University of New England **DUNE: DigitalUNE**

All Theses And Dissertations

Theses and Dissertations

8-1-2018

An Exploration Of The Impact Of Instructional Coaching

Cindy Ramdial-Budhai University of New England

Follow this and additional works at: https://dune.une.edu/theses



Part of the Educational Leadership Commons

© 2018 Cindy Ramdial-Budhai

Preferred Citation

Ramdial-Budhai, Cindy, "An Exploration Of The Impact Of Instructional Coaching" (2018). All Theses And Dissertations. 172. https://dune.une.edu/theses/172

This Dissertation is brought to you for free and open access by the Theses and Dissertations at DUNE: DigitalUNE. It has been accepted for inclusion in All Theses And Dissertations by an authorized administrator of DUNE: DigitalUNE. For more information, please contact bkenyon@une.edu.

AN EXPLORATION OF THE IMPACT OF INSTRUCTIONAL COACHING

By

Cindy Ramdial-Budhai

BA (Rollins College) 1995

MA (University of Central Florida) 2001

M.Ed (University of West Florida) 2015

A DISSERTATION

Presented to the Affiliated Faculty of the College of Graduate and Professional Studies at the University of New England

Submitted in Partial Fulfillment of Requirements

For the degree of Doctor of Education

Portland & Biddeford, Maine

July, 2018

Copyright by
Cindy Ramdial-Budhai
2018

An Exploration of the Impact of Instructional Coaching

Abstract

Florida public school teachers, in compliance with No Child Left Behind Act (2001), seek to teach through mastery of Florida State Standards. Literacy coaches support teachers to ensure students master these standards. Research about the impact of instructional coaches at the elementary and middle school levels exists, but research is limited about the impact of coaching at the high school level. This mixed-methods study was influenced by the idea of scaffolding connected to the zone of proximal development (Vygotsky, 1978), tracking progress during mastery learning (Slavin, 1987), and the teaching map of instructional strategies (Marzano, 2017). Participants in this study included a Florida literacy coach and three Intensive Reading and three English Arts teachers. The research question is: How might instructional coaching impact the instruction of teachers as they seek to improve instruction? Data was collected through initial and exit surveys, interviews, and observations which tracked responses about the three coached interventions of small-groups, professional development, and tracking student progress. The results of this study indicate that the coach supporting teachers with the implementation of small-groups or rotations is not closely related to the impact of the coach during the mastery learning process. Coaching for small-groups or rotations was not confirmed as interventions that all participants felt helped improve their instruction. Support from a literacy coach can have a positive impact on instruction during the mastery learning process in other areas. School-based professional development has a positive impact on instruction. Findings suggest that the coach can improve instruction by assisting with tracking student progress.

Recommendations include: literacy coaches should continue to be trained on high-yield strategies to continue to impact instruction of English Language Arts and Intensive Reading teachers, administration should offer enough time for a literacy coach to support teachers in the classroom and support of coaching initiatives, and schools should increase the availability of tools to track student progress. School staffs and students can benefit from having a literacy coach who, following a plan, can positively impact instruction.

University of New England

Doctor of Education Educational Leadership

This dissertation was presented By Cindy Ramdial-Budhai

It was presented on 25 July 2018

And approved by:

William Boozang, Ed.D. Lead Advisor University of New England

Suzan Nelson, Ed.D. Secondary Advisor University of New England

Scott Fritz, Ed.D. Affiliate Committee Member School District of Osceola County

DEDICATION

First and foremost, this study is dedicated to my husband, Raju, who made my research time priority for three years. You are always trying to prove your love for me and I cannot imagine how else you could ever be more supportive of me. You are the nucleus of my life. To my two precious, beautiful children, Krishan and Chalisa: I also dedicate this to you and remember that the bar has been set with this study, so onward to you both! I wish you happiness and success in whichever field you pursue. Always love and support each other. This is also dedicated to my in-laws, Rose and Jag, as well as my brother, Sean, and his family for always being there for our family. Growing up, my mother would recite to me a Longfellow quote, "The heights by great men reached and kept were not attained by sudden flight but they, while their companions slept, were toiling upward in the night." This is my mantra and I thank her for instilling that work ethic and this study is dedicated to my mom, Dularie. This study is not just for my selfish goal, since childhood, of earning a doctoral degree. Instead, it is proof that had my father enough access to similar resources, he would have accomplished this himself. This study is, symbolically, my dad's dream of higher education realized and it is dedicated to my dad, Boysie. I love you all.

ACKOWLEDGEMENTS

I am grateful to everyone who supported me during my entire career as an educator. I am especially appreciative for the support I received from Dr. and Mrs. Fritz, as they supported my interest in school-wide literacy. Mrs. Fritz was the phenomenal coach I aspired to be and she, unknowingly, sparked my interest in the topic of this study. I am also so very grateful that Dr. Fritz spent countless hours offering feedback on my doctoral dissertation chapters. Thank you both for believing in me and keeping me on track. I am also thankful to the late Grover Butler III for inspiring me to lead, even when I questioned myself. His love of family, school, and community will always be a constant on my mind as I make decisions as a leader. Also, I would like to thank Dr. Boozang for guiding me through this process, with patience and words of motivation. I feel lucky to have had Dr. Boozang as a committee chair because he knows his subject and he cares about his students. I would also like to extend appreciation to Dr. Nelson for always taking time to share very specific feedback and having a genuine interest in guiding me through the final phase of my studies. Finally, thank you to my former students, and fellow educators, as you have been a huge part of making life meaningful.

TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION	1
Background and Context	2
Statement of the Problem	3
Purpose of the Study	5
Research Questions	6
Conceptual Framework	6
Rationale and Significance	9
Assumptions, Limitations, and Scope	10
Definitions of Key Terminology Used in This Study	12
Conclusion	14
CHAPTER 2: LITERATURE REVIEW	15
Coaching Teachers to Implement Mastery Learning with Small-Groups	16
Small-Groups and Intervention Programs	18
Small-Groups and Online Reading Practice	19
Coaches Training Teachers During the Mastery Learning Process	21
Modeling as Professional Development	22
Professional Development and Impact on Instruction	23
Professional Development Connected to Literacy Coaching	26
Tracking Student Progress	27

Tracking Student Progress and Mastery Learning	28
Tracking Student Progress and Literacy	30
Tracking Student Progress, Remediation, and Mastery	33
Conclusion	37
The Need for Further Research	40
CHAPTER 3: METHODOLOGY	42
Setting	45
Participants	46
Types of Data	47
Analysis	48
Participants' Rights	50
Study Limitations	51
Conclusion	52
CHAPTER 4: RESULTS	54
Review of Methodology	54
Surveys	54
Observations	55
Interview	55
Summary of Data Collection	56
Participant Profile	56

	Research Questions	58
	Presentation of Results	60
	Theme 1: Small-Groups	60
	Interview	60
	Surveys	65
	Learning Cycle Observations	67
	Theme 2: Professional Development	70
	Interview	70
	Surveys	74
	Learning Cycle Observations	77
	Theme 3: Tracking Student Progress	78
	Interview	79
	Surveys	81
	Learning Cycle Observations	84
	Theme 4: Mastery Learning Helped Students Learn Content	85
	Interview	86
	Surveys	87
	Learning Cycle Observations	87
	Summary	88
(CHAPTER 5: CONCLUSION	93

Review of Research Question	94
Interpretation and Alignment of Findings with Literature	98
Implications	103
Small-Groups During Mastery Learning	103
Professional Development During Mastery Learning	105
Recommendations for Further Action	108
Recommendations for Further Study	109
Conclusion	110
References	113
Appendix A	123
Open-Ended Interview Questions-Instructional Coach	123
Appendix B	126
Open-Ended Interview Questions-Teachers	126
Appendix C	129
Coach Survey-Initial	129
Appendix D	133
Coach Survey-Post	133
Appendix E	137
Teacher Survey-Initial	137
Appendix F	141

Teacher Survey-Post	141
Appendix G	145
Learning Cycle Tool	145
Appendix H	148
Letter of Informed Consent	148

LIST OF FIGURES

Figure 1. Conceptual Framework of Instructional Coaching Interventions through the Mastery		
Learning Process	8, 59	
Figure 2. 2016 Preliminary School Grade Overview (Source: Florida Department of		
Education)	44	
Figure 3. Summary of Participants' Experience	58	
Figure 4. Small-Groups Survey Responses	67	
Figure 5. Professional Development Survey Responses	77	
Figure 6. Tracking Student Progress Survey Responses	84	
Figure 7. Coach Survey Comparison	89	
Figure 8. Teacher Survey Comparison	91	

CHAPTER 1

INTRODUCTION

Over the last sixteen years, Florida public schools have operated under the *No Child Left Behind Act* (2001) and schools receiving school performance grades. Schools face the challenge of demonstrating adequate progress through a school grade, as measured by students' scores on the Florida Standards Assessment (Florida Department of Education Mission, 2017). To understand school grades, one should consider that Common Core State Standards were created "to ensure all students, regardless of where they live, are graduating high school prepared for college, career, and life" (Common Core Development Process, 2018, para. 1). The state of Florida funds its public schools and requires compliance with the *No Child Left Behind Act* (2001), as well as Florida State Standards for learning content such as English and Math, a version of Common Core State Standards implemented in Florida.

Florida public schools receive a grade, which is heavily weighed on students' performance on mastery of the English Language Arts standards of the state test, the Florida Standards Assessment (FSA). Students in high school are tested in tenth-grade on FSA as a graduation requirement. In order to support teachers of tenth-grade FSA students, many Florida districts have offered resources like curriculum guides, curriculum calendars, education books, countless professional development trainings, and even school site instructional coaches over the years. It is typical in a Florida public high school to see such resources. The goal of such support has been school improvement with each child's success as the focus (*No Child Left Behind Act*, 2001). Even with such resources available in abundance, most schools cannot seem to show enough gains in reading to become A-rated by the Florida Department of Education. Although the state complied with the *No Child Left Behind Act* (2001), students are still struggling

(McCullers, & Bozeman, 2010). Children have still been 'left behind'. In 2016-2017, not a single comprehensive high school in this school district was rated as A. There were schools, however, that showed gains, but they did not achieve enough proficiency or gains in reading to be rated as A. It is for that reason that it is worthwhile to research how an instructional coach may help improve a Florida school, by supporting teachers' instruction during the mastery learning process. This study was unique because it investigated coaching interventions during the mastery learning process at the secondary level. Research existed at the elementary school level, but there was little research about how coaching impacted instruction at the high school level.

Background and Context

The school in this study was a public high school. The number of full-time employees was 155. The number of volunteers varies (FOCUS School Software, 2018). The study was conducted at one campus. The community, through consultation with an international theme park, developed the high school that exists today. Regarding academics of the organization, this high school has been categorized in the past, by the state of Florida, largely according to the school's state test scores in reading, as a "B" school.

The high school in this study, according to the SIP (School Improvement Plan), aimed to have a five percent increase in reading comprehension scores for the 2017-2018 school year. The student population consisted of approximately 2,661 students. It had been determined that there would be an increase in relocated students, due to hurricanes Maria and Irma devastating Puerto Rico in late 2017. There were currently 91 or more students enrolled due to moving to Florida after the storms. Approximately 81% of the students were Caucasian (FOCUS School Software, 2018). Less than 1% of the student population was Black. Almost 58% of the student population was Hispanic. Although staff started the year unsure of the demographics due to hurricanes

Maria and Irma, it is understood that the needs of all students must be addressed. While the changes in the school's enrollment demographics were still ongoing, the school improvement plan continued to maintain its goal to increase from 55% of the tenth graders passing an English section on the Florida Standards Assessment, largely comprised of reading comprehension-type questions, to 60%, reflecting a gain of 5%. This school had recently been graded a "C." This drop from a "B" to a "C" has forced staff to reflect on the cause(s) (Florida CIMS, 2017). During this process of reflection, leaders should consider that "not every framework works well in every situation" (Bolman & Deal, 2013). Since for the 2016-2017 school year, this school received a "C" grade from the Florida Department of Education, one recent avenue that administration has pursued in an attempt to improve instruction, is an emphasis on instructional coaching.

Statement of the Problem

This research addressed the problem of the lack of information available to conclude how a coach could support Intensive Reading and English teachers to improve instruction at the high school level as they implement mastery learning. Furthermore, part of the problem was that more interventions should occur, instead of teachers' dependence on reading interventions through a software program. This was where the instructional coach could play a key role by offering resources to teachers and training them on how to plan lessons with effective interventions that could impact FSA Reading scores, and in turn the school grade, which was measured in part by reading scores on the state test (FSA-Florida Standards Assessment). The school faced a problem: the school's grade, had plummeted from a "B" in the 2015-2016 school year to a "C" in the 2016-2017 school year. Since 50% of the school grade was based on the FSA (Florida Standards Assessment) reading scores of tenth graders, there needed to be an improvement in

reading (Florida CIMS, 2017). This related to the implementation of coaching interventions in Intensive Reading and English Language Arts.

This study examined the instructional coaching of teachers who apply such reading interventions. At the general level, this research may help personnel, at the district level, to understand what works and what needs improvement, as it relates to the district's curriculum map for both Intensive Reading and English Language Arts. This body of research may contribute to teaching and learning by findings that have an impact on the success of students at other schools throughout the school district, in reading comprehension, as the study will provide a closer look at coaching teachers through the implementation of mastery learning. There was a possibility that a few staff members may also impact these coming changes, so staff would have to prepare to meet the needs of all students. Also, a literacy coach was expected to work with staff, while maintaining a positive rapport with them (Blamey, Meyer & Walpole, 2008, p. 310). At the local level, this research may help stakeholders put together a school improvement plan. One should also consider that "coaching may be a solitary effort when new, struggling, or specific content area teachers are singled out for one-on-one support" (Desimone & Pak, 2016, p. 8). Leaders may be able to understand how coaches can impact instruction since due to such research, teachers and administrators will know the coach's and teachers' perspectives on which strategies worked and which did not work.

Strategies the coach implemented include small-groups collaboration and tracking progress, in addition to sustained and relevant training throughout the process. Although small-groups learning and tracking progress may generally seem like high-yield strategies, "research on literacy coaching at the secondary level is extremely limited" (Blamey, Meyer & Walpole, 2008, p. 311). Since there was also limited research about coaching at the secondary level, there

was a need to understand what literacy coaches can do to improve literacy at a school (Blamey, Meyer & Walpole, 2008, p. 311-312). Results of this study shed light on the experience of coaches assisting teachers who teach a highly-tested area, related to school improvement in reading. Understanding what happened during the coaching process, and the training it may involve, were steps toward finding solutions of how instructional coaches may help support teachers.

Purpose of the Study

The purpose of this mixed-methods study was to examine the impact of a literacy coach on Intensive Reading and English Language Arts teachers as they focused on three interventions to facilitate the mastering of learning standards in their classrooms. The role of the literacy coach was changing, as this type of educator may now also be considered "an effective evaluator of literacy needs, a coach must assist schools in the selection, use, and interpretation of assessments to make informed decisions about the literacy needs of students" (Blamey, Meyer & Walpole, 2008, p. 310-311). A rationale for further study was that there had been emphasis on the use of specific interventions such as online reading practice software programs. Teachers started to strongly depend on the use of these software tools, but this study provided more data on the impact of other coaching interventions to assist with improving instruction, as opposed to overdependence on software. Although "facilitating change in a teacher's instructional practice is incredibly difficult" (Kamps & Greenwood, 2005, p. 502), reflection on instruction can be beneficial. This mixed methods study offered a view of whether instructional coaching in the Intensive Reading and English classroom can have a positive impact on the teacher's instruction.

Research Questions

The research question is: How might instructional coaching impact the instruction of teachers as they seek to improve instruction? Other questions include:

- 1. What impact does the instructional coach have on small-groups instruction in English and Intensive Reading classes?
- 2. How does the professional development provided by the instructional coach to literacy teachers improve instruction in English and Intensive Reading classes?
- 3. To what extent does coaching teachers to track student progress contribute to instruction in English and Intensive Reading classes?

Small-groups, professional development, and tracking progress may sound like they would improve instruction, but more research was needed because "in order for secondary coaches to fulfill the needs of secondary teachers, professional development must address strategies for infusing literacy into content areas" (Blamey, Meyer & Walpole, 2008, p. 323). Therefore, how does instructional coaching, with the use of these three strategies: small-groups instruction, training teachers, and tracking progress impact the instruction of these teachers as they seek to improve instruction?

Conceptual Framework

The questions for this study, though directly related to instructional coaching, derived from the desire to improve instruction at the school. A common belief was that a focus on instruction may improve the school, academically. For example, one study showed "social studies teachers who met with their coach more often to review assessment data reported more positive perceptions of coach influence" when the coach made data-driven decisions with teachers and administration (Marsh, McCombs, & Martorell, 2010, p. 896). Typically, strategic

goals have impact because educators just want a way to help students, who are struggling and being 'left behind' (O'Malley, Plumlee, & Stranahan, 2007). The framework for this study was based on the research, although primarily about the elementary and middle school levels, that showed the impact of interventions in coaching Intensive Reading and English Language Arts teachers during the implementation of mastery learning, with a focus on small-groups, professional development, and tracking progress (Figure 1).

A framework for this study proposed working with an instructional coach may help teachers apply high-yield strategies (Marzano, 2009) to instruct students. A coach may start to wonder, however, how to most efficiently and effectively help teachers improve their instruction and, in turn, help students to achieve success. During this study, participants comprised of a coach and teachers, were asked questions that may prompt them to reflect on if coaching is effective, which approaches work, and if high-yield strategies (Marzano, 2009) really are the key to supporting teachers to improve instruction.

This study investigated if professional development may complement the coaching cycle to support that "the guided instruction phase of learning happens as the cognitive responsibility shifts to the student, with teacher support and scaffolding" (Fisher, Frey & Nelson, 2012, p. 554). This study also explored if training teachers during mastery learning might also impact instruction. Similarly, the study may yield results on whether coaching teachers to use small-groups learning may offer teachers more opportunities to assist students (Figure 1) during the mastery learning process. Vygotsky (1978) explained that when learners reflected, it allowed them to build their arguments. This study analyzed feedback from coaches and teachers as they reflected on whether this entire process, as part of coaching interventions, contributes to improved instruction, as teachers guide students to mastery of the content.

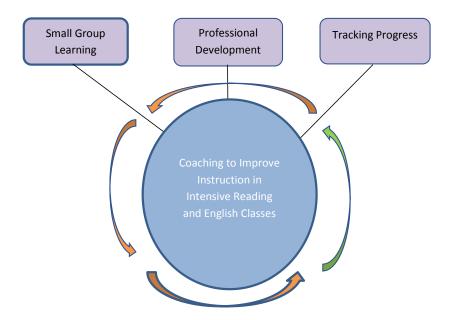


Figure 1. Conceptual Framework of Instructional Coaching Interventions that Impact Instruction.

Although there has been research on instructional coaching at the elementary school level, there was not much research available at the high school level on small-groups coaching and there seemed to be "still a great deal of confusion and disagreement about why cooperative learning methods affect achievement and, even more importantly, under what conditions cooperative learning has these effects" (Slavin, 1996, p. 44). Piaget (1926) noted that learners develop cognitive and social skills when they interact in groups, so this study could offer more insight on the process at the high school level, through coaching teachers to build on those skills. Since Slavin's work (1996), much research has been conducted, but not very much data is available about this topic at the secondary level, grades nine to twelve. These theorists have built the foundation for further research, as it applies to coaching teachers to meet students' needs. Such theorists have shown that learning occurs in steps and this research will bring results that show the positive, negative, or neutral impact of coaching teachers to meet students' needs at these diverse steps of learning. This study explored approaches that may have worked for

elementary school teachers but are uncertain to work at the high school level during the mastery learning process. Are those high-yield strategies, such as organizing students for learning (Marzano, 2009), transferable to the coaching cycle at the high school level?

Rationale and Significance

The results of this study provided a view about a coach's and teachers' perspectives of support during the coaching process, specifically during implementation of mastery learning. Educators may be able to understand what a coach does and how a coach may assist teachers, as well as better understand teachers' perspectives during the coaching process. This study also shed light on strategies and techniques that are deemed effective, or ineffective, when coaching in the Intensive Reading or English classroom. Despite coaching being viewed as "a powerful mechanism for teacher learning" (Desimone & Pak, 2016, p. 5) and potential benefits of the study, one may argue that there are common pitfalls that those using quantitative research methodology as part of a mixed-methods approach should avoid, as it may not answer a research question of local needs, may include too large a sample, and may not relate to the audience. The research may, therefore, seem insignificant in its impact on others. During this process, one should remember that research, so far, on coaching has demonstrated that "although certain roles of coaching at the elementary and secondary levels overlap, others do not" (Blamey, Meyer & Walpole, 2008, p. 311). To avoid a view of this research seeming insignificant, the principal investigator clearly explained findings and include an in-depth discussion.

Another way to avoid the negative aspects of this type of research was to keep the research focused on changing a local, instructional concern so that it is not perceived as too general. This approach would probably follow the approach of pragmatism "because it fits in applied settings where there are complex social phenomena" (Pole, 2007). After all, reading

scores may, to some degree, have had an impact on motivation. Improved instruction in reading may also further motivate students who might have been labeled as at-risk.

In researching the impact of instructional coaching interventions on the school's grade, pragmatism would allow consideration for variables like different experiences, socio-economic backgrounds, varied resources, as well as teaching and learning styles (Florida CIMS, 2017). When conducting a study with a mixed-methods approach, a researcher needs to pay close attention to such variables, as "additional research is needed to determine which coaching and feedback procedures are most helpful, whether these vary based on adult characteristics, and the feasibility of the coaching model's implementation with indigenous staff as coaches" (Ledford, Zimmerman, Chazin, Patel, Morales, & Bennett, 2017, p. 428). One would also have to consider the research question: is it specific enough to keep the study focused? Additionally, one would have to consider if there needs to be a large sample, which would likely require quantitative research; if there is a need for another, smaller sample, one would likely use a qualitative approach. This was what led to this study having a mixed-methods approach.

Even when using mixed methods, one must continue to remain as objective as possible since the principal investigator's word choice in writing the research questions, interview protocols, and survey questions should always be considered as these tools are formed, to ensure the research attempts to objectively answer the research question (Pole, 2007). Finally, as suggested by Smith and Heshusius (1986), mixed-methods may not be an obligatory compromise—it may be the best solution to one's research questions.

Assumptions, Limitations, and Scope

Since there was research on the coaching cycle (Eisenberg, 2015, paragraph 4) at the elementary level and some research at the middle school level, practitioners are usually offered

this research as the framework for coaching at the high school level. This assumption may hold false, as when one tries to implement strategies that have been researched, primarily at the elementary levels, in a high school program. There was another assumption that coaching may work with one 'magical' approach, such as using solely small-groups. Quick fixes were not usually characteristic of making a transformation. In an attempt to being long-term instructional improvement at school, a transformational approach may bring such long-term changes (Burns, 1978) that may benefit a school, as it is the desired approach to improve a school. It was also for this reason that research at the high school level was recommended, in a quest to find solutions to the need of coaching interventions to assist high school Intensive Reading and English teachers.

Limitations included that the study was based on research carried out at one school which is a small data pool. Another limitation was that teachers and their coaches, in an attempt to maintain privacy, may or may not hesitate in reporting detailed responses to questions posed by the researcher. This was why it was crucial to ensure credibility during the study by maintaining confidentiality (Bloomberg & Volpe, 2016, p. 162). On the other hand, some may respond in anger, or not respond at all, due to low morale where work conditions are perceived as poor. A challenge may also be the coach having one system to track progress over the process of mastery and the teachers having another system that did not merge with that of the coach's system. The issue of transferability and not having a common experience to extend to future research was also a consideration (Bloomberg & Volpe, 2016, p. 164). This could also create a conflict on tracking progress of mastery as well as being an obstacle to having common language to support teachers during the study.

The scope of the research included one school, but the study can be replicated to other schools in the district, since the schools share a common curriculum (Bloomberg & Volpe, 2016,

p. 164). This research could also include and impact coaches at other schools in this district or even other districts, as the study indirectly addresses other schools' experiences, although their demographics are not exactly the same. This study may help school leaders as their "instructional coaches working one-on-one with teachers are able to embed discussions and activities in a specific subject area" (Desimone & Pak, 2016, p. 5). Finally, some of this research may relate to the experience of other coaches, nationally, at the high school level because it has been difficult in the past to find research about coaching interventions in Intensive Reading and English Language Arts, at the high school level.

Definitions of Key Terminology Used in This Study

Adequate Yearly Progress, or AYP: a way to measure if schools are making progress in student achievement (Florida Department of Education Mission, 2017).

Close Reading: during this reading approach, readers are guided through the text multiple times as they "develop a fairly sophisticated understanding of what the author actually said" (Frey & Fisher, 2013).

Coaching Cycle: a protocol for instructional coaching, which usually includes "One of the ways for coaches to support effective instructional practice and the ongoing collective problem solving and collaboration that promotes quality instruction is to adopt a three-pronged approach" (Eisenberg, 2015, paragraph 4).

Florida Standards Assessment: statewide assessment administered to tenth graders enrolled in public schools in the state of Florida. Students must pass the FSA to receive a regular high school diploma (Florida Standards Assessments, 2017).

FSA (Florida Standards Assessment) scores: also impact the school grade, as each school is designated a school grade based on FSA and a few other factors. FSA scores contribute to fifty

percent of the school grade (Florida Department of Education School Grades Learning Gains Calculation for 2015-16, 2016, July).

