have been affected by his poor writing skills or the scorer's inter-rater reliability.

Another possible threat to the validity of this study is the teacher reaction to the survey questions. Although the survey was answered anonymously, answers were subjective, and teachers may have felt inclined to answer positively in the spirit of cooperation. The

development of the teacher survey by the researcher may have been biased toward a positive outcome.

#### **Suggestions for Future Research**

This study may be expanded to include a larger sampling of students. The idea of studying a cohort over several years, especially if using data such as the MSA proficiency levels, may give a clearer picture of the effects of an intervention on one group over time. The teachers in this study were encouraged to gather data from observations and frequent teacher-generated formative assessments. Future studies could be undertaken to compare student data from classrooms with different instructional approaches. Teachers who teach and assess reading diagnostically, and those who teach using a scripted manual and published tests can compare student data on particular measures such as reading comprehension, fluency and vocabulary.

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# Appendix A.

## Riviera Beach Elementary Classroom Focused Improvement Process/ School Improvement Team Survey

May, 2009

I am a primary teacher	I am an intermediate teacher
eck the student data that was analyzed/ rev	iewed at your CFIP meetings:
student workDIBELSte	eacher created assessments
AACPS benchmark dataMSA 2	2008 dataMath topic tests
report card/ interim gradesfluer	
Other (specify)	
ase check ANY that apply.	
How has CFIP helped you analyze classroo	om data?
a. CFIP has helped me group studen	
b. CFIP has helped me address areas	
c. CFIP has helped me focus on asse	
d. CFIP has helped me focus on plan	
e. CFIP has helped me plan differen	
f. CFIP has given me some creative	
g. CFIP has helped me respond to st	
h. CFIP has given a better understan	
II. CFIF has given a better understan	unig of classiooni data.
Comments	
1. Do you feel that CFIP has helped you be students' needs in decoding? yes no somewhatN/A  2. Do you feel that CFIP has helped you be students' needs in comprehension? yes no some How?	A  uild your own capacity to diagnose you  whatN/A
3. Do you feel that CFIP has helped you be students' needs in writing? yes no some	nild your own capacity to diagnose you what N/A
I feel pretty comfortable in diagnosi	

•		nting your own targeted assessments this year? Fortable in creating my own targeted assessments.					
		ry prepared assessments in Reading.					
		ry prepared assessments in Math.					
1 0	Tyrejer textbook of county prepared assessments in Math My assessments were more specific to what I taught.						
		ny own assessments.					
Comments	•	<u> </u>					
planning and ass	sessment <i>at the</i>	mproved your capacity to collaborate in instructional team level?somewhat					
yes _		some what					
		cicipation in CFIP helped you to prepare your students					
for success on th		aland are manage any students for success on MCA					
		nelped me prepare my students for success on MSA.  CFIP had much to do with student success on MSA.					
No, 1 d	on t tillik tilat	CTT had much to do with student success on MSA.					
7. Would you like	ce to participat	te in CFIP next year?					
yes							
Comments							
From which CF	TP discussions	do you feel you benefited the most?					
(Choose 3 in ord		·					
diagn							
collat							
advan							
ideas	for assessment	S					
arts in							
instru	_						
_	ssional develop	ment					
Comments							
TD1							
Please explain a	ny ways that C	FIP may have changed your instruction this year.					

# Appendix B.

Date: Grade	
Date	
Step 1	
What questions are we trying to answer through this data analysis?	
Step 2	
Data used in analysis:	
Assessment linked to which VSC objective:	
Step 3	
Conclusions from the data:	
Achievement of NCLB groups:	
Step 4	
Class strengths /weaknesses:	
~ -	
Step 5 Students in need of remediation:	
Students in need of remediation.	
Description or remediation:	
Students ready for enrichment:	
Description of enrichment:	

## Data for Analysis

#### **DIBELS**

DIBELS monitoring /Fluency passages

County benchmark assessments

• Other interventions:

Running records

Tests/quizzes

BCR's (Explicit Lessons)

Classwork

MSA scores

Classroom assessments

Teacher anecdotes

### Interventions/Enrichments

Regroup for teaching		
Use different resources:		
Conduct whole class review		
Use different instructional		
strategies:		
Allow more time		
Set up for independent learning/research:		
Assess in a different way:		
Give more practice		
Use concrete examples:		
Provide more structure		
Set up tutoring with:	when:	
Use learning partners		
Use additional chunking/ scaffolding		
Use technology:		

## Appendix C.

# Riviera Beach Elementary 08-09 Classroom Focused Improvement Plan

Grade	
Date	

Reading		Math
VSC Objective(s):	VSC Objec	tive(s):
Assessment:	Assessment	t:
Notes/ Needs/ Suggestions:		Notes/ Needs/ Suggestions:
learning partners technology	manipulatives	response techniques reteach

enrichment tutoring chunking/scaffolding intervention parent contact materials

clarify directions reciprocal teaching reduce distractions