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WORKSHOP TRAINING AND INSTRUCTIONAL COACHING: A MODEL FOR PROFESSIONAL DEVELOPMENT THAT RESULTS IN ACADEMIC STUDENT GROWTH

by

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A Dissertation

Submitted to the Graduate Faculty

of the

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In partial fulfillment of the requirements

for the degree of

Doctor of Philosophy

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This dissertation, submitted by Amy Jo Leonard in partial fulfillment of the requirements for the Degree of Doctor of Philosophy from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done, and is hereby approved.

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Amy Jo Leonard June 8, 2012

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ABSTRACT

This study examined two forms of Professional Development, workshop training and instructional coaching together and workshop training alone. All participating teachers attended the same workshop training on vocabulary instruction and were trained in using procedural cards for teaching science vocabulary. Two teachers were randomly selected to be in the experimental group (workshop training and instructional coaching together) and two teachers were randomly selected to be in the control group (workshop training alone). The experimental group received six weeks of instructional coaching including pre-conferencing, post-conferencing, and classroom observations with feedback. Using posttest t-test, the researcher determined the effects of both the experimental and control groups. The students in the experimental group classrooms outperformed the control group classrooms in science vocabulary growth. Qualitative data provided insight into the successes and difficulties the experimental group teachers had in implementing their newly acquired knowledge from the workshop training, along with noting the characteristics of coaching that the teachers found beneficial.

CHAPTER I INTRODUCTION

If you were to ask any practicing teacher if they have attended professional development activities in the past five years, most reply in the affirmative. For example, teachers in North Dakota have credential renewal requirements that can easily include professional development (PD) to remain current in their licensure areas. The licensure renewal for ND teachers calls for "six semester hours of re-education" for each five-year period of time. Many higher education institutions provide on-site or on-line classes to fulfill these requirements. However, many school districts who employ educators with Masters or PhD degrees are able to provide on-site PD to be used for this purpose. Professional development meets these requirements when it meets three criteria: (1) appropriate procedures are followed, (2) credit approval is sought, and (3) a willing university approves the credit (North Dakota State Government, 2012).

While some school districts may never offer PD for university credit, or for licensure renewal; and although instructional coaching is not generally used for licensure renewal, others provide PD through an instructional coach. These coaches are able to provide on-site and on-going PD as teachers make instructional changes to improve their teaching. It is important to note that not all PD has learning instructional strategies as its goal. PD that is offered by school districts may include logistical information that assists the teacher in areas outside of instruction. For example, the district where this study was conducted offers PD in cultural practices, classroom management and behavior programs all of which affect the education of the students but are not considered to be instructional issues. These types of PD are still necessary as they contribute to the education of the students; however, they are more specific to student physical, emotional and spiritual development, rather than instructional growth.

Professional development (PD) and its effect on students' academic achievement is a topic of discussion for administrators, educators and the consultants who make their living providing PD for school systems all across the world. Professional development is defined as "ongoing learning opportunities available to teachers, and other education personnel, through their schools and districts" ("Professional Development", 2004, para. 1). Schools and districts have numerous types of professional development from which to choose; however, for the purposes of this study, professional development will be limited to the following types: workshops and instructional coaching.

Literature on PD in the form of articles within peer-reviewed journals and articles that describe PD in a variety of settings is abundant. Well-constructed quantitative or qualitative studies detailing the effectiveness of PD, including instructional coaching, on student achievement are rare. Instructional coaching is site-based PD that occurs in the teachers' classrooms and conference rooms as the instructional coach assists teachers in providing quality instruction for their students. Still, research relating instructional coaching to on-going professional development is on the rise (e.g., Cassidy & Cassidy,

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2008; Denton & Hasbrouck, 2009; Elish-Piper & L'Allier, 2011). This study will add to the current work in this field.