Learning Gain: schools may earn a point, calculated into the school grade, when a student improves in reading level. There are five levels, with a level 5 as the highest, level 3 as proficient, and levels 2 and 1 as not making progress (Florida Department of Education School Grades Learning Gains Calculation for 2015-2016, July 2016).

Mastery Learning: addresses differentiation in teaching literacy skills, but it allows the teacher to focus on "the challenges that face adolescents, ELLs, learning-disabled students, and struggling adult readers" (Snow, Ippolito & Schwartz, 2008, p. 48); "the establishment of a criterion level of performance held to represent "mastery" of a given skill or concept, frequent assessment of student progress toward the mastery criterion, and provision of corrective instruction to enable students who do not initially meet the mastery criterion to do so on later parallel assessments" (Slavin, 1987, p. 175).

Official SAT Practice: online tool that offers, among other practice, reading comprehension practice through a personalized approach (Official SAT Practice, 2017).

Professional Learning Communities: teachers collaborate on applying strategies that improve learning for all students (All Things PLC, 2018).

School Improvement Plan (SIP): many key terms may be addressed in the SIP or School Improvement Plan. The SIP is a guide to a school setting goals, targets, and implementing an annual plan for the school's success (Florida CIMS, 2017).

Small-Groups: instructional strategy that groups students to discuss and practice content; this strategy can consist of formal grouping or informal pairs (Senn, Marzano, Garst, & Moore, 2015).

Tracking Progress: a monitoring approach where "the teacher facilitates tracking of student progress on one or more learning goals using a formative approach to assessment" (Marzano Causal Teacher Evaluation Model, 2018).

Conclusion

In summary, coaching has been an important role on an instructional leadership team in the state of Florida, due to state and "federal emphasis placed on using student achievement data to monitor student progress and a school's adequate yearly progress and should inform designers of professional development" (Blamey, Meyer & Walpole, 2008, p. 322). The role of the coach is dynamic. Another shift in coaching is that "future coaches will need to feel more comfortable in the role of data analyst" (Blamey, Meyer & Walpole, 2008, p. 322). Despite the many roles of a coach, there is usually school-based data that suggests coaches may support teachers on specific standards, in addition to teaching strategies (Marzano, 2017). One way to bridge the gap between what the school needs and how to further assist is by working with teachers to resolve a problem, based on the school improvement goals (Florida CIMS, 2017).

Research connected to this study's research problem will be discussed in the literature review in the following chapter. Chapter Two will highlight theories and a framework that have been foundational to instructional coaching during the mastery learning process. Taking a closer look at the school in this study would allow reflection on instructional coaching in the implementation of mastery learning.

CHAPTER 2

LITERATURE REVIEW

This study examined instructional coaching through the mastery learning process. Mastery learning "is based on demonstrated performance, not curricular time. Learners practice and retest repeatedly until they reach a designated mastery level; the final level of achievement is the same for all, although time to mastery may vary" (Yudkowsky, Park, Lineberry, Knox, & Ritter, 2015, p. 1495). This mixed-methods study included both the impacts of coaching on instruction and how coaches and teachers perceived the effectiveness of coaching. The purpose of this study was to examine the impact of a literacy coach on Intensive Reading and English Language Arts teachers as they focused on three interventions to facilitate the mastering of learning standards in their classrooms. The study examined the coaching support of high school teachers during the mastery learning process. The kind of support that may be offered by the coach, to teachers, included: small-groups instruction, professional development, and tracking progress (Florida CIMS, 2017). If an instructional coach supports teachers during the mastery learning process, with interventions like small-groups, professional development, and tracking progress, it may impact instruction. Coaching may have an impact on instruction and it may assist in instructional support decisions made at the school. Florida public schools receive funding for reading coaches to support teachers to improve instruction.

Literacy Worldwide reported that "the Reading Excellence Act of 1998 under Clinton and the Reading First provisions of the No Child Left Behind Act of 2001 under Bush have allotted large amounts of federal dollars for professional development targeting improved reading instruction" (International Reading Association, 2004, paragraph 2). There was once, however, a discrepancy between who was a coach, the role of the coach, training and education

required to become a coach, including lack of consensus on definitions of a coach (International Reading Association, 2004). Florida does not prescribe a specific coaching model but Lockwood, McCombs, and Marsh (2010) wrote about a focus on coaching and *Just Reads*, Florida! which was influenced by Florida Governor in 2001, Jeb Bush. The goal for having a coach was for Florida students to read at or above grade level. Funds were, therefore, allocated to school districts so that they may recruit coaches at all levels in "lowest performing schools (i.e., those receiving an "F" on the state accountability rating system, the governor's A + Plan" (Lockwood, McCombs, & Marsh, 2010, p. 375-376). Although there were no set requirements to be a coach, "the overarching goal of Florida's coaching program was to improve students' reading ability by helping teachers implement effective, research-based instruction in reading and in other content areas" (Lockwood, McCombs, & Marsh, 2010, p. 375-376). The state also provided training modules to coaches and principals, as well as an annual conference (Lockwood, McCombs, & Marsh, 2010, p. 376). Although the role of coaches was initially unclear, these initiatives in the state of Florida, at the state and local levels, helped to outline the role of a coach, as they supported teachers with improving instruction. Coaching teachers in implementing small-groups and tracking progress, while training them, may improve instruction.

Coaching Teachers to Implement Mastery Learning with Small-Groups

Research sub-question 1 asked: What impact, found through the mixed method study, does the instructional coach have on small-groups instruction regarding mastery learning for students in English and Intensive Reading classes? Coaches can assist with modeling small-groups instruction, as it may impact the mastery learning process. Collaboration in small-groups allows sharing ideas. Also, students are able to learn a concept and practice it in multiple ways. Small-groups encourage the application of new concepts through interactive activities, note-

taking, synthesis, analysis and real-world application (Estrada, 2005). A teacher may have more of an opportunity to work one-on-one with students during small-groups time due to having fewer students to manage at the teacher-led group. There is also the opportunity to have mixed-level groups and even homogeneous groups, depending on the concept and the needs of students. During the study, the principal investigator examined if small-groups instruction represents efficiency with practice in different ways. It might be a time-saver in that there can be more practice in less time. Instead of one practice a day, it is fast-paced, engaging practice often within one period, offered in multiple ways. Further research of small-groups instruction could lead to strategies where a student could be taught multiple standards within a shorter period.

Estrada (2005) attempted to link professional development with small-groups reading instruction, in search of a link with student achievement. The study examined if students receiving explicit instruction in small-groups would improve achievement levels. One limitation with the Estrada (2005) study was that student achievement had not been directly measured with reading comprehension. It was measured with components of the reading process but reading comprehension had not been directly linked. Estrada (2005) had, however, confirmed that the small-groups approach engages learners.

Similarly, Fisher and Frey (2014) researched the impact of close reading if it was used as an intervention to improve reading comprehension among middle school students. This study was influenced by the need to offer data on a specific intervention strategy. This study was influenced by interventions suggested by Vaughn (2012) to meet the needs of struggling students. In this study, the best practices of literacy interventions focused on interventions among adolescents, such as an after-school program focused on collaboration. This was an intervention program that focused on strategies like close reading, peer collaboration, and wide reading of

young adult literature. A diagnostic was used to collect baseline data from the Gates-MacGinitie Reading Test in order determine reading levels. Students who participated in this study ranged from those of low-income households to English language learners and most students were male. The study tracked progress for five to six months. One unique aspect about this intervention was that it occurred during an after-school program. The role of the teacher was to facilitate practice, lead a small-groups rotation, and teach comprehension skills through the close reading strategy. This study included remediation of reading interventions at the middle school level, using close reading. This research piece is foundational in that it does not only include reading interventions, but it also studied, to some degree, tracking progress. Results indicated that students benefited with gains in comprehension, through diagnostics, from instruction that included the close-reading of complex, grade-level texts.

Small-Groups and Intervention Programs

Solis, Vaughn, and Scammacca (2015) studied an intervention program for students who struggled in reading comprehension, to narrow the gap of high-performing and low-performing students. The implementation of the Common Core movement influenced this study in that the movement highlighted the need for change since so many students seemed to struggle with meeting the new standards. The role of reading teachers was to implement a ninety-minute intervention that primarily consisted of interactive software and reading. Students involved in this study were ninth-graders who had experienced reading difficulties. The initial sample consisted of fifty-nine students who received the interventions each school day. There were two intervention teachers and both intervention teachers had education degrees at the master's level. Solis, Vaughn, and Scammacca (2015) researched the impact of interventions implemented to assist those fifty-nine students in a longitudinal study. Findings related to the implementation of

reading interventions in a content area at the high school level. This research connects to the research problem of whether instructional coaching can support instruction during the mastery process because one requirement in the school's reading program was that students must use a software program for reading practice. This software tool that measured growth was the *Bridge-IT*. The Solis, Vaughn, and Scammacca (2015) study, therefore, offered a view of how coaching worked while some students used a software intervention tool for reading comprehension, in addition to participating in teacher-led lessons at other times.

Small-Groups and Online Reading Practice

Furthermore, improving reading instruction may be impacted by another type of small-groups instruction which may involve technology. Several school districts have adopted a technology-based intervention tool for reading comprehension. Wolff, Isecke, Rhoads, and Madura (2013) explored nonfiction reading at the middle school level, supplemented with the use of a reading comprehension software program. This intervention related to small-groups learning because "teachers can differentiate instruction by rotating students through Readorium stations" (Wolff, Isecke, Rhoads, & Madura, 2013, p, 42). Readorium was a software program used as part of an intervention program that diagnosed students' reading comprehension deficits, scaffolded lessons, and offered teacher resources for personalized interventions. The sample for this study consisted of 280 middle school students. Results indicated that comprehension scores were higher with the use of the software. The effective use of this software included a rotation model for small-groups learning.

Many reading interventions include small-groups instruction. Wolff, Isecke, Rhoads, and Madura (2013) carried out the study to investigate best practices of reading interventions on high school students. This study was influenced by the idea that students who struggle in reading are

at risk for not graduating from high school. This study was influenced by interventions suggested by the National Reading Panel (2000), as the need for the integration of reading strategies became apparent to meet the needs of struggling students. In this study, the best practices of literacy interventions focused on interventions among adolescents, such as the use of Readorium software.

Despite increased demand in performance of students and accountability of schools, not much attention had been placed in utilizing software to improve the reading proficiency of high school students. One intervention that Wolff, Isecke, Rhoads, and Madura (2013) implemented in Readorium was vocabulary interventions, which allowed teachers to modify the curriculum to implement a differentiated approach. Readorium offered a differentiated approach which meant they made changes based on the literacy needs of students. The role of the Readorium teacher was to differentiate instruction, if progress monitoring on the software program showed a need for one-on-one interventions. This study included remediation of reading interventions at the high school level, using a software program. The results indicated that the Readorium software could have an impact on comprehension of non-fiction, particularly science texts. Based on the results of the study, the program was modified to increase focus on motivation of students and to work as a teacher-friendly tool for differentiated instruction and increased instruction, in general.

At the state level, it is suggested to follow a plan of action with any approach, but small-groups instruction is not mentioned as a single-approach solution (Florida Department of Education Literacy Coach Academy Training Modules, 2018). Small-groups instruction is one of many strategies addressed in training modules. Coaches across the state, therefore, have the option to implement it. At the local district level, small-groups instruction is an option, if tasks align with lesson targets (Senn, Marzano, Garst, & Moore, 2015). At the local level, there was a

period that small-groups was implemented, but no correlation was found between *solely* using small-groups and gains on the Florida Standards Assessment (Florida Department of Education, 2016). This might have been because tasks in small-groups may not have been aligned with learning targets (Senn, Marzano, Garst, & Moore, 2015). Coaches can have an impact on the implementation of small-groups in that Steckel (2009) found that "teachers who endeavored to change their literacy instruction did so because their coaches helped them to see evidence that a new practice was worthwhile" (Steckel, 2009, p. 22). This related to the study in that the common goal was to examine if training on small-groups can impact instruction. Although, if implemented correctly, small-groups instruction may be an intervention that positively impact reading and English instruction. While that approach can impact instruction at a school, little research is published about small-groups and instructional coaching at the high school level. There are also other elements that need to be in place for small-groups to work in a high school classroom: modeling through professional development and tracking student progress through mastery learning can be supported by the coach.

Coaches Training Teachers During the Mastery Learning Process

Research sub-question 2 asked: How does the professional development provided by the instructional coach to literacy teachers improve instruction during the master learning process in English and Intensive Reading classes? If coaches supported teachers with professional development during the mastery learning process, it may become one approach to improving instruction in Intensive Reading and English and, consequently, the instruction of reading at a school. Research suggests that "implementing coaching models takes time and resources, which means that it is not always as extensive of a PD tool" (Desimone & Pak, 2016, p. 7). This meant the professional development at the school should include best practices that have been proven to

improve reading. Such trainings were akin to a 'show don't tell' writing strategy. So often teachers attended trainings and left with the feeling of having wasted planning time. They were even given books or literature that, if used appropriately, could impact instruction in a positive light.

Some educators believe that modeling a lesson during a training may benefit teachers and, as a result, reading instruction at the school should occure *showing* them how to apply what they learned at the training, as opposed to *telling* them how to apply it (Desimone & Pak, 2016, p. 7). Modeling, especially of new strategies, may bring life and real-world experience to the instructional coaching process. If implemented with fidelity, "Modeling instruction emphasizes the importance of effective professional development" (Barlow, Frick, Barker, & Phelps, 2014, p. 14). Again, although there were many studies about the effects of professional development, there was not much information about how instructional coaches may implement professional development at the high school level in order to support Intensive Reading and English teachers.

Modeling as Professional Development

Modeling, as a training approach during and after a professional development session, also offered an immediate example of how to apply a strategy (Barlow, Frick, Barker, & Phelps, 2014). Modeling and professional development would have to occur within a short span of time from each other. When time elapsed between a training and the implementation of strategies offered from the training, there may be elements of the strategy that were forgotten due to the elapsed time (Barlow, Frick, Barker, & Phelps, 2014). For this reason, time was of the essence and it may be beneficial to lessen the gap between when a strategy was taught, modeled, and implemented. When the coach models a lesson, it might work as a guide for teachers so there is

less need to initially brainstorm and plan—since the modeled lesson is already done for the teachers and may just need tweaking to suit the teacher's style and students' needs.

The coach's use of professional development, if sustained, may positively impact teachers' instruction. Training may have to be sustained for proper implementation of new strategies to be appropriately utilized. Once there is sustained training, then instruction can drive student achievement. To illustrate, one study consisted of "three inter-connected workshops" (Koellner & Jacobs, 2015, p. 56) suggesting a series of sustained trainings offered to teachers had a positive impact on instruction. The results of this study showed impact on instruction within a short period of time (Koellner & Jacobs, 2015). Fluctuation in student achievement, however, over the period of three years of reported data has shown some growth in student achievement but there have been inconsistencies, as well. One would have to consider a reason for such inconsistencies in student achievement could be that participating teachers varied over the period of the study to due turnover at schools. This study was important because it pointed in a significant direction and opened the door for further research.

Professional Development and Impact on Instruction

Soper and Marquis-Cox (2012) studied literacy interventions and pointed out a connection to professional development and training during the coaching cycle. The goal of their study was to investigate a literacy intervention for high school students. This study was influenced by changes in literacy and reading over the last ten to fifteen years. It was also influenced by the introduction of Common Core State Standards, as the need for the integration of reading strategies became apparent to meet the needs of struggling students. In this study, the literacy interventions were in accordance with *No Child Left Behind* (2001). This intervention program addressed reading comprehension deficits through scaffolded lessons; the program

offered professional development and teacher resources for personalized interventions from *Just Read*, *Florida* (2001). This program was created to increase interest of students in reading as well as supporting literacy in schools across Florida, the state in which this study occurred. The role of the nine teacher-participants of this intervention program was to apply interventions, progress monitoring, and data-driven decisions concerning the direction of differentiation. This information directly related to the research in that it included literacy interventions, in reading, at the high school level. Although longitudinal district data showed a ten-percent gain in reading comprehension performance on the state assessment (Florida Standards Assessments, 2017), this finding also suggested a need for additional improvement. Although this particular study offered insight into gains in reading, there were not many studies at the high school level that addressed that topic, yet another example of why further study at the high school level would offer educators more concrete literature on coaching reading instruction at their school-level.

Swanson and Wanzek's (2014) goal was to research reading interventions in social studies courses for middle and high school students. This study was influenced by standards connected to literacy in social studies instruction (National Governors Association & Council of Chief School Officers, 2010), requiring middle- and high school social studies teachers to integrate literacy into their courses. In this study, six units of social studies consisted of integrated reading practice. One intervention that was implemented was the integrated approach, which allowed teachers to instruct the content area while applying reading strategies. This study is an example of "when PD is aligned with key elements such as content standards, curriculum, and daily lessons, it is more likely to be well implemented" (Desimone & Pak, 2016, p. 8). The role of the teacher was to instruct the content area, while analyzing the text through the use of close reading strategies (Swanson & Wanzek, 2014). Although this study directly related to the

topic in that it included integration of reading comprehension in a content area, the participants were not Intensive Reading or English teachers. This study, however, exemplified the positive impact using reading interventions, as well as coaching on how to implement close reading which may have impacted across curricula.

A mixed-method study by Vaughn, Roberts, Wexler, Vaughn, Fall, and Schnakenberg (2014) researched the impact of interventions in a reading course versus the impact of not having placed students in a reading class but instead, placing them in an elective course. The study included three large, urban high schools in Southwestern United States. The teachers in this program were hired and trained by the researchers. Interventions were also modeled. This form of training directly related to the topic in that it delved into reading interventions at the high school level and placement into a reading remedial course to improve achievement in reading. Data was collected during both years of the study. Vaughn et al. (2014) offered insight into the benefits of modeling to reinforce professional development.

Another aspect of professional development was the quality of the reading coach. The quality of the reading coach could impact instruction. If the reading coach was able to train teachers to instruct in a highly effective manner, instruction improved. The improvement in instruction then may, in turn, impact student achievement. March, McCombs, and Martorell (2012), suggested that there was a connection between the reading coach and how coaching impacted instruction. March, McCombs, and Martorell (2012) described the reading coach as "an on-site person who provided professional development, progress monitoring, and student data analysis to generate improvements in reading instruction and achievement" (p. 5). Their research carried out at Florida middle schools suggested that there was a connection between the reading coach and how coaching impacted instruction. There was no concrete evidence from this study

that there was a relationship between quality coaching and student achievement. Although there was no evidence in this study that quality coaching may positively affect student achievement, results indicated that quality coaching may improve teacher performance. This study was a building block toward additional research needed beyond its middle school participants, with an emphasis on improving instruction.

Professional Development Connected to Literacy Coaching

Literacy coaching and its connection to professional development had been a significant area of research. One study showed that "extending time for literacy coaching is critical to teacher professional-development" (Oberg de la Garza, 2008, p. 216). There was little research on models of all three of the components of professional development, instructional coaching, and its impact on teacher performance. Nevertheless, this study highlighted the importance of dedicating time to instructional coaching due to its potential positive impact on teaching. At the state level, it was suggested to follow a plan of action with any approach but one, single model of professional development was not endorsed at the state level. There were several modules, offered by the state, as the Florida Department of Education Literacy Coach Academy Training Modules (2018). School districts adopted, on their own, an evaluation system.

Steckel (2009) wrote that "successful coaches had the benefit of working in schools that valued teacher learning and provided the time, space, and other resources to facilitate discourse, inquiry, and reflection" (p. 22). At the state level, "Districts frequently have a professional development plan that supports district goals and also have traditional offerings that have been in place over a number of years and may or may not be effective today" (Taylor & Gunter, 2005, p. 74). Also, at the state level, it was found that "The process of asking, "What is working and not working in literacy learning?" related to professional development will get at the heart of what

teachers need and want so they can improve student achievement" (Taylor & Gunter, 2005, p. 74). At the local level, the role of the coach was outlined in Lake County Schools to:

model the seven processes of literacy and a love for reading. Design and provide professional development supporting Just Read, Lake! Assist the principal in leading the school literacy leadership team. Assist the principal in leading the development and implementation of a school literacy plan. (Taylor & Gunter, 2005, p. 57)

This supported the need for coaches to train teachers. The local school district adopted systems whereby instruction, as well as coaching, was connected to an evaluation system based on Marzano (2009). At the local district level, there had been much focus on training teachers to understand how tasks should align with lesson targets (Senn, Marzano, Garst, & Moore, 2015). Although this is a step in the right direction with common language, trainings, and instructional training, more research was needed to confirm if this professional development impacted coaching Intensive Reading and English teachers at the high school level.

Professional development may be a key aspect of coaches training teachers to improve instruction as there was more support requested by teachers on effective strategies (Marsh, McCombs, & Martorell, 2012, p. 18). This study examined if a coach had an impact on instruction when professional development is utilized through the coach's support. Another intervention to guide instruction in English and Intensive Reading classes was tracking progress.

Tracking Student Progress

Research sub-question 3 asked: To what extent does coaching teachers to track student progress contribute to instruction during mastery learning in English and Intensive Reading classes? Coaches supporting tracking student progress as part of mastery learning was an intervention that may also complement small-groups because it allowed awareness of progress in

class and through Professional Learning Communities (Vaughn & Fletcher, 2012). Sustained professional development, as well as continued monitoring of mastery learning, may make small-groups implementation even more impactful. The use of data sheets for students to track and reflect make students much more aware of their goals and progress toward reaching those goals. The teacher may better track the class's performance, and this may drive the direction of instruction. The Professional Learning Community (PLC) may, in turn, gather team data to look for trends and share lesson ideas.

Tracking Student Progress and Mastery Learning

Mastery learning allowed teachers to focus on a step-by-step, scaffolded approach to instruction. Mastery learning helped the teacher to meet the needs of students who continue to struggle with concepts, in that they should master a skill or standard before moving on to another skill or standard. There was a study (Vaughn & Fletcher, 2012) with the goal of researching the impact of RTI, or Response to Intervention, involvement on high school students who showed deficits in reading comprehension. RTI is an approach that tracks students' academic and behavioral progress, which related to mastery learning. This study was influenced by the idea that students who struggled in reading may also be impacted by participation in an RTI program. This study was also influenced by RTI screening, monitoring, and intervention. Data collection was influenced by public health research. In this study, literacy interventions focused on screening and assessment and then following the tiers of intervention. The study consisted of a phase that included elementary students as well as another phase that included secondary students. These secondary students were in Tier 1 and 2 of the RTI program at their school and they also struggled academically in reading. The role of the teacher was to model and instruct high-yield reading strategies that would improve literacy. Results indicated although students

with disabilities may be identified as in need of interventions in reading comprehension, it was difficult to tell whether it was a disability or a deficiency in reading comprehension.

Nevertheless, this information related to the coaching cycle phase of modeling and mastery learning in that it included remediation of reading interventions at the high school level, using an RTI program. This study not only incorporated modeling reading strategies, it also included small-groups instruction. It can also be noted that "changes in secondary interventions for those making inadequate progress include reduced group size" (Kamps & Greenwood, 2005, p. 508). Vaughn and Fletcher (2012) offered future researchers a glimpse into the merge of modeling and small-groups.

Also related to mastery learning and meeting learning needs was the study researching building academic growth through the implementation of reading interventions among high school students (Pyle & Vaughn, 2012). This study was influenced by the RTI, or Response to Intervention, approach of support by tiered interventions for students who struggle in reading. These students may also share behavioral challenges which increase the risk of not graduating from high school. This research was influenced by the need for the integration of reading strategies. This became a focus to meet the needs of struggling students. In this study, RTI interventions were implemented over three years. There were two years of direct interventions and a third monitoring year. Students were eligible to receive services if they did not pass the state's reading test, Texas Assessment of Knowledge and Skills (TAKS). In this intervention program, the TAKS was used as the baseline diagnostic. Then, the role of the teacher was to assist in further screening, interventions, progress monitoring, and data-driven decisions concerning the direction of differentiation. The role of the teacher was to participate in

professional development on vocabulary and comprehension, with a focus on: word study, fluency, comprehension, vocabulary, and motivation.

A major finding was that "secondary students with significant reading difficulties who were not provided intervention exhibited substantial declines in their reading performance, whereas students who were provided reading intervention, maintained reading achievement and did not experience the same decline" (Pyle & Vaughn, 2012). The fact that they did not decline was evidence that such reading interventions were important. This information directly related to the topic in that it included a system of reading interventions at the high school level, used as a multi-tiered approach. Although TAKS is a high-stakes test, this study may be a way to show how RTI through mastery learning may strengthen small-groups instruction.

Tracking Student Progress and Literacy

Additionally, Edwards (2008) performed a study to investigate the effects of phonics intervention on reading fluency for high school students. This study was influenced by the idea that students who struggled in English class may benefit from phonics interventions. This research was influenced by the theory that elementary students who struggle with reading also struggle with phonics. In this study, the literacy interventions focused on interventions among high school students. One intervention that was implemented during this study was phonics intervention, with equal time spent on meeting with students. This study comprised of a class of ninth-grade students. They were chosen due to their lower grades compared with other ninth grade classes. The role of the teacher was to implement phonics instruction, differentiate instruction, and monitor progress. The outcome of Edwards (2008) showed that students at the high school level benefited from phonics interventions.

Furthermore, all students benefited during this study in that they demonstrated gains. This information directly related to the mastery learning process and tracking learning in that it included remediation of reading interventions at the high school level, using phonics which is a specific area in reading; there was also emphasis on tracking progress. One increasingly popular area in reading had been phonics. Fluency and phonics can be addressed during small-groups instruction and tracking progress, making this study relevant to exploring ways to support teachers during the mastery learning process.

Hawkins, Sheeley, and Ling (2011) studied students who struggled in reading. Progress was also tracked. It was hypothesized that repeated reading and vocabulary previewing would work as interventions which would, in turn, improve reading comprehension. This quantitative study researched the impact of those interventions, while receiving assistance from a Special Education teacher. The study included six high school students who read below grade level. They were from an urban high school in the Midwestern United States. The students were tenth and eleventh grade students reading between fourth- and eighth-grade levels. Hawkins, Sheeley, and Ling (2011) related to instructional coaching in that it described the impact of two reading interventions at the high school level. Working with Special Education students may be more beneficial to such students if they are instructed in small-groups, as there would be fewer students working at the teacher-led small-group. This allowed more individualized help and the coach can assist with such structure.

A differentiated approach allowed for educators to track student progress, which in turn also allowed the implementation of mastery learning (Lang, Torgensen, Vogel, Chanter, Lefsky, & Petscher, 2009). The goal of this study was to analyze the effectiveness of reading interventions on high school students. This study was influenced by the *No Child Left Behind Act*

(2001), as the need for the integration of reading strategies into content areas arose to meet the needs of struggling students. Although there was increased demand in performance of students and accountability on the part of schools, not much success occurred to improve students' proficiency in reading. There was a need to provide more support to students to raise achievement. The sample for this study comprised of 1,265 high school students from seven different schools. One intervention that was implemented was "RISE," which was an intervention that allowed teachers to modify the curriculum to implement a differentiated approach. This differentiated approach included making changes based on the literacy needs of students. This was considered a more flexible approach since the teacher had to weigh individual literacy needs. The role of the RISE teacher was, therefore, to differentiate instruction as needed, for students to make progress. This study included remediation of reading interventions at the high school level. This research supported the idea that teachers may use a flexible approach to better meet the needs of their students.

There seemed to be a strong connection between tracking progress, mastery learning, and reading interventions. The goal of this project (Edmonds, Vaughn, Wexler, Reutebuch, Cable, Tackett, & Schnakenberg, 2009) was to review interventions that would improve reading comprehension among older, struggling students. This data derived from reading interventions implemented to assist high school students. This study was influenced by the idea that students continue to struggle in reading. This study, influenced by interventions suggested by *No Child Left Behind Act* (2001), highlighted deficits in reading comprehension of struggling students. This intervention program diagnosed students' decoding, fluency, vocabulary, and comprehension. This was carried out due to the importance of targeted interventions in reading, in lieu of general interventions that may have little impact when compared to targeted

interventions. The majority of the students needed reading instruction; this instruction would be targeted on skills and not generalized instruction.

This study addressed remediation of reading interventions at the high school level and the idea of targeted skills connected to mastery learning in that teachers were encouraged to re-teach concepts to those who have not mastered the concepts at the pace of the rest of the group. This meta-analysis study consisted of a review of a total of twenty-nine intervention studies included 976 students who were instructed in reading comprehension strategies. Researchers found that the "Results from the meta-analysis indicate that students with reading difficulties and disabilities can improve their comprehension when provided with a targeted reading intervention in comprehension, multiple reading components, or, to a lesser extent, word reading strategies" (Edmonds et al., 2009, n.p.). This synthesis of studies suggests that readers who struggled improved their comprehension when they were instructed with the use of reading comprehension strategies. One should be cautioned, however, that struggling sixth- to twelfth grade students may not experience such instruction in reading comprehension because that kind of instruction is usually implemented at the elementary level.

Tracking Student Progress, Remediation, and Mastery

Tracking progress and mastery learning were similar to remediation. There was also a study on the impact of a remediation program for high school students (Lovett, Lacerenza, DePalma, & Frijters, 2012). This study was influenced by the idea that students who struggled in reading may benefit from interventions. This study included interventions similar to the ones suggested by the National Reading Panel (2000), since the need for the integration of reading strategies became more pressing, in order to meet the needs of struggling students. In this study, the best practices of literacy interventions focused on interventions among adolescents, such as

the use of the PHAST PACES program, which facilitated word identification strategies, knowledge of text structures, and reading comprehension strategies. The sample of this study consisted of 268 struggling readers at the high school level. Sixty to seventy hours of intervention time was spent at nineteen high schools in a large, diverse urban school district. This intervention program included two semesters of professional development, in addition to on-site visits. The role of the teacher was to facilitate decoding and comprehension through one-on-one interventions.

Results indicated that although interventions can impact older, struggling readers, a single semester of interventions had not yielded enough positive results. A second semester of interventions had been suggested. This information directly related to tracking progress during the mastery learning process in that it included remediation of reading interventions at the high school level. Regarding reading comprehension and teaching—remediation, intervention, and tracking themes in this study were all inter-connected.

Polkinghorne and Hagler (2012) showed how progress may be tracked, for reading comprehension, in other content areas. The goal of this study was to integrate reading strategies in a Business course to assist high school students in improving reading comprehension. The *No Child Left Behind Act* (2001) and the *Charles D. Perkins Education Act* (1984) influenced the integration of such reading strategies into content areas, as they both brought an increase in accountability as it related to standardized testing and performance in reading. Educators became more involved in the integration of reading strategies in other content areas. This qualitative study researched the impact of interventions in a Business course that implemented reading interventions. Ten teachers participated in this program. The teachers were chosen based on a variety of backgrounds in urban, suburban, and rural areas. Interventions that were used varied

and included primarily interventions that had been beneath the reading level and needs of students. This information directly related to tracking progress in that it included the implementation of reading interventions in a content area at the high school level. This study was another example of how small-groups, modeling, and tracking progress may be implemented to improve reading instruction across the curriculum.

Findings suggested literacy skills were used and they were defined as skills needed to learn workplace content. More specifically, there were strategies implemented that focused on phonemic awareness, although this may be a skill developed at elementary school levels. Despite the attempt to implement literacy strategies in this business course, there were not enough applications of literacy skills to impact a student's development of reading comprehension skills. This would suggest a need for further interventions in building such literacy skills.

At the state level, there were training modules for coaching which included tracking progress, but the trackers were only examples and not required of all districts. Since there was no single-approach to tracking at the state level (Florida Department of Education Literacy Coach Academy Training Modules, 2018), local districts implemented their own plans to track progress. At the local district level, tracking student progress was part of the systems by Marzano (2009). It was strongly suggested that teachers model to students how to track progress and reflect on the next steps (Senn, Marzano, Garst, & Moore, 2015). Regarding teachers' tracking progress, the results from studying local schools indicated that "it appeared that they were not accustomed to being asked to provide evidence of changes in teacher effectiveness, but only to report their time use" (Taylor, Zugelder, & Bowman, 2013, p. 41). Also, among literacy coaches in Florida, the research showed that "although student progress monitoring data were posted in classrooms and in teacher work areas showing the emphasis on data-informed instructional

decision making, the literacy coaches did not indicate that this evidence supported their own individual effectiveness" (Taylor, Zugelder, & Bowman, 2013, p. 41). Research on coaching teachers to track progress at the local level suggested that "formal assessments for screening, diagnosing, and monitoring growth should be included" (Taylor & Gunter, 2005, p. 73). While duties of coaches in Lake County Schools, as well as nearby districts, included updating the principal on needs, interventions, and progress in literacy, as well as making a professional library available to staff, other duties included supporting teachers as they implemented remedial interventions to assist students, which also included data-driven progress monitoring.

Not only did a coach promote literacy at the school and in the community, but the coach also celebrated progress in literacy (Taylor & Gunter, 2005, p. 58). Coaching teachers to track progress not only made teachers and students aware of progress, but they can also use data to celebrate success. Tracking progress, however, was not an approach that is implemented by some teachers in this school district (Learning Cycle Tool, 2018). The reasons for this digression from that approach vary from school to school.

One way to implement tracking progress and teaching for mastery was by creating a system. In their book, Moskal and Keneman (2011) created suggestions similar to those on a manual on how to lead a literacy initiative at an organization. The role of the teacher was to lead others in modeling and instructing reading strategies that would improve literacy. This included reading interventions at the high school level, using a specific area of leadership in literacy. Organization, research, modeling, motivation, and reflection were important aspects of literacy leadership in this study. Regarding impact on instruction, "the value of the data is to inform instruction, which is the target role of the literacy coach" (Moxley & Taylor, 2006, p. 60). Supporting teachers on how to track progress may influence instruction.

Conclusion

Although there have been contributions of this literature to the field of reading, much of the literature suggested that some reading interventions worked: small-groups instruction may be effective, professional development may complement the impact of an instructional coach, and tracking students' progress may be an effective way to check for mastery. The problem remained, however, that much of the research did not occur at the high school level, with interactions between coaches and teachers in English and Intensive Reading classes. It cannot yet be confirmed if strategies may work in the same manner at the high school level. Transferability of research may be an issue in that one cannot confirm the same results of prior research would apply to the high school level (Bloomberg & Volpe, 2016, p. 164). Using research from the elementary and middle school level could have left a gap of research that needs to be addressed at the high school level, as some approaches may work at one level and not work at another level.

There were overall strengths about coaching intervention in the literature. Strengths included: small-groups instruction may allow for more practice time on a concept, the idea that professional development could be used as training toward a common goal, and if students and teachers track progress, at various levels, mastery may likely occur. There was still, however, the need for more research to be done at the high school level (Bloomberg & Volpe, 2016), instead of often citing evidence for effectiveness of these approaches at the elementary and middle school levels.

Overall weaknesses also existed in the literature. Studies in the literature on reading interventions, for the most part, addressed reading interventions in secondary school; but, interventions focused on coaching in elementary schools. Small-groups instruction may require

extra planning, which may not be appealing to some educators to spend even more time planning without compensation, and this need may have to be addressed more in the research. Professional development, if not applied within a reasonable period after the training, may not be as impactful (Desimone & Pak, 2016). Finally, mastery learning required the teacher and PLC to remain consistent in tracking data. This may be a challenge because if the coach stops guiding teachers throughout the entire process, results will be uncertain. The literature may also be missing information. There seemed to be a need for much more literature on the three main coaching interventions: small-groups instruction, professional development, and tracking data as part of mastery learning.

Instructional coaches have played many roles, depending on the needs of the school. One study investigated the instructional coach and data-driven decision making, more specifically how the instructional coach used data and how that might have related to student achievement. Marsh, Sloan McCombs, and Martorell (2010) conducted a study that included Florida middle schools. Their mixed methods study consisted of reading coach programs at eight larger districts in the state, with an average of eight to ten middle schools per district. There were 113 schools and researchers surveyed those schools' principals, reading coaches, and ten teachers at each school. Researchers spent time at each case study during the school year, which included sixty-four interviews and twenty-eight observations. School needs and the reading coach's experience as they related to the coach's role were also observed. Findings included 62% of coaches focused on data and taking action due to data. Over half of the coaches focused on comprehension, vocabulary, fluency, and differentiating instruction to meet the needs of students (Marsh, Sloan McCombs, & Martorell, 2010). Coaches with more experience and coaches at low-performing

schools seemed to use data-driven decision-making more than others. More than half of the coaches noted that administering assessments took time away from their roles as coaches.

Although the recommendation was made for administrators and policy makers to allow more time for coaches to assist teachers, more frequent data support from coaches has shown a positive relationship with student achievement only at the middle school level. This may or may not relate to instructional coaches impacting high schools, as although the study took place at the middle school level, it showed that an instructional coach was of impact at the schools.

Coaches themselves may lack professional development. Gallucci, DeVoogt Van Lare, Yoon, and Boatright (2010) addressed that potential problem. Researchers used the Vygotsky Space approach to examine learning and professional development of a high school literacy coach. The researchers worked under the hypothesis that coaches were learners, as well. Researchers wanted to know not just if coaches were learners as they coached, but also if or how well they were supported. The study occurred at Ridgeview Junior High, a middle school with 957 students in eighth to ninth grade. Researchers in this study included an approach called the "Vygotsky Space to analyze an empirical case that is described in detail with interview, observational, and archival data" (Gallucci, DeVoogt Van Lare, Yoon, & Boatright, 2010, p. 921). They also differentiated between instructional coaching as a supervisory versus a non-supervisory role and specified that their study related to instructional coaching in a non-supervisory role. The study consisted of a series of interviews with an instructional coach, four teachers, a principal, and an external consultant.

During the study, researchers attended forty-one events in which the coach participated, ranging from professional development training to classroom teaching. Results of this study suggested that more research was needed to "help district and school leaders understand

coaching as part of a system of support for professional learning" (Gallucci, DeVoogt Van Lare, Yoon, & Boatright, 2010, p. 956). This study related to the impact of an instructional coach through professional development because although it was a single case study, it occurred at the high school level, as well as offering a closer look at the life of an instructional coach on campus. Further research was suggested on what kind of structure needed to be in place to support the professional learning of coaches, as well as which kinds of instructional content impacted coaching effectiveness. The study suggested that although instructional coaching was supportive of teachers, more research was needed to help district and school leaders guide coaches to offer such support. There was a need for further research, as there is not enough research on how a coach may impact instruction at a high school.

The Need for Further Research

Neumerski (2013) wanted to uncover what researchers may already know and what they may not yet know about instructional leadership, so it was argued that researchers should opt for a more integrated approach, including the principal and instructional coach, to understand the impact of the coach and that little is still known about instructional coaching and its connection to teaching and learning. They found that there was information on the topics, independent of each other, but the research did not describe how these were connected.

Stevens (2010) performed a case study that described the role of a high school literacy coach. It was thought that the role of the high school coach could differ from theory. The case study was designed to investigate one high school literacy coach's role as it was carried out in a school setting where complexities of large institutional systems such as high schools can affect the role as it is envisioned and described in the professional literature. The study attempted to explore the role of the literacy coach. It also attempted to examine how much the role differed in

theory versus practice at the school site. The research included the experiences of a coach at a high school, through observations and interviews. The high school was Laurelton High School and it served about 1,200 students in the Mid-West. Data from this study was gathered from interviews, artifacts, and observations of the literacy coach interacting with administrators and staff. Results included "lack of clarity in role responsibilities, the importance of an initial understanding of the role, credibility as a teacher with- out specific content expertise, and content teacher resistance to the coaching role" (Stevens, 2010, p. 24). This study was evidence that further study was needed on the role of the literacy coach and that the role of the high school coach remained unclear.

If the role of the literacy coach remains unclear, then this may be an obstacle in implementing strategies that may help coaches improve instruction at a Florida school. The next chapter, Chapter Three, will discuss methodology, study details, and data analysis to explore whether the instructional coaching of Intensive Reading and English Language Arts teachers, as they implement mastery learning, impacted instruction.

CHAPTER 3

METHODOLOGY

"Coaching is a multifaceted endeavor that has taken hold in schools across the country as a mechanism for new teacher induction, ongoing teacher learning, assisting in implementation of new initiatives" (Desimone & Pak, 2016, p. 4). Recently, coaches have also been responsible for "helping teachers understand and adapt their instruction to new state content standards" (Desimone & Pak, 2016, p. 4). The question of whether instructional coaching of Intensive Reading and English Language Arts teachers can assist teachers to improve instruction was the over-arching idea influencing this research. This research resulted in providing evidence that may suggest coaches are a critical resource for teachers to improve instruction. The purpose of this study was to examine the interactions between the literacy coach and teachers during the mastery learning process.

The research question was: How might instructional coaching impact the instruction of teachers as they seek to improve instruction? Other questions included:

- 1. What impact does the instructional coach have on small-groups instruction in English and Intensive Reading classes?
- 2. How does the professional development provided by the instructional coach to literacy teachers improve instruction in English and Intensive Reading classes?
- 3. To what extent does coaching teachers to track student progress contribute to instruction in English and Intensive Reading classes?

The school in the study was a public high school and the school's literacy coach will support teachers with a focus on high-yield strategies, like how to organize students for learning (Marzano, 2009) through the implementation of mastery learning. The questions for this study

derived from the problem of how to support teachers at the school to improve instruction. This study explored how teaching during mastery learning can be supported by instructional coaching.

The framework for this study was based on research on instructional coaching at the elementary and middle school levels but there was limited research on coaching, through the implementation of mastery learning, at the high school level. This study related to research on whether there were phases in the coaching cycle that support instruction with a focus on scaffolding (Fisher, Frey & Nelson, 2012, p. 554). A theory related to this study was that of scaffolding and reflection, as Vygotsky (1978) explained when learners reflected, it allowed them to present stronger arguments. Related to reflection during the learning process, this study analyzed initial and post surveys, reflective interviews, and observational feedback from coaches and teachers on how coaching contributed to improved instruction, as teachers guided students to mastery of the content.

Furthermore, there was not much research available, at the high school level, on small-groups learning. A theory related to the small-groups approach was explained when Piaget (1926) suggested that learners develop skills when they interacted in groups. This study further examined how a coach may train and support teachers to attempt small-groups learning as part of the mastery learning process. Moreover, Slavin (1996) wrote about the positive impacts of small-groups collaboration, but little research was available about small-groups learning at the secondary level. These theorists and researchers started the foundation for further research on coaching teachers through the mastery learning process. Such theorists wrote about how learning occurs in steps and this research will bring results on how if those scaffolded steps during mastery learning, with the support of an instructional coach, also impacted instruction at the

secondary level. The research from this study further investigated how the coach assisted teachers during instruction of such scaffolding.

Interventions by the literacy coach, through such scaffolds, could play a key role in offering resources to teachers and supporting them to plan lessons with effective interventions that could impact FSA reading scores, and in turn, the school grade which was measured in part by reading scores on the state test, FSA or Florida Standards Assessment. The breakdown of tested areas is featured in an overview from the Florida Department of Education (Figure 2).

English Language Arts (FSA & FSAA)	Mathematics (FSA, EOCs, FSAA)	Science (NGSSS, EOC, FSAA)	Social Studies (EOCs)	Graduation Rate	Acceleration Success
Achievement (0% to 100%)	Achievement (0% to 100%)	Achievement (0% to 100%)	Achievement (0% to 100%)	4-year Graduation Rate (0% to 100%)	High School (AP, IB, AICE, Dual Enrollment or
Learning Gains (0% to 100%)	Learning Gains (0% to 100%)				Industry Certification) (0% to 100%)
Learning Gains of the Lowest 25% (0% to 100%)	Learning Gains of the Lowest 25% (0% to 100%)				Middle School (EOCs or Industry Certification) (0% to 100%)

Figure 2. 2016 Preliminary School Grade Overview (Source: Florida Department of Education).

Research was required in this area because it would allow leaders to further research trends in gains after instructional coaches have implemented interventions. Another reason why research on how to resolve this issue was important was because such interventions may have an impact on student success, as other instructional coaches may implement the interventions if they were found effective. First, this research allowed leaders to find trends in gains, following the instructional coaching of teachers who apply such reading interventions. Additionally, this body of research contributed to teaching and learning by findings that have an impact on the success of coaches at other schools throughout the school district. Such data would help coaches, as well as

Intensive Reading and English teachers prepare to meet the needs of more students. Leaders were able to understand how to more positively impact instruction because due to such research, teachers and administrators knew which strategies worked and which did not work.

When looking into strategies, one should consider that the school district strongly suggested that the Reading and English departments utilize the curriculum map and implement recommended interventions. One may wonder how educators knew that these interventions are working or if these interventions were impacting reading gains, and therefore also impacting the school's grade. The question was: How does or how can instructional coaching impact instruction?

The research design was a mixed-methods approach to the study of instructional coaching interventions. This study consisted primarily of a qualitative case study of a coach and teachers, interviewing them and observing their experiences throughout the implementation of mastery learning. Some of the study included quantitative data from surveys, assessments, and the Learning Cycle Tool (2018) as some reporting of data was needed to measure progress of schools, comparison of adequate yearly progress, and surveys of teachers about the implementation of such strategies.

Setting

The mixed-methods research was conducted between a literacy coach and Intensive Reading and English Arts teachers from one public high school in the school district in which the principal investigator held the position of Resource Teacher. The school district was in the Central Florida area. This school was in a suburban setting in the school district. The literacy coach supported all teachers at the school, but primarily helped Intensive Reading and English teachers (Florida CIMS, 2017). The research focused on the assistance the literacy coach offered

to three Intensive Reading and three English Language Arts teachers (FOCUS School Software, 2018). These teacher-participants were chosen because they teach the FSA-tested courses, English and Intensive Reading. This study was appropriate because it would bring results about the exploration of how the coach supported teachers through the mastery learning process. Since there was little research on this subject, as it related to the secondary level, the study offered data on how the coach supported teachers. The school leader had been supportive and promoted literacy schoolwide (Florida CIMS, 2017). This study, therefore, offered some insight on how to improve literacy skills at the school.

Participants

The study sample included three Intensive Reading teachers, three English Language Arts teachers, and their literacy coach (FOCUS School Software, 2018). All participants were female, with one Hispanic and two Caucasian English teachers and one African-American, one Caucasian, and one Hispanic Intensive Reading teachers. Only one English teacher was a first-year teacher, another Intensive Reading teacher was in the third year of teaching, and all the other participants taught for five years or more. The teachers and coach were selected because they worked at a school that continued to seek improvement (Florida CIMS, 2017) to an "A" rating as its school grade. Teacher feedback helped the research because their perspective impacted how the coach was perceived and whether they felt they received the instructional support they needed. The literacy coach worked as a peer, along with the researcher, two school years ago, as well.

Although students were not participants in this study, it is important to point out how students were placed into courses. Students who did not demonstrate proficiency in reading comprehension, from the middle school Florida Standards Assessment, were placed in Intensive

Reading for remedial instruction in reading (Florida Standards Assessments, 2017). They were enrolled in English, as well as an Intensive Reading course to offer them interventions in reading (FOCUS School Software, 2018). Some projects the literacy coach supported in English and Intensive Reading classes included: linking students from College Board to Khan Academy for their personalized, online practice in reading comprehension (Official SAT Practice, 2017), monitoring and assisting with online reading practice that focuses primarily reading fluency, and modeling instructional scales and lessons to teachers through the instructional framework (Marzano, 2009). This support had been ongoing, throughout the 2017-2018 school year.

The literacy coach was chosen because the coach's school is still trying to show AYP (Adequate Yearly Progress) to achieve "A" status (Florida CIMS, 2017). Although they have been dedicated to supporting instructional coaching, there was still a need to improve the school's performance in reading. The researcher met with participants through a series of surveys, interviews, and observations of interventions. Meetings occurred during planning or after school hours, as teachers were available within the initial survey, interviewing window, and post-survey period in the spring. There were also classroom visits to observe the coaching cycle (Learning Cycle Tool, 2018). These visits occurred with all six teacher participants and the coach.

Types of Data

Regarding method selection, this study had characteristics of qualitative research (Bloomberg & Volpe, 2016, p. 145). Data included initial and post-surveys, interviews, and observations. Interviews included questions about challenges a coach and teachers face while supporting or teaching through mastery learning. The intent of gathering this data was to explore how the coach impacted teachers during the mastery learning process. This data was needed

because teachers' perspectives were important to understanding how to coach them. Another set of interviewing included questions about challenges the coach faces when helping teachers.

Gathering this information was crucial since they were the main participants of the study. The initial and exit surveys were administered through Qualtrics to ensure accuracy. It contained questions about strategies coaches have used and teachers' views on if and how the strategies helped them improve instruction. This data was needed to analyze interventions by the coach, the researcher must know which strategies and techniques have been used thus far. There were also separate, individual observation times with the coach and teachers (Learning Cycle Tool, 2018), to ensure information shared is confidential and responses were not discussed among participants. The collection of data occurred throughout the process by the researcher, who was a Resource Teacher at the district level. Literacy coaches worked directly with the researcher, so arranging observational time did not pose a challenge. Data was gathered by the researcher during in-person, voice-recorded interviews and surveys. The information from the interviews was immediately transcribed by Rev software (Rev Audio & Video Transcription Services, 2018). Participants were asked to review the data from the interview to ensure it accurately represented their responses. Qualtrics (2018) housed and synthesized the data from the initial and post-surveys. This was the quantitative aspect of the research, as trends during the study were discussed once found.

Analysis

Data was collected from multiple tools to maintain objectivity. Data was gathered from recorded interviews and transcripts of the interviews. Data included feedback from coaches and teachers: one interview protocol for the coach and another for teachers. This information was

needed because the perspective of both parties can help the researcher learn more about the coaching of strategies in Intensive Reading and English classes.

Data was also collected through surveys, using Qualtrics (2018), a data management system, to ascertain which strategies coaches and teachers have attempted. Surveys offered the researcher information on techniques supported by the coach, which could guide the coaching interventions attempted (see Appendices A-F). Observations and consulting teachers and coaches using the Learning Cycle Tool (2018), during the interview and survey process, another important step in the analysis phase to record the process of coaching interventions and document how or if they seemed to have an impact in the classroom (see Appendix G). The Learning Cycle Tool was important because it had been the observation tool used by district administrators and the researcher wanted to remain consistent with measuring such data by using the same tool. Data, using the Learning Cycle Tool (2018), was collected at the beginning and end of the study to ensure a substantial amount of information was gathered from observing the interaction between coach and teachers.