The goal for the consultants, administrators and policy makers who bring PD to their teachers is quality PD that positively impacts the academic achievement of students. To accomplish this, it is important that PD assist teachers in their teaching practices in ways that will be beneficial to all of their students. It may also be important that teachers be able to choose the type of PD that best fits their current needs, and to participate voluntarily. This has been one of the many common threads in the fabric of effective professional development. Semadeni (2010) for example, concentrated solely on teacher choice in one rural Wyoming school district that uses a model called Fusion. A main element of the Fusion model was providing choice in the professional development offered and participation is completely voluntary. The PD was effective, Semadeni (2010) attributed the success partially to providing choice of participation to the teachers.

Common messages in literature on PD include: the use of coaches (Mandel Morrow, 2003; Hall, 2005) and mentors (Boreen, Johnson, Niday, & Potts, 2000) in on-going PD; the implementation of Professional Learning Communities (DuFour, DuFour, Eaker, & Karhanek, 2004); and the employment of reflective dialogue and/or verbal feedback (Showers & Joyce, 1996). The ongoing use of an instructional coach as a form of on-site professional development is of much interest, especially since the No Child Left Behind Act (2001) strongly suggests employing instructional coaches in each school district.

Researcher's Background

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As an instructional coach, I have provided professional development to numerous teachers, coaches, and administrators over the past eight years. I have worked with staff members in Native American schools on my own reservation as well as reservation schools in four other states. The population of these schools ranges from twelve students per grade level to 135 students per grade level. The demographic of these students is nearly 100% Native American, although there are a few students representing other ethnicities. The assistance I provide for each and every classroom teacher is geared to enhance the instructional practices of the individual classroom teachers; therefore, and more importantly, change the potential learning of their current students as well as their future students.

My coaching experiences have allowed me time with other novice coaches, as I provided train-the-trainer type instruction for them prior to my visiting the classrooms within their school systems. This has allowed me to share my experiences and expertise with coaches in other schools as they begin this very important work to improve the learning potential of the students in their charge.

In our district, each school year begins with the staff returning to work one-two weeks prior to the students' arrival. During this time period, they are able to participate in PD that is provided by our school district. This is uncommon for many school districts, but for the school district in which this research study took place, pre-schoolyear PD is a given. There are numerous PD activities in which to participate, and on occasion the staff is given the opportunity to choose which sessions they will attend.

As an instructional coach in this school district for the past eight years, I have learned that if I provide PD that staff has an option to take for credit then I have no empty seats. This allows them an opportunity to acquire credits necessary in renewing their teaching license. Also, PD that teachers assume can be used directly in their classrooms also fills chairs. Teachers have a limited amount of time and, in our geographical area, also a limited number of opportunities to participate in professional development. With the implementation of the on-site instructional coach, teachers are able to acquire the necessary knowledge to improve their instructional skills. This continuous hands-on training is proving to be one of the best solutions to PD. Not only does it eliminate the need to travel, which involves a considerable distance for many rural schools, but it also allows teachers to receive immediate feedback on any and all instructional changes they make within their classrooms. Instructional coaches can become important guides along the path to increasing students growth as they monitor successes and failures within each classroom. With the coach and the educator working as a team, development can be analyzed and improved instantaneously, providing the best possible instruction for each student.

Statement of the Problem

Many dollars are spent in PD in an effort to increase the knowledge and expertise of educators. However, little is known about the type of professional development or the aspects of professional development that link directly to the academic growth of students. Also, the significance that instructional coaching has on teachers and on their students is not well documented. There is a critical need to study these aspects and characteristics of professional development to better use funding available to schools and promote and nurture student academic growth.

Statement of Purpose

The final evidence for successful PD exists in gains in student academic progress. This research study evaluated instructional coaching as a form of professional development, specifically, its impact on student academic growth. Also, this study concentrated on two forms of PD and sought to make connections between the PD and how it affected academic student growth.

Research Questions/Hypotheses

The researcher conducted a study that addressed the following questions regarding the significance of instructional coaching as a form of professional development:

- To what extent do teachers utilize newly acquired knowledge and strategies demonstrated within workshop training with on-going assistance to improve student academic growth?
- 2. Is there a difference in student academic growth in the area of vocabulary instruction by participants who receive the services of an instructional coach in addition to the workshop training when compared to participants who receive workshop training alone?
- 3. What themes emerge during the instructional coaching process that provides evidence of teacher development (skill and understanding) in the area of vocabulary instruction?