Data was organized by teacher responses versus coach responses. The interview protocol yielded responses with evidence of how the coach improved instruction. Voice recorded notes from the interviews and responses and notes from the surveys were organized and coded; all such information was transcribed by Rev for interviews (Rev Audio & Video Transcription Services, 2018) and Qualtrics (2018) for surveys. Categories of recorded information included: coach, English Teacher 1, English Teacher 2, English Teacher 3, Reading Teacher 4, Reading Teacher 5, and Reading Teacher 6, in addition to professional trainings, small-groups learning, tracking progress, mastery learning, and coach support. Patterns or trends were recorded to ascertain any significant findings. The study adhered to the following steps of a mixed-methods

study (Creswell, 2013). One of the first steps in this process was locating a site to study. One had to then gain access to the school site and begin building a rapport with staff, prior to the study. Purposeful sampling was used as the seven participants had to be members of either the English or Reading department for the participants in the study to align with the research questions. Availability was also a factor in choosing participants.

Data collection included surveys, interviews, and observations. The data was collected through the Learning Cycle Tool (2018), which recorded observations. The surveys were administered and recorded through Qualtrics (2018); there were two surveys: an initial survey administered at the beginning of the study and a post-survey administered at the end of the study. The interview was administered by the researcher but recorded and transcribed through Rev software. When field issues arose, challenges included scheduling conflicts when administering interviews. Data was stored to the Cloud and desktop of the research device, while ensuring the confidentiality of participants was maintained. Since the purpose of this research was to explore the impact of instructional coaching, at a high school, on Intensive Reading and English Language Arts teachers during the mastery learning process, the study explored whether mastery learning can be complemented by small-groups instruction, training, and tracking progress, while also investigating how a coach supported teachers. This research was important because it may assist in instructional support decisions made at the school. Following the steps of a study (Creswell, 2013) helped ensure that trends in instructional support were relayed when results were discussed.

Participants' Rights

The six teachers and one literacy coach participating in this study completed a consent form, following University of New England and IRB formatting, allowing the researcher to use

their feedback and observations of their work in the study. Participants also signed, as well the researcher, a confidentiality statement so that their identities were not released. Employers do not have access to names of participants. Confidentiality of participants is a priority (Bloomberg & Volpe, 2016, p. 162). An additional step to ensure this occurred was that the names of participants were quickly coded after recordings (Rev Audio & Video Transcription Services, 2018), then actual identifying information discarded to protect the identity of those employees. Participants' names were replaced in reports of the study. Participation was also voluntary. School and participants were assigned a pseudonym through transcripts and documentation. Furthermore, participants had the right to withdraw from the study at any point through the process. Participants were provided a copy of the study, upon request.

Study Limitations

Although this study brought insight about coaching at the high school level, there were limitations. One potential limitation was that the research included teachers and a coach from only one school, making the data limited to a set of participants from one site. Although there were ten coaches at the high school level, time was another limitation that deterred the researcher from including those coaches in the study. Feedback from all ten coaches may or may not have helped answer the research question. Teachers may fear that coaches and administrators may disagree with their views or coaches may be concerned that teachers find out about their opinions of them. It for this reason that it is important for the researcher to remind participants of the confidentiality agreement. Other limitations included that the participants maintain objectivity during the open-ended interview of the study, as there might be a tendency to add details based on their own philosophy of education. If the principle investigator used the entire interview protocol and did not deviate to discussions that may become off-topic, credibility of the data

collected could be ensured by such structure. Limitations also included ethical considerations, so it was important to protect participants from harm (Bloomberg & Volpe, 2016, p. 161). In this case, the principle investigator followed all measures during data collection and data reporting to ensure that the site and participants remained unknown to the public. This included clarity in the research consent process, ensuring privacy during interviews, observations, and any requested meetings. These occurred individually and in a private setting.

Limitations also related to trustworthiness. One aspect of trustworthiness was credibility. For instance, any researcher may have bias about the topic but "self-reflection creates an open and honest attitude" (Bloomberg & Volpe, 2016, p. 163). Yet another possible limitation was bias toward previously implemented interventions, as sometimes coaches and teachers have a preferred set of strategies from which they choose not to deviate. One way to decrease bias in this study was having participants review notes collected from their own interview to ensure their views were accurately represented. Another aspect of trustworthiness was dependability. A limitation was readers being unable to determine how data was collected. One way to avoid this was the principle investigator explaining in detail the steps for collecting data (Bloomberg & Volpe, 2016, p. 163). Transferability was one more possible challenge. The principle researcher ensured that the data provided is detailed enough "regarding the context and/or background also offers an element of shared experience" (Bloomberg & Volpe, 2016, p. 164). This study contained a shared experience of a coach interacting with teachers at the high school level.

Conclusion

Chapter Three consisted of a review of the methodology of this mixed-methods research study. There were seven participants: six teachers and one coach from a public high school in a Central Florida school district. Data collection occurred through surveys, interviews, and

observations. Confidentiality was emphasized, and data was coded to maintain confidentiality, as well as credibility of research (Bloomberg & Volpe, 2016, p. 163).

The next chapter, Chapter Four, examines the interaction of the coach, in one of the coach's many roles, which was the instructional coaching of teachers; the next chapter also highlights results of methodology for this mixed-methods study. This methodology will be applied and reported in the next chapter with the consideration that

coaching is a multifaceted endeavor that has taken hold in schools across the country as a mechanism for new teacher induction, ongoing teacher learning, assisting in implementation of new initiatives, and, most recently, in helping teachers understand and adapt their instruction to new state content standards. (Desimone & Pak, 2016, p. 4)

Chapter Four will include further details of the study in action, as the consent and confidentiality forms are distributed and completed. The following chapter will also include data collected from the interviews, as well as the initial and exit interviews. The observations (Learning Cycle Tool, 2018) occurred in this phase of the study and data was gathered to answer the research question: whether the instructional coaching of Intensive Reading and English Language Arts teachers, as they implement mastery learning, can assist teachers to improve instruction.

CHAPTER 4

RESULTS

This study provides educators insight about how a coach may impact literacy instruction at a school. The purpose of this study is to examine the impact of a literacy coach on the instruction of Intensive Reading and English Language Arts teachers as they focus on three interventions to facilitate the mastering of learning standards in their classrooms. The study provides data on whether instructional coaching in the Intensive Reading and English classroom impacts the teacher's instruction.

Review of Methodology

Data was collected through initial and post surveys, interview protocols, and initial and post observations. Each method of collecting data was distributed to each participant and it was submitted to the researcher within specific time frames. Data was then coded, categorized, and themes were noted.

Surveys

An initial and post-survey were administered to all participants, coach (see Appendices C-D) and teachers (see Appendices E-F), to learn more about how their interaction with a literacy coach might have impacted their instruction. Qualtrics (2018) was the computer interface used to administer and collect data from the Likert surveys created by the researcher. There were two surveys distributed as initial surveys: one initial survey for teachers and another initial survey for the literacy coach. Upon completion of the initial survey, and after teachers interacted for three weeks with the coach, a post-survey followed for both teachers and coach. The surveys asked questions about small-groups, professional development, and tracking student progress as they related to working with their literacy coach.

The survey consisted of prompts about literacy practices in relation to a Likert Scale, with responses ranging from strongly disagree to strongly agree. The scale to measure the answers were strongly agree equaling four points, agree equaling three points, neutral equaling two points, disagree equaling one point and strongly disagree equaling zero points. Based on this point system, one would calculate means and standard deviations of these points to evaluate trends or experiences of teachers and the coach. Once the surveys were completed, reports and charts of responses were created to illustrate trends, using an offline spreadsheet.

Observations

The Learning Cycle Tool (2018) was used to learn more about what was happening in the classroom at the beginning and toward the end of the study. This observation tool (see Appendix G) allowed the researcher to gather data on whether any of the interventions or approaches modeled by the coach, were evident in the instruction of participants. The Learning Cycle Tool is an observation-type auditing form used by district administrators and it was used in this study to maintain a consistent manner of measuring classroom observation data. The observations during this study, however, only included the researcher and the observed teacher with their class to maintain confidentiality per a consent agreement, as students were not directly studied.

Interview

The interview (see Appendix B) was used to offer participants an open-ended opportunity to speak about their experience with the literacy coach and instruction in their English or Intensive Reading class. Participants described experiences while working with the coach, as those experiences pertained to support received to improve instruction and whether that support from the coach impacted instruction during the mastery learning process. The coach was also interviewed (see Appendix A), with similar question stems, to gather descriptions on the coach's

perspective on how they supported teachers to improve instruction and the kinds of approaches they used during that support. The interviews were conducted by the researcher and recorded and transcribed through Rev software (Rev Audio & Video Transcription Services, 2018).

Summary of Data Collection

Once data was collected, coding began. Spreadsheets were created for reporting survey questions' quantitative results, as well as Learning Cycle Tool observational data. Once interviews were coded, themes were noted, and data was categorized according to emergent themes. Other categories of recorded information included: coach, teacher 1, teacher 2, teacher 3, teacher 4, teacher 5, and teacher 6, in addition to professional trainings, small-groups learning, tracking progress, and mastery learning. Participants were assigned those pseudonyms to maintain anonymity of those involved in the study. Patterns or trends were recorded to ascertain any significant findings as suggested by Creswell (2013) in following steps of a study. For example, once the site was decided, purposeful sampling was another important step the researcher considered because the participants had to be teachers of English and/or Intensive Reading due to the focus of the study. It was then determined that data collection would include surveys, interviews, and observations.

Participant Profile

The study sample consisted of three Intensive Reading teachers, three English Language Arts teachers, and their literacy coach (FOCUS School Software, 2018). Participants were selected because they worked at a school that continued to seek improvement to an "A" rating as its school grade (Florida CIMS, 2017). Ongoing coaching throughout the 2017-2018 school year included small-groups, trainings, and tracking progress related to online practice in reading comprehension (Official SAT Practice, 2017), as well as monitoring and assisting with online

reading practice that focused primarily on reading fluency (Online Reading Practice, 2017). The literacy coach also modeled instructional scales (Marzano, 2009) and lessons to teachers through the instructional framework.

When asked to describe their experience teaching in an Intensive Reading or English classroom, participants shared their backgrounds. ELA Teacher 1, a fifth-year English teacher, said that this "past year has been a bit of a learning experience because we had a new instructional coach and....this is the first year that we've actually had an instructional coach since I've been here." This participant was in year five of teaching but there were other participants more experienced in teaching. ELA Teacher 2 said that this was year nineteen of teaching English and felt like that much experience taught them how to work with all grades of high school English, as well as ESE and gifted students. This teacher explained that "for the most part, my experience has been very positive."

Another teacher was in year one of teaching English and this was also year one of overall teaching. ELA Teacher 3, a first-year teacher, described the experience as "very rewarding, since I have a diverse population for all my classes, and I realize that as teachers, we have to learn our students and their strengths, and where they need to have the most help, in order to progress." Teacher four was an Intensive Reading teacher, in the third year of teaching. Intensive Reading Teacher 4 taught three grade levels in high school Intensive Reading and felt like this was a positive experience, even though this teacher had "to learn both the curriculum for FSA as well as ACT and SAT, all in the past three years." Another participant had almost twenty-six years of teaching experience in Intensive Reading and/or English. For nineteen of those years, this participant taught in elementary school as a reading teacher. Intensive Reading Teacher 5 most recently taught Intensive Reading. The next participant started working at the school a month

after school started, after hurricanes Irma and Maria. Intensive Reading Teacher 6 described this year's instruction as:

Once I came in, we had to build in that structure first. It's been a challenge, but it's been very rewarding throughout the process. They have mastered so many standards. They've reached their goals, and hopefully, they'll reach passing the FSA.

This teacher said that the goal was for students to show gains. Intensive Reading Teacher 6 also said that "I know half of my students or the majority of my students have gained so much not only instructional, but also, they have more self-esteem and motivation because I see that every day."

The final participant, the coach, said that this was the first year of coaching but described this experience so far as one that was: "very rewarding...to work with a lot of teachers who...want help honing in on their craft...enjoy...workshops for them, and... coming up with various resources...to strengthen their instruction."

All participants worked at a single high school campus and their experience is summed up in the table below (Figure 3).

Participant	Subject	Years of Teaching	Educational Level
Teacher 1	English	5	Bachelor's
Teacher 2	English	19	Master's
Teacher 3	English	1	Master's
Teacher 4	Intensive Reading	3	Bachelor's
Teacher 5	Intensive Reading	26	Master's
Teacher 6	Intensive Reading	5	Bachelor's
Coach Literacy		1 st year coaching Master's	

Figure 3. Summary of Participants' Experience

Research Questions

- 1. What impact does the instructional coach have on small-groups instruction in English and Intensive Reading classes?
- 2. How does the professional development provided by the instructional coach to literacy teachers improve instruction in English and Intensive Reading classes?
- 3. To what extent does coaching teachers to track student progress contribute to instruction in English and Intensive Reading classes?

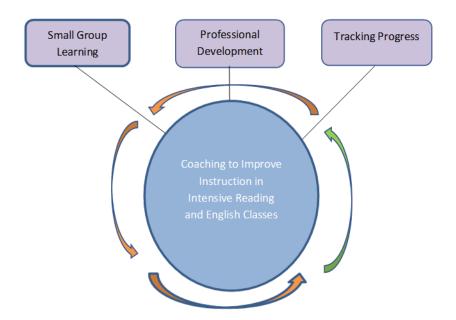


Figure 1. Conceptual Framework of Instructional Coaching Interventions that Impact Instruction.

The framework displayed above (Figure 1) is a visual representation of a core concept, the coach improving instruction, surrounded by three studied interventions that would be continuously utilized to improve Intensive Reading and English teachers. The results will convey connections of these interventions used by the coach to improve instruction.

Presentation of Results

Four themes emerged from the surveys, interview, and Learning Cycle Tool data. These four themes were small-groups, professional development, tracking student progress, and mastery learning helped students learn the content.

Theme 1: Small-Groups

Small-groups is considered a technique in the category of the high-yield strategy of organizing students to practice and deepen knowledge (Marzano, 2009). Marzano (2009) explained that a high-yield strategy may not work every time, in every classroom. If a coach understands when to use a high-yield strategy, teachers will be better supported because the coach could train teachers when and how to use the strategy. Techniques like small-groups or rotations are effective, but they require planning and their successful implementation would depend on the task. If the coach emphasized to the teachers the purpose of the task was for students to practice what they learned and then share it over the course of sequential lesson steps, then small-groups or rotations will have worked. This theme related to the research question: What impact does the instructional coach have on small-groups instruction in English and Intensive Reading classes?

Interview

During the interview phase of the study, at least half of the participants responded that they received support on small-groups or rotations and that it impacted their instruction. These four teachers might have worked more closely with the literacy coach during the mastery learning process and felt that the support of the coach improved their teaching. The literacy coach, by training these four teachers on how to use small-groups or rotations and when to use the techniques, played a role in improving their instruction in this area. Classroom management

could have been a reason why it did not work with the other teachers. If the teachers did not already establish the set up and train students on procedures for small-groups or rotations to work, such as classroom layout, materials organized, and making students aware of their tasks, then the coach should first support the teachers with these ideas as a way to scaffold to eventually using small-groups or rotations.

An interview protocol was used during this study (see Appendices A-B). During the interview, participants were asked about question three, if they were offered any support by their coach in the past on using small-groups or rotations during the mastery learning process and to explain how they were coached. Four out of six teachers, two English and two Intensive Reading, commented that they were coached on small-groups. ELA Teacher 3 responded with: "My coach would come regularly and check up on me. If I had any questions about small-groups or rotations, she was always willing to offer any help, and she would give me feedback if necessary." ELA Teacher 2 commented that:

Okay. I personally can only talk about one reading coach, which is my reading coach for this year. My past reading coach, we didn't really get much support, but this year, my reading coach has definitely worked on small-groups and rotations and come in and looked at what's going on with my small-groups and given me and offered some ways to organize those small-groups a little bit better, to organize rotations where it's more productive and doesn't seem as chaotic, because as a teacher, we do live in chaos from time to time. She is not overbearing, but she definitely gives productive explanations and productive suggestions, and then she's really good about coming in the next time we do it and saying, "Oh yes, that's exactly what I was talking about." She's very clear in her suggestions and very helpful with them.

On the other hand, the two teachers who commented that they were not coached in small-groups reported that they already implemented small-groups prior to working with the new coach this year, as stated by ELA Teacher 1: "Small-groups and rotations, I haven't really been coached on that. That's just more something I picked up along the way."

The coach responded with:

Well I have a new teacher...and she really didn't have a lot of experience teaching at the high school level. She was really a floater in the classroom. She came to me because she needed some help with writing instruction. As a former teacher, I did a lot of collaboration in the classroom, and so I shared with her some different writing activities that she actually did in her small-groups, and she came back and told me how great and how much the kids really benefited from being in those small-groups because she was able to hit so many different points of writing with just doing stations and having the kids work in the group and interacting with one another.

This statement suggests that the coach thought assisting with small-groups had an impact on a teacher's instruction. Most teachers' responses agreed that small-groups had an impact on instruction.

Participants were then asked, in question four, about benefits to instruction when coached during the implementation of mastery learning with approaches like small-groups instruction. All teachers agreed that small-groups instruction was beneficial to instruction during mastery learning. Three teachers, two English teachers and one Intensive Reading teacher, thought that the small-groups technique was beneficial because it offered students the time with the teacher to learn more about practicing skills, as ELA Teacher 1 stated:

Some of the benefits I've found having small-groups in my classroom is that...it makes me more able to see where the kids are, and it's easier to keep track of a group of five at this particular station than it is to keep track of a group of 25 trying to all get the same concept at the same time. It just makes it a little bit more manageable.

Similarly, three teachers, one English teacher and two Intensive Reading teachers, felt that small-groups offered the opportunity to build confidence when students worked with peers, as Intensive Reading Teacher 6 stated:

If I knew my student was struggling, I would sit him first in teacher-led before going to collaboration station, and then he can move forward to independent station. Those struggling students will always be first on teacher-led on that rotation small-groups, just to have them guided first.

The coach commented on benefits to implementing small-groups with:

I think that the teachers, especially in ELA sometimes they kind of stray a little bit from the small-groups whereas in Intensive Reading, they use it all the time, but I think that the ELA teachers are starting to realize how beneficial small-groups instruction is because the students are actually taking ownership of their own learning. They're the ones that are conversing with one another and coming up with these different ideas. I feel like small-groups instruction is definitely beneficial to any teacher in any classroom environment, and I think it definitely helps the students with the mastery learning, as far as being able to see the goal, and work together to get to that mastery learning goal.

The majority of the participants, teachers and the coach, responded that it was beneficial to use small-groups.

When participants were asked question five, they were asked about challenges they faced when it came to small-groups instruction. Five out of six teachers noted challenges. One Intensive Reading teacher responded that there were no challenges. Challenges ranged from organizing students for learning tasks to accepting criticism during the coaching process, as ELA Teacher 1 stated:

One of the things that I had to learn really quickly how to do, was how to get the students to either sort themselves and sort out their belongings and the actual logistics of putting them into the small-groups. Once that was settled, it got a lot easier and now I have a set procedure in place so that if the desks are in stations, the kids know that they put their book bags at the front and when they hear the chime, they can move to the next place.

Once I had the logistics worked out it was fine.

This participant said that a challenge was getting students into groups quickly enough but the participant added that it was possible to resolve that challenge over time.

ELA Teacher 2 responded with "I'm not good with criticism" and added that the challenge was "getting out of that comfort zone and doing something just because it feels comfortable and actually doing something that is more productive." This teacher considered recommendations during coaching as critiques. Intensive Reading Teacher 5 mentioned that:

There's always challenges. There's motivation, getting the students organized, getting them interested in what you want them to do, having them buy into whatever it is that you want them to do. That is always a challenge. And especially with juniors and seniors because they just want to pass exams and they don't care how they pass them.

In this participant's case, the challenge was keeping students motivated. There were, however, not many comments about student motivation when this interview question was posed.

Surveys

The initial and post-surveys indicated that teachers were not in agreement on the impact of the coach on their instruction, as it influenced use of small-groups or rotations. This is because the coach did not work as closely with at least two teacher-participants than with others. Also, small-groups or rotations was not an intervention that was emphasized as much as others during the coaching process. Had small-groups or rotations been modeled and emphasized by the coach to all participants, participants may have responded more positively that their instruction improved in the use of small-groups or rotations.

The initial and post-Likert Scale surveys were administered to participants, coach (see Appendices C-D) and teachers (see Appendices E-F), during the course of this study. Questions nine, ten, and eleven pertained to use of the small-groups approach during the mastery learning process. Question nine asked participants if prior to this year, English teachers practiced the rotational model or small-groups effectively. The mean for all responses was 2.2, reflecting neutrality. This demonstrated that there was no agreement that English teachers practiced these strategies. English teachers' mean was 2.7, suggesting there was some agreement and Intensive Reading teachers' mean of 1.7 suggested they were in the range of "neutral to disagree" about if, this year, English teachers practiced the rotational model or small-groups effectively.

The coach agreed that English teachers practiced the rotational model or small-groups effectively. Regarding this question, the standard deviation was 1.0. This showed that there were various beliefs ranging from teachers strongly agreeing that there was practice to others disagreeing that there was practice in small-groups. English teachers were in more scattered beliefs of agreement, but the Intensive Reading teachers were in more accord with being neutral. For the post-survey, question nine responses indicated that English teachers now practiced the

rotational model or small-groups effectively. The mean was 2.0 and the standard deviation was .6, which meant that most teachers, English or Intensive Reading, had no opinion on small-groups. This demonstrated that it was not in sufficient practice to have any impact. The coach, in retrospect, felt that small-groups were in practice.

Question ten asked if prior to this year, Intensive Reading teachers practiced the rotational model or small-groups effectively. The average mean was 2.8 for all teacher participants: English was 2 and Intensive Reading was 3.7. On average, they agreed, but the English teachers were more hesitant to agree, while the Intensive Reading teachers strongly agreed that Intensive Reading teachers practiced these strategies. The overall standard deviation was 1, with English at 0 and Intensive Reading at .6, suggesting there was a wide array of thoughts about practicing these strategies. English teachers were in total agreement that they had no opinion either way, while Intensive Reading teachers were in favor of strongly agreeing that they practiced these strategies. The coach had no opinion, therefore not having any knowledge of prior years' practice. For the post-survey, question ten responses indicated that Intensive Reading teachers now practiced the rotational model or small-groups effectively. The mean for English was 2.0 and the mean for Intensive Reading was 3.7. While English teachers had no opinion, Intensive Reading teachers and the coach strongly agreed that this practice was implemented.

Question eleven asked participants if they thought their coach supporting them on small-groups or rotations had a positive impact on their instruction. The mean was 3.2, suggesting everyone agreed that the coach supporting the teachers on instructional strategies had a positive impact. The standard deviation was .8 because there was one teacher who felt neutral about the positive impact but everyone else agreed. The coach agreed that there was support for small-groups. The same question was asked for the post survey and the mean was 3.2, with a standard

deviation of .8. While there was parity in everyone feeling that the coach supported the teachers with small-groups or rotations, the English teachers were not consistent with their answers from question nine because they felt neutral about practicing rotational models in question nine, but felt it had an impact on their instruction in question eleven. Figure 4, below, is a summary of responses about small-groups.

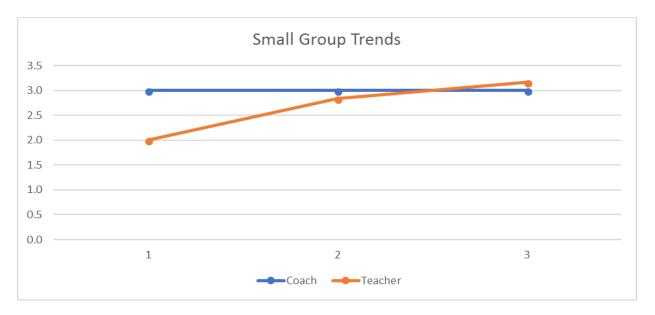


Figure 4. Small-Groups Survey Responses.

Figure 4 has a vertical axis that represents the mean values, zero to four, while the horizontal axis represents the question numbers. The blue line represents the coach's responses, zero to four, and the red line represents the teachers' mean responses, zero to four. This graph depicts that the coach had more positive responses than the teachers to the questions except the last question, which related to the coach's support with small-groups having a positive impact on instruction. In the last question, the teachers felt more positive than the coach.

Learning Cycle Observations

Learning Cycle observational data of two classroom visits, one at the beginning of the study and another toward the end, provided another lens to better understand the impact of

coaching in these classrooms. Using the Learning Cycle tool (see Appendix G), the researcher analyzed three areas of teaching: student grouping, method of instruction, and the level of student engagement. Student grouping consisted of how the teacher organized students to learn (Marzano, 2017). The method of instruction included approaches like direct instruction which involved whole group teaching of skills, guided learning which consisted of the teacher leading students through a lesson, facilitated learning which included students working in the rotational model of practicing from station to station or small-groups, independent learning which meant they worked on their own, assessment which suggested they were taking a test, or another category labeled as 'not observed' because instruction was not happening at the time of the visit.

The Learning Cycle tool was used to examine the six teachers in the beginning of the study and, again, at the end of the study. English Teacher 1 began by having a whole group using guided learning with students who were compliant with some student engagement. That same teacher ended the study by using stations with centers and rotations while utilizing, again, guided learning with the same result of students being compliant with some engagement. English Teacher 2 started by using a whole-group format with the direct instruction method and students being compliant with some engagement. English Teacher 2 ended by having a small-groups format, using the facilitated learning method, that resulted in over 80% of student engagement. English Teacher 3 initially implemented a small-groups format and a facilitated learning method which produced over 80% student engagement. Later in the study, the same teacher utilized the same strategy which generated the same notable result. Reading Teacher 1 had small-groups using facilitated learning methods which resulted in over 80% student engagement. The next time, later in the study, the same teacher tried stations with the same facilitated learning method and had the same high result of over 80% student engagement.

Reading Teacher 2 tried the individual method and guided learning method, but students were only compliant when it came to student engagement. However, they closed the school year using stations paired with facilitated learning to achieve over 80% student engagement. Finally, Reading Teacher 3 initially tried an individual format with the guided learning strategy to only have students compliant with student engagement. The second observation of this teacher included a lesson with whole group format, coupled with guided learning which resulted in over an 80% student engagement.

The Learning Cycle Tool indicated that teachers sometimes used small-groups or rotations and that students were engaged when practicing skills in small-groups or rotations. This technique was not used consistently because, corresponding with the data from the survey, the teachers were not fully comfortable with the using small-groups or they were simply not using this strategy at the time of the observation. Also consistent with the interview, which concluded that about half of the teachers received support from the coach with small-groups, half of the teachers used small-groups as a classroom format during observations. Half of the teachers also felt, correlating with the interviews, that small-groups gave students more time and confidence, hence the strategy being used in half of the teachers' classes during the Learning Cycle observation.

There is still coach support needed on planning with teachers about when to use small-groups and showing the teachers what it would look like. Planning would consist of meeting with the teachers about the standard to be taught and generating steps to teaching toward student mastery of the standard. These steps include scaffolded, sequenced targets that students should master on the path to mastery of the entire standard. During this planning, the coach would help teachers create tasks for those scaffolded targets. This kind of coach support will ensure that

teachers plan with the learning target and task in mind. If they are more aware of how small-groups or rotations look, they will more likely implement it consistently and with confidence.

Theme 2: Professional Development

According to the responses, professional development support from the literacy coach helped teachers to improve instruction more than the other two interventions from this study. The success of the coach impacting instruction was due to trainings being school-based, specific to needs of school (Florida CIMS, 2017), and in a small-groups setting which addressed the focus of the school improvement goals. This theme related to the research question: How does the professional development provided by the instructional coach to literacy teachers improve instruction in English and Intensive Reading classes?

Interview

Interview protocol questions, to the coach (see Appendix A) and teachers (see Appendix B), were also posed about professional development as it related to mastery learning during this study. Interview data suggested that support from the literacy coach regarding professional development impacted teacher participants except two participants who said they were not directly coached. All participants could have benefited more from the coach's support if the coach was more directly involved in training them during the professional development phases. Part of the coach's responsibility is to be aware of all teachers' changing needs for professional development as this could be personalized due to teachers' background experience.

When participants were asked, for question six, if they were offered any support by their coach in the past through modeling or professional development during the master learning process, responses appeared consistent. Two of out six teachers, Intensive Reading teachers, commented that the coach modeled techniques to them. Intensive Reading Teacher 5 noted: "The

reading coach did model the graphic organizer to me before it was done, before I did it with the class" while Intensive Reading Teacher 6 responded with: "Yeah. She modeled team-teach with me in this entire year since I've been here." When asked, four out of six teachers, all the English teachers and one Intensive Reading teacher, did not directly comment on receiving support though professional development, as stated by ELA Teacher 2:

We've had two professional developments in which she has brought people in but also worked with them, which has been nice because I feel like she's showing that, "If I don't know it, I'm going to bring you somebody who does know this on a higher level than I do." We've done a little modeling though that professional development, but not necessarily in our classroom with the kids.

The coach shared that much support was offered to the Intensive Reading teachers:

I would say this year, I have team-taught a lot with the Intensive Reading teachers. Just modeling for them how to do different strategies, showing them how to do the rotational model, because pretty much I have all new teachers in Intensive Reading except for my reading department head. Besides that, everyone else is new, so I have done a ton of team teaching with them, modeling what they should be doing, coming back giving them feedback, showing them how to use the scales, and how the scales could be used in the classroom and modeling the behavior in small-groups with the students.

It is evident the coach believed that a significant part of the school year was spent on assisting Intensive Reading teachers through some form of professional development.

Participants were also asked, in question seven, about benefits from support through professional development. Although some teachers explained that the coach organized

professional development, in lieu of directly presenting it, they all responded that professional development helped their instruction, as ELA Teacher 1 stated:

Some of the strategies...I would definitely consider using, like there was this one set of dry erase dice...I need to steal that so that I can ask them questions about things and turn it into a game where...you've got this question right and you get six points. Move along the board. Go. It seemed pretty fun.

ELA Teacher 2 commented that professional development had an impact on them being better equipped to teach students:

Professional development again has helped me break down the scales to a level that makes it easier for my students to understand why we're learning standards and why we're looking at these scales. If we hadn't had those two professional developments, I don't think that I would be doing as well. I'm not where I want to be, but doing as well as I am with breaking down those scales and getting kids to really look at specific assignments that we do that are helping them understand complex characters or words in context or theme or picking strong quotes...going to those professional developments ...has helped.

ELA Teacher 3 spoke about continuous learning and noted that: "As a teacher, we never stop learning. We never stop growing, and with the help of my coach, I've noticed how my teaching has progressed and how much stronger I am."

Intensive Reading Teacher 6 commented that:

Benefits for me, I have a lot of growth as a teacher, a lot of growth. This is my first year here in the States and first year teaching in terms of reading. Having her support throughout this year has been a gain for me, not only for me, for my students.

When asked a similar question, the coach added:

I will tell you, especially with the modeling aspect, to help improve instruction, the teachers will come back and tell me how excited the kids are after doing a lesson with them and they want to do more of these activities that I've modeled for the teachers, so the students are the ones that are really praising the teachers for these new approaches and they really do like a lot of the things that I've shown them and implemented in the classroom.

When asked question eight about challenges faced when coached to improve instruction during the implementation of master learning with approaches like training or modeling with professional development, teachers responded that there were challenges, such as when ELA Teacher 2 commented on such challenges:

Being open to all the suggestions. What I mean by open to the suggestions, again, it puts me out of my comfort zone. They suggest things that I might not be comfortable with doing or I've never done, and I don't like trying something new because sometimes I fail. I think that other thing with the training and modeling is sometimes dealing with multiple levels of learning, you're dealing with your ESE kids and your regular kids and your advanced kids. Sometimes the modeling doesn't go for certain sets of kids, so I see these activities and I sometimes don't know how to adjust them to use them within the classroom.

There was also mention of no challenges by ELA Teacher 3.

ELA Teacher 3 commented that: "I honestly haven't had any challenges that I can remember." The coach responded to challenges to coaching through professional development with:

The only major challenge that I have really faced is maybe the suggestion that I provided for the teacher. They don't really like it or they're not willing to try that new strategy for implementation, but that's probably one of the major challenges for me, and like I said, because I've really worked a lot with the Intensive Reading teachers, so I probably had maybe one that had a push back on an idea, but for the most part, a lot of them are receptive to the ideas that I've suggested.

Challenges included lesson task-to-learning target alignment, being open to suggestions, availability of the coach for follow-up after a training, implementation support after a training, and understaffing of teachers. There was one teacher's response that there were no challenges and the coach shared that being new to coaching was, at first, a challenge.

Surveys

The survey data suggested there was improved instruction due to professional development offered by the coach. Data indicated that the literacy coach helped teachers who didn't understand scales by bringing clarity on how to use them as they scaffolded targets in a lesson. The coach modeled lessons to Intensive Reading teachers how to analyze texts in the rotational model of small-groups. The coach also focused on supporting teachers with a few approaches for their teaching toolbox instead of offering an overwhelming number of approaches to teachers. This helped improve instruction because participants stayed focused on specific high-yield strategies, like organizing students to practice or deepen knowledge, throughout the study.

The initial (see Appendices C-D) and post-surveys (see Appendices E-F) consisted of questions six to seven and twelve to fifteen that pertained to professional development during the mastery learning process. Question six asked participants if they often met with the coach for

support. The mean for responses was 3.5, which indicated a high level of agreement regarding time spent with the coach for support. The standard deviation was very small, at .5. All teachers and the coach agreed that they met with the coach for support. For the post survey, the mean was 3.0, with a standard deviation of 1.1. On average, everyone felt comfortable that they met often with the coach for support. The coach, too, felt that meetings with teachers were frequent. The standard deviation, however, indicated that there was some difference in opinion; further examination showed that one teacher disagreed that they met often with the coach for support.

Question seven asked if participants seldom met with the coach for support. The mean of responses was 1, which suggested responses were very consistent with question six, in that the opportunity to meet with their coach when support was needed was available. The standard deviation was high because there were equal amounts of neutral, disagree, and strongly disagree responses. The coach, having an average of 3.4 meaning strongly agreed, therefore suggesting that the coach felt that the teachers often met for support. The post-survey resulted in a mean of 3.0, with a standard deviation of 1.1. Again, there was parity with question six and, again, the same teacher claimed to have seldomly met with the coach for support.

Participants were asked, question twelve, if they attended relevant professional development at their school so far this year. The mean was 3.5, suggesting that everyone highly agreed that they attended relevant professional development at their school. The standard deviation demonstrated a very high level of agreement consistent among all the teachers at .5. For the post-survey, the mean was 3.3, with a standard deviation of .5; this demonstrated a very consistent level of agreement between teachers and coaches about attending relevant professional development. Question thirteen asked participants if their coach followed up, after professional development, with them so far this year. The mean was 3.0, showing that everyone was in

agreement. The standard deviation was .5; with a low amount of deviation, everyone believed that the coach followed up after professional development. The coach also agreed. The post survey mean was 3.3 and the standard deviation was .5, which indicated a very consistent level of agreement between teachers and coaches about attending relevant professional development.

Question fourteen asked participants if the professional development offered by the coach was specific to their teaching needs to improve their instruction. The mean was 3.3, which showed that everyone was in agreement that professional development was specific. The standard deviation was .5, which indicated a low amount of disagreement in how specific the professional development was to their teaching needs to improve instruction. The coach agreed that professional development offered by the coach was specific to teaching needs to improve instruction. The post survey responses demonstrated a mean of 3.3 and a standard deviation of .5, with a very consistent level of agreement between teachers and coaches about attending relevant professional development. The final question concerning professional development discussed from the survey was, number fifteen, about if the professional development offered by the coach had a positive impact on instruction. The mean was 3.3, which indicated that everyone agreed that professional development had a positive impact. The standard deviation was .5, with a low amount of disagreement in how they felt about the coach's professional development offerings.

When asked about if the professional development offered by the coach had a positive impact on instruction, the post survey mean was 3.3 with a standard deviation of .5, indicating a very consistent level of agreement between teachers and coaches about attending relevant professional development. The coach agreed that the professional development offered by the coach had a positive impact on instruction. Figure 5, below, summarizes responses about the impact of coaching with professional development during mastery learning.

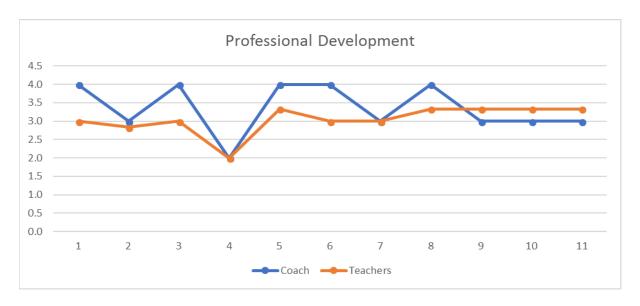


Figure 5. Professional Development Survey Responses.

In the above figure, the vertical axis represents the mean values, zero to four, while the horizontal axis represents question numbers. The blue line represents the coach's responses, zero to four, and the red line represents the teachers' mean responses, zero to four. The coach had a more positive reaction about professional development throughout these questions, except for the questions that related to the impact that the coach had on professional development. For example, the last three questions pertained to what types of professional development was offered by the coach. The last three questions reflected the impact of the coach specifically on professional development and the teachers responded more positively.

Learning Cycle Observations

Learning Cycle classroom observation data, of two classroom observations per teacher participant, reflected practice of approaches from trainings and coach support during professional development. When looking at if "Learning Targets are being addressed and are aligned to the DOK (Depth of Knowledge) of the progression of the Florida Standards," the mean for the English Language Arts classes before and after the audit were 2s, which indicated that all targets were being addressed during the entire cycle. For Intensive Reading, there was a mean of 1.3,

which increased to 1.7 later in the year for a growth of 20%, demonstrating an area becoming stronger in addressing learning targets and aligning these targets with Florida Standards. When observing the classroom for "Student task/evidence of work is aligned to both the learning targets and DOK of the progression (scaffolding) of the Standard," the overall mean in the beginning of the year was 1.3 and ended overall with a 1.8, demonstrating a growth of about 25% for all teachers. English teachers especially had gains to become 100% compliant in showing that tasks were aligned with learning targets on standard progression.

During the observations, classrooms with "Instructional strategy used by the teacher is aligned to the learning target (Teaching Map Strategy)," the end of year mean was 1.5 indicating 80% of the teachers are 100% compliant while 20% of the teachers were close to 50% compliant. While there is room for improvement, great strides have already been made, with respondents documenting a 60% increase in effectiveness.

The Learning Cycle Tool (see Appendix G) did not produce data that was directly connected to the coach helping teachers improve instruction through professional development. Although evidence of professional development was not directly stated on the Learning Cycle form, evidence noted about an increase in the use of scales suggested that the coach impacting instruction was indirectly present. The Learning Cycle Tool is an auditing interface from the school district, that should include questions that would directly gather information on professional development, as it would offer useful feedback for the coaches.

Theme 3: Tracking Student Progress

Tracking student progress continued to impact instruction consistently in the beginning of the year as it did at the close of the year. Tracking student progress continued to impact instruction because the coach stayed focus on supporting teachers as they integrated this

intervention as a routine during instruction. Tracking student progress also impacted instruction because the coach did not just provide the tools, but also modeled these tools for the teachers. This theme of tracking student progress was well received by teachers and coaches in this county and state because there is a heavy focus on the Florida Standards Assessment. This theme related to the research question: To what extent does coaching teachers to track student progress contribute to instruction in English and Intensive Reading classes?

Interview

Interview protocol questions, to the coach (see Appendix A) and teachers (see Appendix B), were also asked of participants about tracking student progress as tracking related to mastery learning during this study. Interview results suggested that almost all participants reported the coach helped with tracking student progress. Teachers reported that the coach impacted instruction by finding experts to train them on using scales, as well as the coach modeling how to use scales. Responses from the interview indicated that the coach impacted instruction during the mastery learning process by elevating the teachers' use of tools for tracking student progress.

During the interview, teachers were asked, in question nine, about if they were offered any support by the coach on tracking student progress. This included students tracking progress with instructional scales, reading or practice trackers, or data sheets during the master learning process. All teachers responded that they were supported with tracking student progress, although one ELA Teacher 1 commented that it would have helped more to see demonstration classrooms of students tracking progress, instead of just being offered support by the coach: "I'm more of a 'learn by seeing it in action' person...But without seeing it in action, it's a lot harder for me to grasp, okay, this is how this is supposed to be done, and this is how it can be

done with my particular group of students. When asked how teachers were supported on tracking student progress, the coach responded with:

At the beginning of the school year, I actually shared with all of my ELA and Intensive Reading teachers a student tracking sheet that I actually implemented last year in the classroom and I have several teachers that are using it. There was another data tracking sheet that I provided that actually was for the individual data chats with students...they actually stopped to talk to the kids about what are some of their weaker areas and how they need to improve with the data trackers.

The coach supported the teachers by providing tools to track progress and by showing them how to do so. When participants were asked question 10, about benefits to instruction when coached to improve instruction during the implementation of mastery learning with approaches like tracking student progress, benefits ranged from being able to show students the learning goal, making data-focused instructional decisions, and tracking student learning.

ELA Teacher 3 stated: "Now I know a different way to track student progress, with the resource that she provided, and I believe I'm going to continue using it in the years to come." Intensive Reading Teacher 6 noted what was gained: "I gained data out of it. I know where my students are and where they need to be." The coach remarked that:

A lot of students actually benefited, and it helped the teachers too, especially a new teacher coming in from a different country who's not aware of this particular assessment, so actually doing the data tracking helped the teachers to benefit from, "Okay a ninth grader needs a score of 343." A lot of them didn't know that or, "A tenth grader needs that 350," so I think it benefited both the teacher and the student.

The coach agreed with teachers who all remarked that tracking student progress benefited their instruction.

Question eleven asked participants about challenges faced when coached to improve instruction during the implementation of mastery learning with approaches like tracking student progress. Challenges included finding ways to make tracking progress a natural part of the classroom, too much emphasis on data, varied ways to analyze the data, and lack of motivation with students reluctant to track their own progress. ELA Teacher 2 stated that the "challenge is that sometimes we get overwhelmed with data and tracking and we lose the individual student and their personality and the culture they live in, which you can't really track within numbers." ELA Teacher 3 said: "challenges have been where students do not actually want to track themselves, or sometimes at the very end, they decide to do it all at once when I've been encouraging them to do it every day, so I learn how to figure that one out." Intensive Reading Teacher 5 even mentioned that "some of the challenges were student motivation. It takes a whole lot to motivate these students." Tracking student progress included tracking data and motivating students through sharing that data.

Surveys

The initial and post-surveys indicated that the teachers (see Appendices E-F) and coaches (see Appendices C-D) stayed consistent with the level of instruction though out the year.

Teachers responded in the surveys that the coach impacted instruction by supplying and modeling the use of tools such as scales. It is clear that the coach was able to impact instruction by supporting teachers on how to track student progress by ensuring that teachers felt confident in utilizing these tools.

The initial and post-surveys consisted of question eight, as well as questions sixteen to nineteen that pertained to professional development during the mastery learning process.

Participants were asked question eight, if FSA (Florida Standards Assessment) scores were used to monitor progress of students and improving instruction. The mean of their responses was 3.2, which indicated a high level of agreement between teachers and coaches that FSA data was utilized to monitor student progress as well as growth in instruction. The standard deviation was .4, which demonstrated that there was a strong agreement that tracking with FSA scores was a solid indicator of student and instructional progress. The post-survey responses to this question included a mean of 3.2, with a standard deviation of .4, which indicated that all teachers, as well as the coach, agreed with little deviation that FSA scores were important and used in monitoring student progress and instructional development.

Question sixteen asked participants if they were coached on how to track progress (scales, reading/practice trackers, or data sheets). The mean of those responses was 3.3, which shows that everyone was in agreement that tracking progress had a positive impact. The standard deviation was .5, a high level of agreement that they had been coached on tracking student progress. The coach was in agreement with these responses. The post-survey indicated a 3.2 mean of the responses and a standard deviation of 1.0. Although, on average, everyone including the coach agreed that the teachers were coached in this area, there was one English teacher who felt neutral which reflected that they may have not been coached enough.

Question seventeen asked participants if they used common assessments to monitor progress and the impact of their instruction. Participants' responses averaged a mean of 3.3, as everyone agreed that they used common assessments. The standard deviation was 1.2 for English teachers and 1.7 for Intensive Reading teachers, which meant that opinions were very scattered,

ranging from disagree to strongly agree. The literacy coach had no opinion which indicated that the use of common assessments, if at all, had very little impact. When asked this question in the post survey, there was a mean of 3.2 and a standard deviation of 1.0. Although, on average, everyone, including the coach, agreed that the teachers used common assessments, there was one Intensive Reading teacher who felt neutral which suggested that they may not have used it enough to impact their instruction.

Question eighteen was posed to find out if the coach supporting the teacher on tracking student progress had a positive impact on instruction. The mean of those responses was 3, which indicated that everyone, on average, agreed that the coach's support positively impacted instruction. The standard deviation of 1.0 suggested that answers ranged from neutral to strongly agree, so some people reported they experienced no impact from the coach's support. The coach's response was also in agreement with the teacher participants. When asked this question in the post survey, the mean was 3.2 and the standard deviation was 1.0. Although everyone, including the coach, generally agreed that the teachers were supported in this area, there was one Intensive Reading teacher who felt neutral, indicating that the teacher may have not been coached enough. Question nineteen asked if discussions with the coach during the coaching cycle were important for the teachers to monitor progress of their own instruction. The mean of the responses was 3.2, which suggested that everyone was in agreement. The standard deviation was .5, indicating a low amount of difference in opinion.

Again, the coach responded similarly to the teachers. Post-survey responses averaged a mean of 3.3 for English teachers and a 2.3 for Intensive Reading teachers. While the coach felt that discussions between coach and teachers were important in monitoring instruction progress, the Intensive Reading teachers felt neutral or that it had little importance, which contrasted with

English teachers, who felt it was important to have discussions between coach and teachers about monitoring progress.

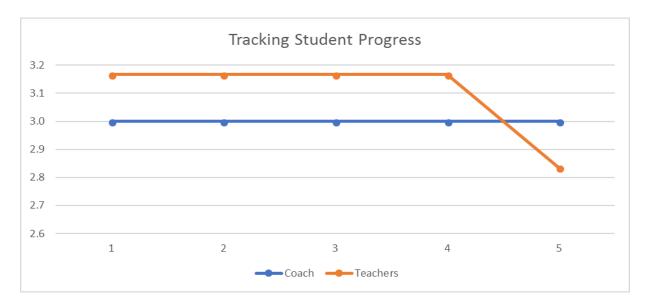


Figure 6. Tracking Student Progress Survey Responses.

The vertical axis in the above figure represents the mean values, zero to four, while the horizontal axis represents the question numbers. The blue line represents the coach's responses, zero to four, and the red line represents the teachers' mean responses, zero to four. This graph demonstrates that the only question that the coach felt more positive than the teachers was the last question that asked if the discussions with the coach during the coaching cycle were important to monitor instructional progress.

Learning Cycle Observations

The Learning Cycle Tool (see Appendix G) indicated that all teachers were tracking student progress toward the end of the study. It ranged from the use of scales to the use of trackers to monitor progress in reading passages. As mentioned before, there was an increase of 30%, which suggests that the coach supported teachers in not only training teachers how to track student progress, but in showing when to use such tools. This district's basic infrastructure is more attuned to apply this discipline into every aspect of instruction and it was an expectation

that the coach would promote scales in this classroom audit because it was a clear demonstration of the progress of the coaches and teachers. This Learning Cycle Tool can be conducted by anyone from the coach to district administration. The weight that the school and school district place on tracking students' progress played a role in the results of the Learning Cycle Tool. Data collected from the Learning Cycle Tool indicated that 100% of the teachers displayed evidence of utilizing scales and tracking progress in the classroom towards the end of the study, showing a clear impact by the coach.

One theme during these initial and post-observations was related to the teacher monitoring the majority of students for learning. Here, the year-end mean was 1.8, which concluded that 90% of the teachers were monitoring the majority for learning. English teachers ended the year with 100% compliant. Regarding another statement in the tool about whether formative assessments in short cycles were evident and used for adapting instruction, the year started with a mean of 1.5, which showed that 75% of the teachers showed evidence of formative assessment monitoring; this area ended with 100% of teachers showing a stronger ability to show evidence of adaptive instruction. Finally, there is evidence of students using a scale and/or tracking their progress on specific standards. In the initial observation, teachers had a mean of 1.4 and closed the year with a perfect 2.0, having a growth of 30%, demonstrating evidence of students measuring their own progress on Florida standards.

Theme 4: Mastery Learning Helped Students Learn Content

This theme was one that emerged from the questions posed during the study. The interview results indicated that a focus on mastery learning helped improve instruction as the coach worked with teachers, except in the case of one Intensive Reading teacher.

Interview

One Intensive Reading teacher responded that mastery learning was not key to learning content but instead, the idea of memorization content was, in the participant's view, more impactful on teaching and learning. In this case, the coach could have worked further to train this teacher on the mastery learning process, as memorization does not improve reading comprehension among students.

When asked about how mastery learning helped their students learn standards, most responses were positive about learning content through mastery learning, such as ELA Teacher 1:

The way that I understand mastery learning, it breaks things down into more of a process which will make it easier for students to at least grasp some of the material, even if they aren't able to grasp all of it at the same time. I know that for the students that I teach, which are ESE and ELL students for the most part, it's really difficult to get them to master a standard without breaking it down, so by doing that, I can see where it's helped them. For example, there's an activity that we do or we did this year with a story where we broke it down into the different parts of plot before asking the question of what those plot pieces did to help move the story forward or build the sense of suspense or whatever, and by doing that, it helped them see, 'Oh, there's a connection here. I need to pay attention to this when I read.'

ELA Teacher 3 responded with an explanation of how scales were used during mastery learning:

By providing goals, the students know what is expected from them. In the beginning of the year, I gave them a real life example of how, if your parents were to give you just one chore and then you're like, 'Oh, I'm done,' and then you go to your parents and you tell

them that, and they say, 'I have more for you,' would you rather have a list of all the chores, or would you just want to know step-by-step? They said a list, and I said, 'Exactly, so I'm going to provide a model to show you what we're going to be doing throughout this unit.' By doing that, they really appreciated it, and they knew where they were at every step, and it helped them to feel motivated learning the standards.

85.71% of teacher responses to that question were positive, including step-by-step instruction, learning scales for mastery, providing goals, mastering skills, and building background.

Another participant, the coach, responded with:

Well mastery learning...is the student actually mastering the standards, so giving the teachers the opportunity and giving them the skillsets that they need to help the students learn the standards...that is our whole objective. That's why we dive into scales and impact the scales and have the students as well go over the scales. That way that they know, this is the goal, which is the standard.

Only one teacher, Teacher 5, suggested that memorizing content is as important as mastery.

Surveys

Initial and post-surveys indicated that all participants, except one Intensive Reading teacher, worked toward mastery of Florida standards. One Intensive Reading teacher did not think mastery learning was a focus or key to learning standards. All the other participants, including the literacy coach, responded that the literacy coach helped improve instruction during the mastery learning process by modeling the use of interventions.

Learning Cycle Observations

Results from the Learning Cycle Tool did not directly relate to mastery learning. Mastery of the standards was the goal in these classrooms, but the only element that related to it on the

Learning Cycle Tool was the use of scales. The use of scales included scaffolding, which is an important step in learning a standard because it allows teachers to address students' needs with ancillary lessons. The coach supported using the Learning Cycle Tool, which related to monitoring mastery, showing that the coach was an important part of instruction during the mastery learning process.

Summary

An emergent theme of mastery learning which sums up the study was the general idea of improving instruction during the mastery learning process. Slavin (1987) wrote about the success of mastery learning if educators consistently tracked student progress because there had to be a way to monitor progress through that process. Instruction can be improved due to support from a literacy coach during the mastery learning process.

When participants were asked, question twelve, about how their experience of being coached during mastery learning was beneficial to improving overall instruction in English and Intensive Reading, 85.71% of responses were also positive among teachers. Teachers described their experience like ELA Teacher 3 commented: "rewarding, good experience where I'm going to take everything I've learned, and I'm going to apply it for the next year, and also make some changes because...there's always something to improve on." ELA Teacher 1 responded with:

Breaking things down into learning targets, into smaller pieces, is really, really critical for my particular group of students...I feel like having the whole ... begin with a goal in mind for the kids, begin with breaking things down and taking that small stuff, even though it's painful at first, and building on that. I feel like that's really helped them a lot.

The coach's response was also positive and included the following remarks:

I would say now that I've been here for almost a year, the experience has been great. I have a lot of teachers now who depend on me, who sometimes they just want to bounce ideas off of me. Sometimes they want me to come and observe just to see if they're implementing strategies well, so I would say a lot of teachers now depend on me. It's been definitely a growing experience for me. Just learning how to work with different personalities, as well has been a good experience for me.

The coaching of these participants during the mastery learning process allowed participants to break down a lesson into smaller chunks, allowing them to teach students in smaller steps.

Teachers and the coach thought this approach of mastery learning helped them to better meet the needs of their students. Figure 7, below, compares the coach's overall initial and post survey responses.

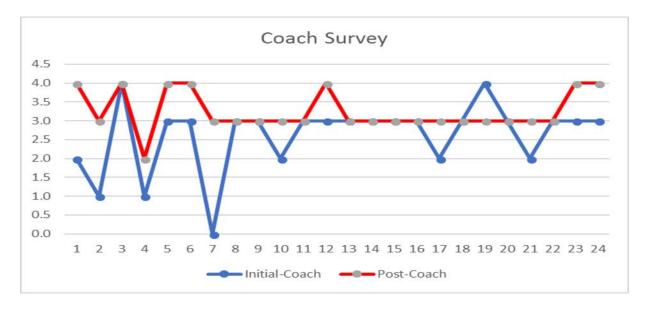


Figure 7. Coach Survey Comparison.

This figure is a visual of the coach's responses with the blue line representing the initial survey answers plot points and the red line representing the answer plot points of the post-survey. There is a clear and noticeable significance in question nineteen in that it was the only

point where the post survey answer was lower than the initial survey answer. The coach's initial answer was strongly agree and then the post-survey answer was just agree, which meant that the coach's view of the practice of small-groups diminished in the post survey. This question addressed if the English teachers now practiced the rotational model or small-groups effectively. It is clear the coach felt there was a reduction in the practice of rotational model or small-groups. This is a helpful reflective tool for the coach to address this area of concern for future reference.

Furthermore, regarding question thirteen, when participants were asked what this entire experience during mastery learning might have hindered, 85.71% of the teachers said that there was no hindrance. One teacher, ELA Teacher 1, said that a hindrance faced was getting:

A little bit too caught up in trying to figure out okay wait, is this right, do I go with this particular breakdown, or is this not what the standard really wanted? Am I going too far? Am I not going far enough? Where am I going? Sometimes I get so caught up in that, that I forget that some of that is more for me, and some of that is more for them and I need to focus on the bit that's for them.

This may be a point to highlight that four teacher participants suggested that nothing was a hindrance during this process. Figure 8, below, sums up the overall teacher responses for the initial and post survey.

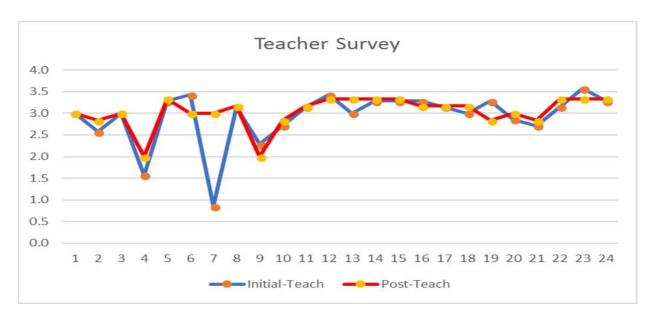


Figure 8. Teacher Survey Comparison.

This figure is a visual of the teachers' responses with the blue line, representing the initial survey answers mean plot points of responses and the red line representing the answer mean plot points of the post-survey. There is a clear and noticeable significance in question seven in that it was the only point where the initial survey answer was significantly lower than the post-survey answer. The initial and post-answer means followed closely throughout the questions except for question seven. The teachers' initial mean answer was 'disagree' and then the post survey answer was 'agree,' which meant that the teachers' view of how often they met with the coach improved dramatically during the post survey. This question addressed how often the teachers felt that they met with the coach for support. This is a helpful reflective tool for the coach to address this issue. The coach can understand how the teachers perceived support corresponding to time spent with the teachers.

Question fourteen asked if participants thought mastery learning can be impactful if coaching teachers occurs, to better assist students increasing reading comprehension in Intensive Reading and English. ELA Teacher 3 commented that: "Teachers need to be coached. We need

that extra support. We need that extra help...resources that we can get, so it definitely has increased the comprehension with the help and the assistance we receive from the coaches." The coach responded with:

I definitely think mastery learning is impactful on teachers...if you can impact those teachers, then it will transfer into student learning...it is beneficial to focus on that reading comprehension aspect as well. I feel like mastery learning and reading comprehension they go hand in hand, especially...when we're trying to strengthen these kids' literacy skillsets and reading comprehension.

All participants responded that mastery learning can be impactful if coaching teachers occurs, to better assist students increasing reading comprehension in Intensive Reading and English.

The use of small-groups or rotations can impact instruction if a coach understands when to use such high-yield techniques. Teachers will be better if coaches are more versed in when to use techniques because the coach could, in turn, train teachers on when and how to use the strategy. Techniques like small-groups or rotations require planning and training on how to align learning targets to tasks.

Professional development support from the literacy coach can help teachers to improve instruction. Such success depends on if the coach trains staff in an environment that is school-based, and specific to the school's goals (Florida CIMS, 2017) and students' needs.

Tracking student progress can impact instruction if the coach maintains focus on supporting teachers as they integrated this intervention as a teaching norm. A literacy coach should not just give teachers tools, but their use should also be modeled to teachers. When these interventions are supported by the coach, instruction can improve.

CHAPTER 5

CONCLUSION

The efforts of a literacy coach can sometimes be thankless and accompanied by scrutiny on whether the coach impacts a school. The coach is expected to always know everything about instruction, yet sometimes this person can be viewed as not knowing enough. The literacy coach must focus on not only the Intensive Reading and English Language Arts areas, but this educator also coordinates all subject areas to have one set of common instructional goals. Coaches have the difficult task of showing gains in learning without having any administrative authority over teachers who may be deficient in instructional skills. Coaches are often taken away from the job to perform menial tasks such as proctoring tests or supervising lunch because the school does not effectively use coaches' abilities to their fullest potential. A literacy coach can positively impact instruction (Lockwood, McCombs, & Marsh, 2010). The literacy coach may be the difference between a school grade of an A or a B. The literacy coach is a resource to offer teachers the means to have the highest possibility of success in the classroom.

Florida public schools receive an annual school grade (Florida Department of Education Mission, 2017). The Florida public school grading system was influenced by the *No Child Left Behind Act* (2001), as schools had to account for making adequate progress and Florida public schools would demonstrate it through a school grade. Schools demonstrate academic progress, in part, through showing how students demonstrate mastery of Florida standards in English Language Arts on the Florida Standards Assessment. These Florida standards were based on Common Core Standards (Common Core Development Process, 2018, paragraph 1). Students take the FSA (Florida Standards Assessment) in the spring of their tenth-grade year. Proficiency on this assessment is also a graduation requirement (Florida Department of Education, 2017).

Florida school districts, with the goal of 'not leaving any child behind,' (*No Child Left Behind Act*, 2001) offer multiple resources for instructional support, including support by literacy coaches. Some schools did not show consistent gains in FSA English Language Arts scores for 2016-2017, even with such support. This sparked the interest to research the impact of a literacy coach on instruction during the mastery learning process of teaching Florida English Language standards. The purpose of this study was to examine the impact of the literacy coach on English Language Arts and Intensive Reading teachers' instruction.

Review of Research Question

The research question is: How might instructional coaching impact the instruction of teachers as they seek to improve instruction? Other questions include:

1. What impact does the instructional coach have on small-groups instruction in English and Intensive Reading classes?

The data from the Likert surveys suggests that, at the beginning of the school year, the overall feelings about the value of utilizing small-groups instruction was, at best, agreeable.

There were no definite feelings that small-groups instruction was being used to its fullest potential. Even though the English teachers apparently felt in tune with the coach that there was much to be desired with the proficiency of the ability to use small-groups instruction, the Intensive Reading teachers demonstrated more confidence showing that they were more aligned with the importance of support with small-groups instruction.

In the post-survey, there were no gains and even some decreased confidence in small-groups instruction. Since there was no increase in confidence from the initial survey, it should be noted that such an intervention that was developed to have a positive effect on instruction should have been more of a focus in the coach supporting teachers to organize students into small-

groups (Senn, Marzano, Garst, & Moore, 2015). During the year, small-groups or rotations practice deteriorated; therefore, that group of teachers did not exhibit confidence in the utility of these strategies. This suggested that using these techniques was not a focus. In contrast, the coach demonstrated that this intervention was a focus. Contrary to the English Language Arts teachers, the Intensive Reading teachers made a clear statement that utilizing small-groups or rotations, as an intervention, would be employed to benefit instruction. While the benefit and growth were clear, the coach could aspire to become stronger in supporting this area since the data suggested there was less focus on this intervention.

Based on the data acquired from both surveys, one can conclude that in the area of small-groups strategies, the coach felt that there was improvement in small-groups instruction. There was disparity between the coach and the English teachers as to the teachers' confidence in their ability to utilize small-groups strategies due to the reduction from agreement to being close to neutral. The surveys demonstrated that the coach did not feel confidence in the time spent with the teachers, concerning small-groups strategies, as it was reflected in the teachers' confidence in using small-groups in their instruction. The time spent with the Intensive Reading teachers reflected well in that they at least stayed level or consistent in the belief of their abilities in using small-groups.

The Learning Cycle Tool is an audit-type assessment used for classroom observations and it was used to observe participants' classrooms. This tool was used to help gauge the types of classroom interaction, such as small-groups, pairs, and centers. Out of six teachers, only half of the teachers utilized small-groups during these observations, which again provided more evidence that the utility of such a strategy could be improved. Interview data indicated that four out of six teachers reported that they received support from the literacy coach on small-groups or

rotations. All data concluded that the coach definitely guided the focus or lack of focus of the teachers. At the high school studied, there was an implication of raising the use of small-groups instruction would ignite another level of confidence in teaching. In this school, which has a diverse student demographic, there are gaps in student knowledge in a classroom. A coach more consistently addressing and increasing utilization of small-groups instruction could close such gaps, which may increase the quality of instruction at this school or even at other schools across the district since this study may work as a foundation of research at other school sites.

2. How does the professional development provided by the instructional coach to literacy teachers improve instruction in English and Intensive Reading classes?

According to the initial survey, professional development was received positively by most participants. The coach, in the beginning of the year, felt that there was great room for improvement in instruction. In the post-survey, much improvement was demonstrated by the coach. There were also increases in English and Intensive Reading. These gains, even though small, corresponded with the coach's perspective of the incremental increase of improved instruction. The coach improved instruction by monitoring and ensuring that the teachers attended professional development training sessions, in addition to supporting them after trainings.

The coach also modeled classroom strategies (Marzano, 2009) and then also followed up with individual teachers to ensure that full benefit had been extracted from professional development strategies taught. All teacher-participants responded during the interview that they were supported by their coach through professional development which ranged from modeling to explicit training on strategies and techniques. They also responded that the coach impacted their instruction through professional development. In the daily, multiple, instructional activities in

which teachers engage, it is vital that teachers have assistance by someone, such as a coach, to help maintain focus on continuous learning. In the typical teacher work-day, the time or attention that is consumed from instruction would, at best, allow only planning periods to commit to professional development. Time has always been the constant deficiency that hinder educators from developing the strategies and skills to increase effectiveness.

Teachers who become stagnant in growing in the art of teaching limit their ability to impact students (Steckel, 2009). The coach bridges the need for training time with the teacher by being a constant force who trains and supports teachers daily. The school district can continue to share a common vision with coaches so that a similar message is sent to teachers during trainings. If there is such common language, then coaches can continue to train teachers with the confidence that the content will be supported by the district's and school's visions. The state can continue to expand trainings offered by programs like *Just Read*, *Florida!* so that the information disseminated to districts is research-based and the message is consistent. This consistent message can reinforce the efforts of the coach at a single school site.

3. To what extent does coaching teachers to track student progress contribute to instruction in English and Intensive Reading classes?

The teachers, in the initial survey, unanimously felt that tracking student progress positively impacted instructional proficiency. All teachers, as well as the coach, were in accord in responding to the benefits of tracking student progress. In the post-survey, the mean was consistent with the initial survey, with everyone in agreement when it came to the positive effects of monitoring student progress. All teachers and the coach aligned when it came to understanding the importance of tracking student progress and its positive impact on their instruction. Teachers were coached on tracking Florida Student Assessment scores, common

assessments, online reading practice, as well as scales and data sheets to analyze progress of students, which teachers used as a gauge of students' progress (Florida CIMS, 2017). Teachers responded that they appreciated the support and discussions by the coach, regarding the sharpening of these skills which would, in turn, increase proficiency of instruction.

The Learning Cycle Tool, in the post-observation, indicated that all six teachers were compliant with having students track their progress on specific standards. Similarly, teachers responded in the interview that tracking student progress was a strategy that improved their instruction and the coach agreed with their responses. The main way that they said the coach assisted them with tracking student progress was by sharing tools to track progress and showing teachers how to use the tools. At the district level, the coach can continue to be supported with how to best train teachers on any new tracking tools or modifications to tools that already exist. At the state level, more tracking protocol examples can be made available to districts, in the form of additions to already-existing state training modules, so that districts have more options to offer coaches who train teachers to track student progress.

Interpretation and Alignment of Findings with Literature

Over the course of this study, data was collected from initial and post surveys, interviews, and Learning Cycle Tool classroom observations. The main research question was: How might instructional coaching, during the implementation of mastery learning, impact the instruction of teachers as they seek to improve instruction? Other questions and findings included:

1. What impact does the instructional coach have on small-groups instruction in English and Intensive Reading classes?

The conclusion of this research question is that small-groups or rotations instruction could be an effective teaching technique if teachers know to use it (Marzano, 2017), yet the

teachers and coach started off the year with a lack of confidence in this area. There were teachers who understood the importance and some who had no opinion on the subject. In the literature review, Solis, Vaughn, and Scammacca (2015) attempted to implement small-groups as a way to impact reading through the use of interventions in small-groups and reading practice software.

Although some participants in this study attempted a similar small-groups or rotations model like Solis, Vaughn, and Scammacca (2015), the success in this study did not yield results like it did in the study by Solis, Vaughn, and Scammacca (2015). There was little impact and development in small-groups instruction in this study. This could have been related to a lack of focus on the technique and perhaps the perceived benefits of small-groups instruction, which subsequently can be more labor-intensive regarding planning. Progression, over the course of the study, demonstrated very little change. Changes occurred only in the coach's perspective as to the importance of this technique of small-groups or rotations. The Learning Cycle Tool also showed that only half the teachers studied used small-groups or rotations. Nevertheless, perhaps this study, when completed, could serve as a self-analysis tool for the coach as the research concluded that the teachers' focus was a direct reflection of the coach's focus.

Limitations during this study included obtaining the data. First, there was a limited number of teachers and literacy coaches to survey. A limited sample would yield a higher amount of variation or a higher standard deviation. In retrospect, this allowed the use of the small-groups approach, which created a more intimate study. Additionally, the surveys used a five-point Likert scale, strongly disagree to strongly agree, which meant again that it would have higher variances in answers. The limitations of using the Learning Cycle Tool was that it was an audit completed in person, conducted randomly, showing what a teacher was doing during two different times over a school year. This audit was done only twice, which may have been a

misrepresentation or a skewed average of what happened in the classroom because of the lack of more audits over an extended period. Also, a limitation of the interview could have been that the participants might have been guarded in their responses because, as educators, they might have felt like some of the challenges were part of the job and not necessary to mention.

Discrepancies in this research include the use of the Likert survey. Likert scales have only unidimensional answers while most people have sophisticated multi-dimensional views on issues. Therefore, one cannot truly quantify the beliefs of people. For instance, the first question of the survey for teachers was "I have had a strong start to the year as a teacher, regarding the strength of my instruction." Although the surveys were anonymous, the answer could have been more complicated than "strongly disagree" to "strongly agree." Or it could have been a "strongly disagree" in reality, but one would never let anyone know that there was no confidence in the instruction ability of oneself, therefore answering "agree." These feelings, attitudes, and beliefs may create some level of discrepancy.

Also, there would be discrepancies incurred with the use of the Learning Cycle Tool because the audit was done by the researcher, in person. This could create a best performance or 'show' for the researcher, which may not be a true representation of what may have actually happened in the classroom without an observer present. As noted in the literature, one challenge as Senn, Marzano, Garst, and Moore (2015) found, if tasks align to lesson targets, small-groups instruction can have an impact. If tasks do not align with lesson targets, it becomes more of a challenge to implement small-groups or rotations.

2. How does the professional development provided by the instructional coach to literacy teachers improve instruction in English and Intensive Reading classes?

The conclusion of the research on this question is the part of the data which showed the most increase in impact during this study. Evidence supports the coach assisting teachers through training and modeling was a priority (Barlow, Frick, Barker, & Phelps, 2014). Professional development data demonstrated the most impact on instruction for both English and Intensive Reading teachers, coupled by the coach's support. As in the literature review, the coach in this study did not just give tools, but the coach also modeled how to use the tools (Desimone & Pak, 2016). As with the implementation of other strategies, following up by a coach to reinforce support of the strategy, as well as monitoring and modeling professional development sessions are critical for long-term benefits to take place.

Limitations included time. Professional development was an ongoing and more time-consuming process. Continuous education is usually associated with time restraints. Professional development classes, though necessary in an ever-changing educational environment, takes time away from being in the classroom. During this study, dedicated time was also needed between coaches and teachers when modeling lessons.

There was no direct evidence that professional development could be assessed on the Learning Cycle Tool, except the posting of scales on the board or trackers in folders that would reflect a strategy learned from a previous professional development session. This audit-style tool could not capture direct data on professional development. A limitation from the interview could have been that the coach was new to the school that school year and so there might not have been enough time to reflect on trainings and impact by that specific coach. Finally, another limitation is that teachers cannot receive all professional development classes in just one year because professional development is ongoing.

Discrepancies in findings included participants having different backgrounds that might have led to great disparity in confidence levels of both teachers and coaches. In the initial survey, the coach's responses suggested that there was little confidence in the amount of professional development that was being disseminated. In the post survey, there was a great increase which, with time, had a significant impact on this coach's ability to help teachers. This variance came with years of experience, as teachers with less years would respond to the survey questions very differently to teachers who had many years of teaching experience which would skew means.

3. To what extent does coaching teachers to track student progress contribute to instruction in English and Intensive Reading classes?

The conclusion of this research question is that teachers held tracking student progress in high regard for helping improve their instruction. Like the literature review, the coach supporting teachers helped maintain a high level of instruction, reinforcing the techniques used to identify gaps in learning. Strategies were used when they seemed to fit with the goal of the lesson and not as generic strategies (Marzano, 2017). There was little gain in confidence as the teachers were already receiving a high level of reinforcement coaching with tracking prior to the initial survey. Teachers learned more about tracking student progress over the course of the past school year, especially during the study, as they worked with the coach to monitor student progress. This relates to a similar approach in the literature (Pyle & Vaughn, 2012) that included teachers tracking progress, in preparation for a state test. The Learning Cycle Tool also indicated that all six teachers where in compliance with having evidence that the students were tracking progress by using scales.

One limitation, other than time, unique to tracking student progress would be that the teachers studied were all from the same school, district, and state. The issue or focus on tracking

student progress is a norm in this school district. A broader dispersion of sampling would be necessary to measure the impact of a coach on teachers tracking student progress. The results may be different if data were collected from a state where standardized testing did not weight as heavily as in Florida school districts, where tracking progress is emphasized to the point that teachers thought it was required.

Discrepancies in findings include the idea that tracking student progress had been a necessity for success, since the implementation of tests such as the FSA. Tracking student progress for mastery (Slavin, 1987) was commonplace during this study. Tracking student progress is just a part of daily instruction as a teacher in the school district, which would tend to show data that will lean favorably toward the benefits. Students tracking their own progress through scales is also a point of reflection on the district's Learning Cycle tool. The culture in such a Florida school district will reflect data demonstrating that teachers are likely strong in this area and coaches' impact will be very slight because this has been and will be a focus for these educators, therefore making the data one-sided due to the constant focus on tracking students, especially prior to testing.

Implications

Small-Groups During Mastery Learning

The use of small-groups or rotations in this research demonstrated the direct correlation between the coach's focus and teachers' focus. Only half of the teachers observed with the Learning Cycle Tool used small-groups or rotations. The strengths of the coach would reflect in the strengths of the staff. In this focus group, the teachers were not as confident in their abilities with using small-groups strategies due to the training received by the coach. The focus of the coach should represent the focus of the school improvement plan (Florida CIMS, 2017) which in

this case would be to improve reading scores and support improved instruction in reading. Meeting the teachers at their level of applying small-groups or rotations may further improve instruction through such scaffolding (Vygotsky, 1978) of the techniques to teachers. The results of this study can also be used at other schools in the school district, as schools try to determine how to improve instruction with the assistance of coaches. Such research can, therefore, be replicated district-wide or even state-wide to determine how best a literacy coach can improve instruction.

If a coach is knowledgeable about the craft of when to use small-groups, it can impact instruction. Just like any other technique from any group of high-yield strategies, one must know that a technique or strategy may not work in every situation, every time. However, if a coach plans with teachers, those who implement a teacher-led station within their small-groups or rotations offer an opportunity to assist students in a smaller, more structured setting. There is a need for the coach to focus on teaching small-groups strategies to teachers so that students have access to receiving assistance from the teacher in a smaller group.

In this study, mean values were low. This meant that the participants felt neutral to agreeing with small-groups instruction, indicating no increase in the coach improving instruction with the use of small-groups. This suggested that more time supporting teachers in knowing when to use small-groups should be a next step for the coach. Boardman, Buckley, Vaughn, Roberts, Scornavacco, and Klingner (2016) researched Collaborative Strategic Reading (CSR research-based strategies), especially as it applied to collaboration of students with moderate disabilities of middle school language arts and reading, social studies, and science. It was found that a higher amount of such instruction led to higher yields for students with disabilities. These results show that, similarly, a coach can use small-groups to encourage collaboration among

students, as well as to increase time with students at the teacher-led station. More time at the teacher-led station will ensure more time working on skills, with the teacher's guidance at that station. Literacy coaches will need time to influence teachers to use small-groups if the task calls for it, as one of the coach's unspoken jobs is to convince staff into implementing strategies or techniques.

Professional Development During Mastery Learning

The results of this study suggested that a coach involved in professional development yielded the highest rate of return on improving instruction. A literacy coach is a resource of instructional support who can help create, deliver, support, and model professional development initiatives, as well as work with the principal to ensure school goals are met (Taylor, Zugelder, & Bowman, 2013). The impact of a literacy coach is crucial in an ever-changing educational environment where the challenges of meeting the needs of secondary students are a constant. Coaches should be asked to engage in creating an environment to give teachers the skills to produce literacy rates with the highest chance of success. The focus of the coach on professional development reflected the school's improvement plan (Florida CIMS, 2017) goal to improve reading scores and support improved instruction in reading.

Again, there should be a direct line item for evidence of professional development in the Learning Cycle Tool that could reinforce this area of concern in an average day of instruction. The results of this study can also be used at other schools in the school district, as this research examined school-based professional development, based on the instructional needs of the school and the school's goals. This approach may help other schools, as well, to determine how to improve instruction with the assistance of the literacy coach. This study can also be replicated district-wide

or even state-wide to determine how best a literacy coach can improve instruction through professional development, specific to the site's needs.

Professional development offered by the literacy coach can positively impact instruction. It can impact instruction as the coach works with administration to identify instructional needs, creates goals, and trains teachers based on those specific school needs. In this study, the mean values were high, indicating that the participants were in agreement to strongly agree. The results demonstrated the best growth of all three areas, with the highest return. Navarro-Pablo and Gallardo-Saborido (2015) conducted a study about the benefits of training teachers on using cooperative learning. It consisted of undergraduate students of Early Childhood and Elementary Education Teaching who had been teaching linguistic and literary skills. Although it was carried out among teachers of elementary level students, there were benefits that related to secondary level students learning content together as well as improving social and thinking skills.

A challenge to implementation of school-specific professional development to impact instruction, and potentially a school grade, is when a coach presents generic trainings that are unrelated to school's data. It is important, therefore, to maintain focus on the needs of the school when trainings are created, presented, and supported. It is difficult for administration to motivate staff with classes that one could deem unimportant. Teachers often feel that professional development is irrelevant. The literacy coach is the best intervention to incorporate differentiation to promote relevant and rich professional development.

Tracking Student Progress During Mastery Learning

The data indicated that tracking student progress was consistent with the focus of the coach supporting teachers (Joseph, Kastein, Konrad, Chan, Peters, & Ressa, 2014). This strong focus carried much weight on the Learning Cycle Tool, a district-wide classroom auditing

platform. The focus of the coach was to support FSA goals using scales and tracking data. The focus of the coach related to assisting teachers with tracking student progress connected to the school's improvement plan to show gains in reading scores and support instruction in reading since monitoring of progress through tracking is part of instruction.

Although the results of this study cannot be generalized, it may point to techniques which can be used by other schools in the district, as the study included how the coach facilitated teachers who tracked student progress, as a monitoring tool during the mastery learning process. This approach of the coach helping teachers with ways to track student progress may help other schools to use such tools to improve instruction with the assistance of the literacy coach. This examination of tracking student progress with the help of a literacy coach can also be replicated district-wide or even state-wide to learn how best a literacy coach can improve instruction through showing teachers to track student progress, specific to the site's needs.

A literacy coach who trains and models to teachers how to track student progress has an impact on instruction. Joseph, Kastein, Konrad, Chan, Peters, and Ressa (2014) found that tracking students' performance in the classroom was considered necessary for student success. They also found that there were many methods for collecting and tracking students' academic performance. These methods ranged from evaluation rubrics to graphing performance. Their teacher-participants were able to use data to make instructional decisions. However, they had to make sure that the methods aligned with learning targets were measured by mastery level. This helped teachers gather data about student learning to better meet their students' needs.

A coach can follow a similar model in that once one tracks student progress, it allows the opportunity to further work with students on areas of need. Tracking student progress allows teachers to continuously reflect on students' progress and adjusting instruction based on such

progress. When a coach supports teachers to track student progress, the teachers are placed on the path to adapt their instruction to meet the needs of how their students' progress. Data from this study suggested that mean values were high, which reflects that participants 'agreed' to 'strongly agreed' that tracking student progress positively impacted instruction. The coach helping teachers track student progress remained consistent throughout the study. There is a threat of teachers tracking progress but neglecting to plan lessons based on this data, so this is another opportunity for the coach to remind teachers to keep a balance by continuing to plan lessons and let the data drive instruction. As with other initiatives of the literacy coach, there must be creation of a culture so that actions become habits where tracking students' progress is embedded in all lessons as part of the norm.

Recommendations for Further Action

Although participants were solely in English Language Arts and Intensive Reading, a school leader can use the results of this study to further define projects of a literacy coach to impact instruction, as this study offered results that indicated that a literacy coach can impact instruction at a high school. This study also reflected benefits to using this model during the instructional coaching process.

One recommendation is that literacy coaches should continue to be trained on high-yield strategies and understanding when to use techniques within these strategies, like organizing students into small-groups and rotations (Marzano, 2017), so that they may continue to impact instruction of English Language Arts and Intensive Reading teachers. Another recommendation is administration should offer enough time for a literacy coach to support teachers in the classroom, as modeling is important to showing teachers how to use new, high-yield strategies. Increasing the availability of tools to track student progress, as well as the coach demonstrating

how to use such tools in the classroom, is another recommendation to ensure access to resources for coaches to implement while supporting teachers to improve instruction. Support by administration to reinforce coaching initiatives is also a recommendation because it is important for teachers to feel that administration, not just the coach, is supportive of initiatives to improve instruction.

As for how these results will be shared, this study will be available to the seven participants, six teachers and one literacy coach, upon request. It will be distributed to participants and even available to any school or district that requests it. It will be stored in the university database for future researchers to use as part of their literature review to further their research on the impact of coaching on instruction at the secondary level.

Benefits of this study to the larger educational field include an example of the positive impact a literacy coach had on instruction during the mastery learning process, as it supports the educational value of a literacy at a high school. Also, this study can be replicated within the school district in which it occurred, across the state of Florida, or to other high schools across the nation. Benefits to stakeholders include administrators who can make decisions based on the success of the model of coaching during mastery learning with small-groups, professional development, and tracking student progress. Furthermore, literacy coaches can read this study to learn more about how they can further assist English and Intensive Reading teachers. Teachers use this study can learn more about the interaction between a coach and teachers as they all work to improve instruction during the mastery learning process.

Recommendations for Further Study

Next steps for researchers of this topic or similar topics may include researching the impact of coaching at more schools, since the sample size of such a study can increase to gather

even more data. Future research may also include coaches, other than a literacy coach such as science coach or math coach if a school has one, supporting other subjects. Next steps may include research extended to different grade levels, like kindergarten through grade five or grades six through eight, following this model of coaching through mastery learning with the use of small-groups, professional development, and tracking student progress. This study may be modified by coaches who wish to examine if their intervention has impacted instruction. That type of action research, after each intervention by the coach, can help a coach understand which intervention yielded more impact on instruction.

Conclusion

English and Intensive Reading teachers instruct students to master state standards and the support of the literacy coach helps during this process. The results of this study indicated that the coach supporting teachers with the implementation of small-groups or rotations was not closely related to the impact of the coach during the mastery learning process. This could be because more professional development was needed to educate all teacher participants and the coach on when to use high-yield strategies like small-groups or rotations because not all strategies work in every lesson and classroom (Marzano, 2017). Although small-groups or rotations was not confirmed as an intervention that all participants felt the coach helped them improve regarding their instruction, support from a literacy coach can have a positive impact on instruction during the mastery learning process in other areas.

School-based professional development had a positive impact on instruction. The prerequisite to site-based professional development would be determining the needs of each, individual school. One may use the school improvement plan to write such goals once the data has determined the professional development needs of the school. Another area that positively impacted instruction was professional development at the school level, as it offered the coach opportunities to train English and Intensive Reading teachers, as well as model high-yield strategies to teachers. Professional development included follow-up with the coach and teachers felt like it helped improve their instruction.

The coach can improve instruction by assisting with tracking student progress. The coach can introduce tools, or modify existing trackers, to support teachers in using tools to track progress. The key to this intervention during the study was showing teachers how to empower students to track their own progress and reflect on the next steps toward mastery. Teachers reported that they were more aware of the progress of their students and when mastery occurred because they knew how to track student progress.

Effective literacy coaches can positively impact instruction. A good coach fills a knowledge gap as a trainer who helps teachers acquire growth in their craft. Despite often having a myriad of responsibilities beyond training teachers, planning with content groups, and modeling lessons, literacy coaches must find ways to support the school improvement goals. During this path toward achieving such goals, they train, motivate, track progress, and manage their time to support all subject areas to integrate literacy, ensure success for all, and an improved school grade. The literacy coach must have a sophisticated understanding of instructional strategies as well as a thorough understanding of how to manage and motivate teachers while disseminating this information in a deliberate format to be effective. A school can benefit from having a literacy coach who plans, according to the school improvement plan, and positively impacts instruction.

References

- All Things PLC. (2018). *Solution Tree Inc*,. Retrieved January 21, 2018, from http://www.allthingsplc.info/
- Barlow, A. T., Frick, T. M., Barker, H. L., & Phelps, A. J. (2014). Modeling instruction: The impact of professional development on instructional practices. *Science Educator*, 23(1), 14.
- Blamey, K. L., Meyer, C. K., & Walpole, S. (2008). Middle and High School Literacy Coaches:

 A National Survey. *Journal of Adolescent & Adult Literacy*, 52(4), 310-323.

 doi:10.1598/jaal.52.4.4
- Bloomberg, L. D., & Volpe, M. (2016). Completing your qualitative dissertation: A road map from beginning to end. Los Angeles: SAGE.
- Bolman, L., & Deal, T. (2013). *Reframing organizations: Artistry, choice and leadership* (5th ed). San Francisco, CA: Jossey-Bass. (earlier editions are acceptable).
- Boardman, A. G., Buckley, P., Vaughn, S., Roberts, G., Scornavacco, K., & Klingner, J. K. (2016). Relationship between implementation of collaborative strategic reading and student outcomes for adolescents with disabilities. *Journal of Learning Disabilities*, 49(6), 644-657. doi:10.1177/0022219416640784
- Burns, J. (1978). Leadership. New York: Harper & Row.
- Castek, J., & Coiro, J. (2015). Understanding what students know. *Journal of Adolescent & Adult Literacy*, 58(7), 546-549. doi:10.1002/jaal.402
- Collet, V. S. (2012). The gradual increase of responsibility model: Coaching for teacher change. *Literacy Research and Instruction*, *51*(1), 27-47. doi:10.1080/19388071.2010.549548

- Common Core Development Process. (2018). Retrieved April 22, 2018, from http://www.corestandards.org/about-the-standards/development-process/
- Creswell, J. W. (2013). *Qualitative inquiry & research design: choosing among five approaches*.

 Thousand Oaks, CA: SAGE.
- Desimone, L. M., & Pak, K. (2016). Instructional coaching as high-quality professional development. *Theory into Practice*, *56*(1), 3-12. doi:10.1080/00405841.2016.124194
- Edmonds, M. S., Vaughn, S., Wexler, J., Reutebuch, C., Cable, A., Tackett, K. K., & Schnakenberg, J. W. (2009). A synthesis of reading interventions and effects on reading comprehension outcomes for older struggling readers. *Review of Educational Research*, 79(1), 262-300. doi:10.3102/0034654308325998
- Edwards, K. (2008). Examining the impact of phonics intervention on secondary students' reading improvement. *Educational Action Research*, 16(4), 545-555. doi:10.1080/09650790802445726
- Eisenberg, E. (2015, March 18). The coaching cycle: before, during, and after. *Literacy Daily*.

 Retrieved October 14, 2017, from https://www.literacyworldwide.org/blog/literacy-daily/2015/03/18/the-coaching-cycle-before-during-and-after
- Estrada, P. (2005). The courage to grow: A researcher and teacher linking professional development with small-group reading instruction and student achievement. Research in the Teaching of English, 39(4), 320-**364**.
- Frost, S., & Bean, R. (2006). Qualifications for literacy coaches: Achieving the gold standard.

 Retrieved April 29, 2018, from http://www.citationmachine.net/apa/cite-a-website/manual
- Frey, N., & Fisher, D. (2013). Close reading. Principal Leadership, 13(5), 57-59. Retrieved from

- https://une.idm.oclc.org/login?url=https://search-proquestcom.une.idm.oclc.org/docview/1270603677?accountid=12756
- Fisher, D., & Frey, N. (2014). Close reading as an intervention for struggling middle school readers. *Journal of Adolescent & Adult Literacy*, 57(5), 367-376. doi:10.1002/jaal.266
- Fisher, D., Frey, N., & Nelson, J. (2012). Literacy achievement through sustained professional development. *The Reading Teacher*, 65(8), 551-563. doi:10.1002/TRTR.01082
- Florida CIMS. (2017). *Local High School: School Improvement Plan*, 1-54. Retrieved January 02, 2018.
- Florida Department of Education. (2016). 2015-2016 Annual Legislative Report on Teacher Evaluation (pp. 1-35, Rep.).
- Florida Department of Education. (2018). *Literacy Coach Academy Training Modules*. Retrieved April 01, 2018, from http://www.fldoe.org/academics/standards/just-read-fl/literacy-coach.stml
- Florida Department of Education. (2017, June). *School Accountability Reports*. Retrieved July 10, 2017, from http://schoolgrades.fldoe.org/
- Florida Department of Education. (2016, July 08). School Grades and Learning Gains for 2015-2016. Retrieved September 10, 2017, from http://www.fldoe.org/core/fileparse.php/5637/urlt/2016SchoolGradesLearningGains.pdf
- Florida Department of Education Mission. (2017). Retrieved December 26, 2017, from http://www.fldoe.org/policy/federal-edu-programs/about-us/mission.stml
- Florida Department of Education School Grades Learning Gains Calculation for 2015-16. (2016, July). Retrieved December 26, 2017, from

- http://www.bing.com/cr?IG=BB309A31F6CE4FAEBBC186414ABF7F77&CID=2AB3

 A1D207A86463167EAAB60607658C&rd=1&h=caQwpVPUrOwpKbYKFaWPinlRd5s

 mAYk5pka8C0D2FBo&v=1&r=http%3a%2f%2fwww.fldoe.org%2fcore%2ffileparse.ph

 p%2f5637%2furlt%2f2016SchoolGradesLearningGains.pdf&p=DevEx,5064.1
- Florida Standards Assessments. (2017). Retrieved December 26, 2017, from http://www.fldoe.org/accountability/assessments/k-12-student-assessment/fsa.stml
- FOCUS School Software (Version 2004-2018) [Computer software]. (2018). Retrieved January 02, 2018, from https://osceola.focusschoolsoftware.com/focus/
- Gallucci, C., DeVoogt Van Lare, M., Yoon, I., & Boatright, B. (2010). Instructional coaching: Building theory about the role and organizational support for professional learning. *American Educational Research Journal*, 47(4), 919-963. doi:10.3102/0002831210371497
- Joseph, L. M., Kastein, L. A., Konrad, M., Chan, P. E., Peters, M. T., & Ressa, V. A. (2014).
 Collecting and documenting evidence: Methods for helping teachers improve instruction and promote academic success. *Intervention in School and Clinic*, 50(2), 86-95.
 doi:10.1177/1053451214536043
- Hawkins, R. O., A., Sheeley, W., & Ling, S. (2011). Repeated reading and vocabulary-previewing interventions to improve fluency and comprehension for struggling high-school readers. *Psychology in the Schools*, 48(1), 59-77.doi: 10.1002/pits.20545
- International Reading Association. (2004, May). The role and qualifications of the reading coach in the united states. Retrieved April 29, 2018, from http://www.literacyworldwide.org/docs/default-source/where-we-stand/reading-coach-position-statement.pdf?sf

- Lockwood, J. R., McCombs, J. S., & Marsh, J. (2010). Linking reading coaches and student achievement: Evidence from florida middle schools. Educational Evaluation and Policy Analysis, 32(3), 372-388. doi:10.3102/0162373710373388
- Kamps, D. M., & Greenwood, C. R. (2005). Formulating secondary-level reading interventions. *Journal of Learning Disabilities*, 38(6), 500-509. doi:10.1177/00222194050380060501
- Koellner, K., & Jacobs, J. (2015). Distinguishing models of professional development: The case of an adaptive model's impact on teachers' knowledge, instruction, and student achievement. *Journal of Teacher Education*, 66(1), 51-67. doi:10.1177/0022487114549**599**
- Kouzes, J. M., & Posner, B. Z. (2000). The five practices of exemplary leadership: When leaders are at their best. San Francisco: Jossey-Bass.
- Lang, L., Torgensen, J., Vogel, W., Chanter, C., Lefsky, E., & Petscher, Y. (2009). Exploring the relative effectiveness of reading interventions for high school students. *Journal of Research on Educational Effectiveness*, 2(2), 149-175. doi: 10.1080/19345740802641535
 Learning Cycle Tool. (2018). Retrieved April 01, 2018, from https://www.research.net/
- Ledford, J. R., Zimmerman, K. N., Chazin, K. T., Patel, N. M., Morales, V. A., & Bennett, B. P. (2017). Coaching paraprofessionals to promote engagement and social interactions during small group activities. *Journal of Behavioral Education*, 26(4), 410-432. doi:10.1007/s10864-017-9273-8
- Lovett, M. W., Lacerenza, L., De Palma, M., & Frijters, J. C. (2012). Evaluating the efficacy of remediation for struggling readers in high school. *Journal of Learning Disabilities*, 45(2), 151-169. doi:10.1177/0022219410371678

- Marsh, J. A., McCombs, J. S., & Martorell, F. (2012). Reading coach quality: Findings from Florida middle schools. *Literacy Research and Instruction*, *51*(1), 1-26. doi:10.1080/19388071.2010.518**662**
- Marsh, J. A., Sloan, J., McCombs, J., & Martorell, F. (2010). How instructional coaches support data-driven decision making: Policy implementation and effects in Florida middle schools. *Educational Policy*, 24(6), 872-907. doi:10.1177/0895904809341467
- Marzano Causal Teacher Evaluation Model. (2018). Retrieved April 01, 2018, from http://www.marzanoevaluation.com/
- Marzano, R. J. (2009). Setting the record straight on "high-yield" strategies. *The Phi Delta Kappan*, 91(1), 30-37.
- Marzano, R. J. (2017). New art and science of teaching: More than fifty new instructional strategies for academic success. S.l.: Solution Tree.
- McCullers, J. F., & Bozeman, W. (2010). Principal self-efficacy: The effects of no child left behind and Florida school grades. *NASSP Bulletin*, *94*(1), 53-74. doi:10.1177/0192636510371976
- Moskal, M. K., & Keneman, A. F. (2011). Literacy leadership to support reading improvement:

 Intervention programs and balanced instruction. New York: Guilford Publications Inc.

 M.U.A.
- Moxley, D. E., & Taylor, R.T. (2006). Literacy coaching: A handbook for school leaders, SAGE

 Publications, 2006. ProQuest Ebook Central,

 http://ebookcentral.proquest.com/lib/uneedu/detail.action?docID=1051672.

 Created from uneedu on 2018-04-23 16:18:35.
- Navarro-Pablo, M., & Gallardo-Saborido, E. J. (2015). Teaching to training teachers through

- cooperative learning. *Procedia Social and Behavioral Sciences*, 180, 401-406. doi:10.1016/j.sbspro.2015.02.136
- Neumerski, C. M. (2013). Rethinking instructional leadership, a review: What do we know about principal, teacher, and coach instructional leadership, and where should we go from here? *Educational Administration Quarterly*, 49(2), 310-347.

 doi:10.1177/0013161X12456700
- No Child Left Behind Act. (2001). Retrieved July 11, 2017, from http://www.fldoe.org/policy/edu-laws-legislation/no-child-left-behind/
- Oberg de la Garza, Tammy. (2008). Professional development and literacy coaching: A portrait of fostering teachers' deep understanding.
- Official SAT Practice. (2017, April 24). Retrieved January 21, 2018, from https://collegereadiness.collegeboard.org/sat/practice/full-length-practice-tests
- O'Malley Borg, M., Plumlee, J. P., & Stranahan, H. A. (2007). Plenty of children left behind: High-stakes testing and graduation rates in Duval county, Florida. *Educational Policy*, 21(5), 695-716. doi:10.1177/0895904806289206
- Piaget, J. (1926). The language and thought of the child. New York: Harcourt Brace.
- Pole, K. (2007, July). Mixed Methods Designs: A review of strategies for blending quantitative and qualitative methodologies. *University of Texas*. Retrieved February 18, 2016, from https://elearn.une.edu/bbcswebdav/pid-1236527-dt-content-rid-9066213_1/courses/50815-201604-EDU-803-A1/Pole 2007 mixed methods.pdf
- Polkinghorne, F., & Hagler, B. (2012). Integrated reading literacy interventions: A qualitative study of the defining characteristics and classroom practices of in-service teachers of high school business." *Delta Pi Epsilon Journal* 54(2), 29.

- Pyle, N., & Vaughn, S. (2012). Remediating reading difficulties in a response to intervention model with secondary students. *Psychology in the Schools*, 49(3), 273-284. doi:10.1002/pits.21593
- Qualtrics. (2018). Retrieved April 01, 2018, from https://www.qualtrics.com/
- Rev Audio & Video Transcription Services. (2018). Retrieved April 01, 2018, from https://www.rev.com/transcription
- Senn, D., Marzano, R. J., Garst, L. H., & Moore, C. (2015). Organizing students for learning:

 Classroom techniques to help students interact within small groups. West Palm Beach,

 FL: Learning Sciences Marzano Center.
- Slavin, R. E. (1987). Mastery learning reconsidered. *Review of Educational Research*, 57(2), 213;175;-213. doi:10.2307/1170235
- Slavin, R. E. (1996). Research on cooperative learning and achievement: What we know, what we need to know. *Contemporary Educational Psychology*, 21(1), 43-69. doi:10.1006/ceps.1996.0004
- Smith, J. K., & Heshusius, L. (1986). Closing Down the Conversation: The End of the Quantitative-Qualitative Debate Among Educational Inquirers. *Educational Researcher*, 15(1), 4-12. Retrieved February 18, 2016, from http://files.eric.ed.gov/fulltext/ED258985.pdf
- Snow, C., Ippolito, J., & Schwartz, R. (2005). What we know and what we need to know about literacy coaches in middle and high schools: A research synthesis and proposed research agenda. *Journal of Adolescent & Adult Literacy*, 49(4), S35.
- Solis, M., Vaughn, S., & Scammacca, N. (2015). The effects of an intensive reading intervention

- for ninth graders with very low reading comprehension. *Learning Disabilities Research* & *Practice*, 30(3), 104-113. doi: 10.1111/ldrp.12061
- Soper, S. L., & Marquis-Cox, D. (2012). Literacy intervention for adolescents in the public high school. *Perspectives on Language and Literacy*, 38(2), 13.
- Steckel, B. (2009). Fulfilling the promise of literacy coaches in urban schools: What does it take to make an impact? *The Reading Teacher*, *63*(1), 14-23. doi:10.1598/RT.63.1.2
- Stephens, D., Morgan, D. N., DeFord, D. E., Donnelly, A., Hamel, E., Keith, K. J., Leigh, S. R. (2011). The impact of literacy coaches on teachers' beliefs and practices. *Journal of Literacy Research*, 43(3), 215-249. doi:10.1177/1086296X11413716
- Stevens, N. (2010). The High School Literacy Coach: Searching for an Identity. *The Journal of Education*, 191(3), 19-25. Retrieved from http://www.jstor.org/stable/42744152
- Swanson, E., & Wanzek, J. (2014). Applying research in reading comprehension to social studies instruction for middle and high school students. *Intervention in School and Clinic*, 49(3), 142-147. doi:10.1177/1053451213496157
- Taylor, R.T., & Gunter, G. A. (2005). K-12 Literacy leadership fieldbook. SAGE Publications, 2005. ProQuest Ebook Central, http://ebookcentral.proquest.com/lib/uneedu/detail.action?docID=1994348.
- Taylor, R. T., Zugelder, B. S., & Bowman, P. (2013). Literacy coach effectiveness: The need for measurement. *International Journal of Mentoring and Coaching in Education*, 2(1), 34-46. doi:10.1108/20466851311323078
- Vaughn, S., & Fletcher, J. M. (2012). Response to intervention with secondary school students with reading difficulties. *Journal of Learning Disabilities*, 45(3), 244-256. doi:10.1177/0022219412442157

- Vaughn, S., Roberts, G., Wexler, J., Vaughn, M. G., Fall, A., & Schnakenberg, J. B. (2014).
 High school students with reading comprehension difficulties: Results of a randomized control trial of a two-year reading intervention. *Journal of Learning Disabilities*, 48(5), 546-558. doi:10.1177/0022219413515511
- Vygotsky, L. S. (1978). *Mind in society* (M. Cole, V. John-Steiner, S. Scribner, & E. Souberman, Eds.), Cambridge, MA: Harvard University Press.
- Wolff, E. S., Isecke, H., Rhoads, C., & Madura, J. P. (2013). Nonfiction reading comprehension in middle school: Exploring in interactive software approach. *Educational Research Quarterly*, *37*(1), 24.
- Yudkowsky, R., Park, Y. S., Lineberry, M., Knox, A., & Ritter, E. M. (2015). Setting mastery learning standards. *Academic Medicine*, 90(11), 1495-1500.

doi:10.1097/ACM.0000000000000887

Appendix A

Open-Ended Interview Questions-Instructional Coach

An Exploration of the Impact of Instructional Coaching

Opening Statement: "Good morning/afternoon. Today, I would like to interview you in order to learn more about your coaching experience during the mastery learning process. I have a few questions for you about how you support teachers by implementing small-groups, professional development, and how to track student progress as you help teachers improve instruction, but please feel free to add feedback beyond the questions. Just a reminder that you will be recorded so that this interview may be transcribed accurately."

Institution: Anonymous High School Interviewee (Title and Name): Reading Coach, Mr(s). Anonymous

Interviewer: Cindy Ramdial-Budhai (Researcher)

Instructions: Please answer these interview questions with details that explain your responses.

- Describe your experience related to instructional coaching in a Reading or English Language Arts classroom.
- How might mastery learning help your students learn standards?
- Have you offered any support, in the past, on small-groups or rotations during the mastery learning process? If yes, explain how you supported Reading or English Language Arts teachers.
- What have been some benefits to instruction when you might have attempted to coach teachers to improve instruction during the implementation of mastery learning with approaches like small-groups instruction?

- What have been some challenges you faced when you might have attempted to coach teachers to improve instruction during the implementation of mastery learning with approaches like small-groups instruction?
- Have you offered any support, in the past, by modeling and/or professional development during the mastery learning process? If yes, explain how you supported Reading or English Language Arts teachers.
- What have been some benefits to instruction when you might have attempted to coach teachers to improve instruction during the implementation of mastery learning with approaches like modeling and/or professional development?
- What have been some challenges you faced when you might have attempted to coach teachers to improve instruction during the implementation of mastery learning with approaches like training or modeling with professional development?
- Have you offered any support, in the past, on tracking student progress (scales, reading/practice trackers, data sheets, etc.) during the mastery learning process? If yes, explain how you supported Reading or English Language Arts teachers.
- What have been some benefits to instruction when you might have attempted to coach teachers to improve instruction during the implementation of mastery learning with approaches like tracking student progress?
- What have been some challenges you faced when you might have attempted to coach teachers to improve instruction during the implementation of mastery learning with approaches like tracking student progress?
- How was your experience of coaching during mastery learning beneficial to improving overall instruction in ELA and Reading?

- How was your experience of coaching during mastery learning a challenge to improving overall instruction in ELA and Reading?
- Do you think mastery learning can be impactful if coaching teachers occurs, to better
 assist students increase reading comprehension in Reading and English Language Arts?
 Why or why not?
- Think about when you coached a teacher: was there a more useful strategy (small-groups versus professional development versus tracking student progress) utilized during the mastery learning process that was supported by you, or did all three impact instruction equally, toward assisting teachers to improve instruction?
- Explain what you understand about how you can coach teachers with using small-groups;
 what you understand about how you can coach teachers with professional development;
 explain what you understand about how you can coach teachers with using tracking
 student progress.
- Do you feel as though you have helped other teachers? If yes, how?
- How do you feel you supported others during the implementation of mastery learning?

Appendix B

Open-Ended Interview Questions-Teachers

An Exploration of the Impact of Instructional Coaching

Opening Statement: "Good morning/afternoon. Today, I would like to interview you in order to learn more about your instructional experience during the mastery learning process. I have a few questions for you about how support offered to you by your coach on small-groups, professional development, and tracking student progress might relate to improving your instruction, but please feel free to add feedback beyond the questions. Just a reminder that you will be recorded so that this interview may be transcribed accurately."

Institution: Anonymous High School Interviewee (Title and Name): Teacher, Mr(s).

Anonymous

Interviewer: Cindy Ramdial-Budhai (Researcher)

Instructions: Please answer these interview questions with details that explain your responses.

- Describe your experience teaching in a Reading or English Language Arts classroom.
- How might mastery learning help your students learn standards?
- Have you been offered any support by your coach, in the past, on using small-groups or rotations during the mastery learning process? If yes, explain how you were coached.
- What have been some benefits to your instruction when you were coached during the implementation of mastery learning with approaches like small-groups instruction?
- What have been some challenges you faced when you were coached to improve instruction during the implementation of mastery learning with approaches like smallgroups instruction?

- Were you offered any support by your coach, in the past, through modeling or
 professional development during the mastery learning process? If yes, explain how you
 were coached.
- What have been some benefits to your instruction when your coach helped you during the implementation of mastery learning with approaches like modeling and professional development?
- What have been some challenges you faced when you were coached to improve instruction during the implementation of mastery learning with approaches like training or modeling with professional development?
- Have you been offered any support by your coach, in the past, on tracking student progress (scales, reading/practice trackers, data sheets, etc.) during the mastery learning process? If yes, explain how you were coached.
- What have been some benefits to your instruction when you were coached to improve
 instruction during the implementation of mastery learning with approaches like tracking
 student progress?
- What have been some challenges you faced when you were coached to improve instruction during the implementation of mastery learning with approaches like tracking student progress?
- How was your experience of being coached during mastery learning beneficial to improving overall your instruction in ELA and Reading?
- Explain what this entire experience during mastery learning might have hindered, if anything.

- Do you think mastery learning can be impactful if coaching teachers occurs, to better
 assist students increase reading comprehension in Reading and English Language Arts?
 Why or why not?
- Think about when you were coached: was there a more useful strategy (small-groups versus professional development versus tracking student progress) utilized during the mastery learning process that was supported by you, or did all three impact instruction equally, toward your coach assisting you to improve instruction?
- Explain what you understand about how you were coached on how to use small-groups;
 what you understand about how you were coached on teaching with professional
 development; explain what you understand about how you were coached on how to use
 tracking student progress.
- Do you feel as though your coach has impacted your instruction? If yes, how? If no, why do you think so?
- How do you feel you supported others during the implementation of mastery learning?

Appendix C

An Exploration of the Impact of Instructional Coaching

Coach Survey-Initial

Instructions: Please answer each of these survey questions by selecting the best option that represents your thoughts.

Statement	Strongly	Agree	Neutral	Disagree	Strongly
	Agree				Disagree
1. I have had a					
strong start to					
the year as a					
coach,					
regarding					
offering					
instructional					
support.					
2. English					
teachers were					
priority for me					
to assist so far					
this year.					
3. Reading					
teachers were					
priority for me					
to assist so far					
this year.					
4. Other Content					
Area teachers					
were priority					
for me to assist					
so far this year.					
5. Data source(s)					
are used in my					
decision-					
making to assist					
teachers.					
6. I often meet					
with the					
teachers I					
support.					
7. I seldomly meet					
with the					

, , , ,			
teachers I			
support.			
8. FSA scores are			
used for me to			
monitor			
progress of			
instruction or			
my impact on			
teachers.			
9. Prior to this			
year, English teachers			
practiced the rotational			
model or small-			
groups			
effectively.			
10. Prior to this			
year, Reading			
teachers			
practiced the			
rotational			
model or small-			
groups			
effectively.			
11. The coaching			
on small-			
groups/rotations			
I offer has a			
positive impact			
on instruction.			
12. I facilitated			
relevant			
professional			
development			
for my teachers			
so far this year.			
13. I have followed			
up, after			
professional			
development,			
with my			
teachers so far			
this year.			
14. The			
professional			

	,	Г	Τ	
development I				
offer has been				
specific to the				
needs of				
literacy				
teachers and				
improving their				
instruction.				
15. The				
professional				
development I				
offer has a				
positive impact				
on instruction.				
16. I have coached				
teachers on how				
to track student				
progress				
(scales,				
reading/practice				
trackers, data				
sheets, etc.).				
17. I use common				
assessments to				
monitor				
progress of				
instruction or				
my impact on				
teachers.				
18. The coaching				
on tracking				
student				
progress I offer				
has a positive				
impact on				
instruction.				
19. Discussions				
with teachers				
during the				
coaching cycle				
are important				
for me to				
monitor				
progress of				
instruction or				

		T	T	T T
my impact on				
teachers.				
20. English				
teachers use				
effective, high-				
yield				
instructional				
strategies				
during the				
mastery				
learning				
process.				
21. Reading				
teachers use				
effective, high-				
yield instructional				
strategies				
during the				
mastery				
learning				
process.				
22. I measure my				
coaching				
impact on				
instruction this				
year through				
observations				
and data.				
23. Overall, I feel				
like I will help				
improve				
instruction this				
year.				
24. Overall, I feel				
like I will have				
a positive				
impact on				
instruction this				
year.				
jour.			l	

Appendix D

An Exploration of the Impact of Instructional Coaching

Coach Survey-Post

Instructions: Please answer each of these survey questions by selecting the best option that represents your thoughts.

Statement	Strongly	Agree	Neutral	Disagree	Strongly
	Agree				Disagree
1. I had a strong					
start to the year					
as a coach,					
regarding					
offering					
instructional					
support.					
2. English					
teachers were					
priority for me					
to assist this					
year.					
3. Reading					
teachers were					
priority for me					
to assist this					
year.					
4. Other Content					
Area teachers					
were priority					
for me to assist					
this year.					
5. Data source(s)					
were used in					
my decision-					
making to assist					
teachers.					
6. I often met with the teachers I					
supported.					
7. I seldomly met with the					
teachers I					
supported.					

O ECA seemes			
8. FSA scores			
were used for			
me to monitor			
progress of			
instruction or			
my impact on			
teachers.			
9. English			
teachers NOW			
practice the			
rotational			
model or small-			
groups			
effectively.			
10. Reading			
teachers NOW			
practice the			
rotational			
model or small-			
groups			
effectively.			
11. The coaching			
on small-			
groups/rotations			
I offered had a			
positive impact			
on instruction. 12. I facilitated			
relevant			
professional			
development			
for my teachers			
this year.			
13. I have followed			
up, after			
professional			
development,			
with my			
teachers this			
year.			
14. The			
professional			
development I			
offered was			
specific to the			
needs of			
		ı	

1:40.00.000			
literacy			
teachers and			
improving their			
instruction.			
15. The			
professional			
development I			
offered had a			
positive impact			
on instruction.			
16. I coached			
teachers on how			
to track student			
progress			
(scales,			
reading/practice			
trackers, data			
sheets, etc.).			
17. I used common			
assessments to			
monitor			
progress of			
instruction or			
my impact on			
teachers.			
18. The coaching			
on tracking			
student			
progress I			
offered had a			
positive impact			
on instruction.			
19. Discussions			
with teachers			
during the			
coaching cycle			
were important			
for me to			
monitor			
progress of			
instruction or			
my impact on			
teachers.			
20. English			
teachers used			
effective, high-			
enective, mgn-			

yield			
instructional			
strategies			
during the			
mastery			
learning			
process.			
21. Reading			
teachers used			
effective, high-			
yield instructional			
strategies			
during the			
mastery			
learning			
process.			
22. I measured my			
coaching			
impact on			
instruction this			
year through			
observations			
and data.			
23. Overall, I feel			
like I helped			
improve			
instruction this			
year.			
24. Overall, I feel			
like I had a			
positive impact			
on instruction			
this year.			

Appendix E

An Exploration of the Impact of Instructional Coaching

Teacher Survey-Initial

Instructions: Please answer each of these survey questions by selecting the best option that represents your thoughts.

Statement	Strongly	Agree	Neutral	Disagree	Strongly
	Agree				Disagree
1. I have had a					
strong start to					
the year as a					
teacher,					
regarding the					
strength of my					
instruction.					
2. English					
teachers are					
priority for my					
coach to assist					
this year.					
3. Reading					
teachers are					
priority for my					
coach to assist					
this year.					
4. Other Content					
Area teachers					
are priority for					
my coach to					
assist this year.					
5. Data source(s)					
are used in my					
decision-					
making when					
planning.					
6. I often meet					
with the coach					
for support.					
7. I seldomly meet					
with the coach					
for support.					

	T T		I	
8. I have used				
FSA scores to				
monitor				
progress of				
students and				
improving my				
instruction.				
9. Prior to this				
year, English				
teachers				
practiced the				
rotational				
model or small-				
groups				
effectively.				
10. Prior to this				
year, Reading				
teachers				
practiced the				
rotational				
model or small-				
groups				
effectively.				
11. My coach				
supporting me				
on small-				
groups/rotations				
has a positive				
impact on my				
instruction.				
12. I attended				
relevant				
professional				
development at				
my school so				
far this year.				
13. My coach				
followed up,				
after				
professional				
development,				
with me so far				
this year.				
14. The				
professional				
development				
development				

CC 1.1			_
offered by my			
coach is			
specific to my			
teaching needs			
to improve my			
instruction.			
15. The			
professional			
development			
offered by my			
coach has a			
positive impact			
on my			
instruction.			
16. I have been			
coached on how			
to track student			
progress			
(scales,			
reading/practice			
trackers, data			
sheets, etc.).			
17. I use common			
assessments to			
monitor			
progress and			
the impact of			
my instruction.			
18. My coach			
supporting me			
on tracking			
student			
progress has a			
positive impact			
on instruction.			
19. Discussions			
with the coach			
during the			
coaching cycle			
are important			
for me to			
monitor			
progress of my			
instruction.			
20. I think English			
teachers use			

effective, high-			
yield			
instructional			
strategies			
during the			
mastery			
learning			
process.			
21. I think Reading			
teachers use			
effective, high-			
yield			
instructional			
strategies			
during the			
mastery			
learning			
process.			
22. I have			
measured the			
improvement of			
my instruction			
this year			
through			
discussions			
with my coach,			
reflection, and			
data.			
23. Overall, I feel			
like I will			
improve my			
instruction this			
year.			
24. Overall, I feel			
like my coach			
will help me			
improve my			
instruction this			
year.			
<u> </u>	1	<u> </u>	

Appendix F

An Exploration of the Impact of Instructional Coaching

Teacher Survey-Post

Instructions: Please answer each of these survey questions by selecting the best option that represents your thoughts.

Statement	Strongly	Agree	Neutral	Disagree	Strongly
	Agree				Disagree
1. I had a strong					
start to the year					
as a teacher,					
regarding the					
strength of my					
instruction.					
2. English					
teachers were					
priority for my					
coach to assist					
this year.					
3. Reading					
teachers were					
priority for my					
coach to assist					
this year.					
4. Other Content					
Area teachers					
were priority					
for my coach to					
assist this year.					
5. Data source(s)					
were used in					
my decision-					
making when					
planning.					
6. I often met with					
the coach for					
support.					
7. I seldomly met					
with the coach					
for support.					
8. I used FSA					
scores to					

monitor			
progress of students and			
improving my			
instruction.			
9. English			
teachers NOW			
practice the			
rotational			
model or small-			
groups			
effectively.			
10. Reading			
teachers NOW			
practice the			
rotational			
model or small-			
groups			
effectively.			
11. My coach			
supporting me			
on small-			
groups/rotations			
had a positive			
impact on my			
instruction.	<u> </u>		
12. I attended			
relevant			
professional			
development at			
my school this			
year.	 		
13. My coach			
followed up,			
after			
professional			
development,			
with me this			
year.			
14. The			
professional			
development			
offered by my			
coach was			
specific to my			
teaching needs			

to improve my			
instruction.			
15. The			
professional			
development			
offered by my coach had a			
positive impact			
on my			
instruction.			
16. I was coached			
on how to track			
student			
progress			
(scales,			
reading/practice			
trackers, data			
sheets, etc.).			
17. I used common			
assessments to			
monitor			
progress and			
the impact of			
my instruction.			
18. My coach			
supporting me			
on tracking			
student			
progress had a			
positive impact			
on instruction.			
19. Discussions			
with the coach			
during the			
coaching cycle			
were important			
for me to			
monitor			
progress of my			
instruction.			
20. I think English	 	 	
teachers used			
effective, high-			
yield			
instructional			
strategies			

during the			
mastery			
learning			
process.			
21. I think Reading			
teachers used			
effective, high-			
yield			
instructional			
strategies			
during the			
mastery			
learning			
process.			
22. I measured the			
improvement of			
my instruction			
this year			
through			
discussions			
with my coach,			
reflection, and			
data.			
23. Overall, I feel			
like I improved			
my instruction			
this year.			
24. Overall, I feel			
like my coach			
helped me			
improve my			
instruction this			
year.			

Appendix G

An Exploration of Instructional Coaching through the Mastery Learning Process

Learning Cycle Tool

DEMOGRAPHICS:

School Name:	Date:	Grade or	Content Area:
		Course Level:	

GUARANTEED AND VIABLE CURRICULUM:

Standards(s) being addressed in the lesson	Pacing On pace: Within 2 weeks
follow the Curriculum Unit Plan: Y/N	Ahead of Pace: > 2 weeks
	Behind Pace: > 2 weeks

INSTRUCTION and STUDENT TASKS:

1.	Learning Targets are being addressed and are aligned	Yes
	to the DOK of the progression of the Florida Standards	Partially
	· ·	No
2.	Student task/evidence of work is aligned to both the	Yes
	learning targets and DoK of the progression of the	Partially (Below the aligned DoK)
	Standard	No (Not at all aligned)
3.	There is evidence of students using a scale and/or	Yes
٥.	tracking their progress on specific standards	Partially (Teacher is using a scale/tracking
	tracking their progress on specific standards	progress)
		No (No evidence of use of scales/tracking)
4.	Instructional strategy used by the teacher is aligned to	Yes
	the learning target (Teaching Map Strategy)	Partially
		No (Not at all aligned)
5.	Teacher is monitoring the majority for learning	Yes (90% or more of the class)
		Partially (51% or more of the class)
		No (Less than 50% of the class)
6.	Formative assessment in short cycles are evident and	Yes
	used for adapting instruction	Partially (Formative assessments are evident, but
		instruction is not adapted)
		No (Formative assessments are called for, but no
		evident)
		Not Applicable (Formative assessments are not
		called for)
	CLASSROOM CONDITIONS/METHODS:	
1.	What is the level of student engagement?	80% or more (Authentically engagement)
		Compliant with some engagement

		Committee
		Compliant Off Task
	NATIONAL IN A ROUGH CONTINUE WAS ARRESTED OF A CONTINUE OF	Direct Instruction
2.	What is the predominant method of teacher	
	instruction?	Guided Learning
		Facilitated Learning
		Independent Learning
		Assessment Not Observed
	and the state of t	11.11.11
3.	What is the student grouping format?	Whole Group
		Small Group Pairs
		Stations/Centers/Rotations
		Individual
4.	Did you observe evidence of ELA Shifts in the	1- Regular practice w/complex text & academic language
	classroom?	Reading and writing are grounded in evidence from texts
		3- Building knowledge through content-rich
		nonfiction/informational texts
		None Observed
5.	Did you observe evidence of the Math Shifts in the	1- Greater FOCUS on fewer topics
	classroom?	2- COHERENCE by linking topics and thinking across grades
		3- RIGOR by pursuing conceptual understanding,
		procedural skills and fluency, and application with equal
		intensity
		None observed
6.	Did you observe evidence of the Standards for	1- Make sense of problems and persevere in solving
0.	Mathematical Practice in the classroom?	them.
	Wathematical Practice in the classroom?	2- Reason abstractly and quantitatively.
		3- Construct viable arguments and critique the reasoning
		of others.
		4- Model with mathematics.
		5- Use appropriate tools strategically.
		6- Attend to precision.
		7- Look for and make use of structure.
		8- Look for and express regularity in repeated reasoning
		None Observed
7.	Did you note classroom evidence of the following?	o PBIS Initiative or Positive Classroom Conditions (Drop-
	(Select all that apply)	down menu TBD)
		AVID Strategies: Writing to Learn
		AVID Strategies: Inquiry Focused
		AVID Strategies: Collaborative structures
		AVID Strategies: Organized note taking
		AVID Strategies: Reading strategies
		o PLCs: Norms and Collective Commitments
		PLCs: Collaborative Planning
l		o PLCs: Lesson Alignments
		PLCs: Use of PLC-wide dataNone of the above

8.	Did you note classroom evidence of the following?	0	ELL Strategies: Demonstration of Key Concepts (Visual,
	(Select all that apply)		Video, etc.)
		0	ELL Strategies: Use of Dictionary (Word-to-
			word/electronic)
		0	ELL Strategies: Explicitly Teaching Cognates Related to
			Content
		0	ELL: Total Physical Response
		0	ELL Strategies: Other ELL Strategies
		0	ESE Strategies: Collaborative Planning
		0	ESE Strategies: Differentiated Instruction
		0	ESE Strategies: Explicit Instruction
		0	Other ESE Strategies
		0	None observed, but needed
		0	None called for

Appendix H



UNIVERSITY OF NEW ENGLAND CONSENT FOR PARTICIPATION IN RESEARCH

Project Title: An Exploration of the Impact of Instructional Coaching

Principal Researcher/Investigator(s): Cindy Ramdial-Budhai, Graduate Doctoral Student,

University of New England; email: cramdialbudhai@une.edu; phone: (407)760-2634.

Faculty Advisor: Dr. William Boozang; email: wboozang@une.edu; phone: (508)446-7685.

Introduction:

General requirement language:

- Please read this document in its entirety. The purpose of this form is to provide you with details about this study and to document if it is your decision to participate.
- Please ask any questions that you may have about this study, now, during, or even after the study has transpired. You can take as much time as you need to decide whether you want to participate. Your participation is voluntary.

Why is this study being done?

The purpose of this proposed mix-methods study is to explore the process of coaching Reading and English Language Arts teachers through the implementation of mastery learning in their classrooms. Success in conducting a research study is a requirement for the researcher/principal investigator's doctoral degree program at the University of New England. The researcher/investigator is not being paid for the research or its findings and is receiving no external funds for this work.

Who will be in this study?

Your campus has been identified as a study site for this research because the campus employs at least one full-time instructional coach. The instructional coach(es) and selected team(s) of core content teachers who work with the coaches have been identified as potential subjects for this study. You are invited to participate. The study will investigate interactions between coaches and teachers during the mastery learning process.

What will I be asked to do?

The study phases will include a brief (approximately 15 minutes), online, initial study survey. Participants are simply asked to respond to the survey in a timely manner. Over the following eight weeks, the researcher will observe participants in the classroom and record data of the observations, using the Learning Cycle tool. There will also be one (approximately 30 minutes) in-person, one-on-one interview that the researcher will conduct with each participant in order to gain perspective on the participant's instructional experience during the implementation of mastery learning; the interview will be audio-recorded and coded during the

transcription process so that confidentiality is maintained and identity of participants is protected (participants will be assigned pseudonyms in the published work). Participants will have the opportunity to review their transcript and they may provide additional information as they see fit. The study phases will conclude with a brief (approximately 15 minutes), online, post-survey. Participants are simply asked to respond to each survey in a timely manner. Surveys, interviews, and observations will occur at the participant's school site, at previously scheduled times. Participants will not receive monetary reimbursement to participate in this study.

What are the possible risks of taking part in this study?

There are no anticipated risks associated with participation in this study.

What are the possible benefits of taking part in this study?

Participants in this study may benefit by gaining a better understanding of how they interact with each other, how they respond to the instructional needs of their school, and how they perceive instructional support, as well as how else they might like to be supported.

What will it cost me?

There are no costs to participants in this study.

How will my privacy be protected?

The identity of the study site will not be disclosed; instead, it will be referred to as "the high school."

The identity of the location of the study site will not be disclosed; it will only be disclosed that the location in the Central Florida area.

Initial and post study survey results will be handled by only the primary researcher/investigator and the identity of the participants will not be revealed when results of this data are discussed in the doctoral dissertation.

Interviews with participants will occur on an individual basis, in a private setting, on previously scheduled dates and the identity of participants will remain protected through the use of pseudonyms. The interview will be transcribed by the primary researcher (the original will be available to only the researcher and interviewee) and originals will be securely destroyed once pseudonyms are assigned. Each participant will not be referred to by actual name, but instead participants will be referred to by pseudonym. The identity of the participants will not be revealed when results of this data are discussed in the doctoral dissertation, or during any future conversations.

Participants will have access, via an individual email and not a group email (to maintain anonymity even after the study), to the committee-approved final dissertation.

How will my data be kept confidential?

All data will be collected with confidentiality in mind. This study consists of one researcher and that researcher will be the sole person privy to such collected data prior to the study being published. Once the study is published, participants and sites will not be identifiable. No comments or data will be used to identify participants in the dissertation or in future conversations.

Surveys will be administered through an independent data system. Interviews will be administered, in person, by the researcher. Only the researcher will know the interviewee's name and pseudonym. Observations will be recorded via the Learning Cycle tool and inputted by the researcher.

*Please note that the University of New England's Institutional Review Board may choose to review these research records.

General requirement language:

Consent forms (signed) will be kept by the researcher for a minimum of 3 years after the study is complete before it is destroyed. This information will be securely stored in a in a location only accessible to the researcher.

General requirement language:

Participants are asked not to repeat what is discussed during the study and to respect other participants' privacy by not asking others you think may be participants if they are participants.

What are my rights as a research participant? General requirement language:

Participation in this study is completely voluntary. Your decision to participate will have no impact on your relationships with the researcher, the campus principal, administration, instructional coaches, teachers, or the school district.

Participants in this study will carefully read the consent letter and then complete a consent agreement form, following University of New England and IRB formatting, granting permission to the researcher to include their feedback and observations of their work in the study. Participants will also sign, as well as the researcher, a confidentiality statement so that their participation and identities are not revealed. Employers will not have access to names of participants. Securing the confidentiality of participants will be a priority. An additional step to achieve this is that the names of participants will be quickly transcribed, then coded, and actual identifying information discarded, to maintain anonymity of those participants. Participants' names will be replaced in the content of the study. Schools and participants will be assigned pseudonyms through transcripts and documentation. Furthermore, participants will have the right to withdraw from the study, at any point through the process. Participants shall be provided a copy of the study, upon request.

General requirement language:

You may reserve the right to refuse to answer any interview question.

General requirement language:

You may remove yourself as a participant, at no penalty, from this research study at any

time.

What other options do I have?

Educators: please keep in mind that your participation in this study is completely voluntary. Understand that if you choose not to participate in this research, it will not adversely impact your relationships with the researcher, principal, instructional coaches, and teachers.

Whom may I contact with questions?

The researcher/investigator responsible for this study is Cindy Ramdial-Budhai. You may contact the researcher at cramdialbudhai@une.edu or (407)760-2634, or the faculty advisor, Dr. William Boozang at wboozang@une.edu or (508)446-7685.

General requirement language:

If you suffer a study-related injury, please contact the researcher at cramdialbudhai@une.edu or (407)760-2634, or the faculty advisor, Dr. William Boozang at wboozang@une.edu or (508)446-7685.

General requirement language:

If you have any questions or concerns about your rights as a research subject, you may call Olgun Guvench, M.D. Ph.D., Chair of the UNE Institutional Review Board at (207) 221-4171 or irb@une.edu.

Will I receive a copy of this consent form?

You will have access to a copy of this consent form.

Participant'	s Statement	

I understand the aforementioned explanation of this research, including any potential risks and benefits associated with my participation as a research subject. I agree to participate in the research and I do so voluntarily.

Participant'	S	signature	
Date			
Printed name _			

Researcher's Statement

The study participant (named above) was allotted sufficient time to consider the information, an opportunity to ask questions, and has voluntarily agreed to participate in this study.

Researcher'	S	signature	
Date			
Printed name			