Rationale for This Study

This research study examined the significance of instructional coaching on academic student growth. Professional development is a common theme in educational systems; thereby, making this research study relevant to an entire profession. Given the immense dedication school systems have in designing professional development and the ultimate goal of improved academic growth, an investigation such as this will undoubtedly assist in determining aspects of successful professional development.

Operational Definitions

The terms professional development, workshop training, instructional coaching, student progress, vocabulary instruction, and effective teaching have been defined as they pertain to this research.

Professional development. Professional development in this study refers to "ongoing learning opportunities available to teachers, and other education personnel, through their schools and districts" ("*Professional Development*", 2004, para. 1).

Workshop training. Within this document, workshop training is referred to as a "training class or seminar in which the participants work individually and/or in groups to solve actual work related tasks to gain hands-on experience" ("Business dictionary", n.d., para. 2).

Instructional coaching. "An instructional coach is defined as someone whose primary professional responsibility is to bring practices that have been studied using a variety of research methods into classrooms by working with adults rather than students" (Kowal & Steiner, 2007, p. 2).

Student Progress. A formal definition for student progress as it relates to elementary students was not found. For the purposes of this study, student progress was referred to as a measureable gain made by a student based on test scores, specifically in the area of science and its vocabulary.

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Vocabulary instruction. Vocabulary instruction is the teaching and learning of words that are specific to a content area, or the comprehension of literature. In the document *Put Reading First* vocabulary is defined as "the words we must know to communicate effectively" (NICHD, 2001, p. 29). Further, NICHD (2001) describes reading vocabulary as the "words we recognize or use in print" (p. 29). "Vocabulary plays an important part in learning to read" (NICHD, 2001, p. 29), and although not all words need be taught directly "direct instruction helps students learn difficult words, such as words that represent complex concepts that are not part of the students' everyday experiences" (NICHD, 2001, p. 30).

Effective Teaching. Marzano (2007) describes effective teaching as having the following three general characteristics: "1. Use of effective instructional strategies, 2. Use of effective classroom management strategies, 3. Effective classroom curriculum design" (p. 5).

Abbreviations

For the purpose of this study, the following abbreviations will be used.

- NCLBA No Child Left Behind Act
- NWEA Northwest Evaluation Association
- PD Professional Development

Assumptions

All teachers in the control and experimental groups received workshop training in the area of vocabulary instruction in the content area of science. It is assumed that all teachers were willing to learn the strategies, cooperated in the practice sessions and made a good-faith effort to apply their newly acquired vocabulary instruction strategies in their classroom at the beginning of the school year 2011/2012.

Delimitations

This study did not examine the teacher's application of previously acquired instructional skills in the area of vocabulary instruction, nor did it examine previous instructional coaching that may or may not have occurred with the participating teachers. The final evidence for successful PD exists in gains in student academic progress. This research study evaluated instructional coaching as a form of professional development, specifically, its impact on student academic growth. Also, this study concentrated on two forms of PD and sought to make connections between the PD and how it affected academic student growth. The population of this study was limited to the students enrolled at an elementary school located on a Native American Reservation for the school year 2011-2012. Generalizing the research from this study to other populations may be difficult as the population was unique in that it is homogeneous in socio-economic status and also in race. This study was limited by geographical location and accessibility to a single education facility that employs a full-time instructional coach and has a large student population.

Summary

Professional development and its effect on students' academic achievement is at the crux of this research project. Finding a possible link between PD that positively affects students' academic achievement is important to administrators, stakeholders, teachers, and especially to students. Two different types of PD were researched to help determine how to best meet the needs of elementary teachers as they strive to increase their own teaching skills while simultaneously providing richer vocabulary instruction in science to increase academic achievement for their students.

Chapter II presents a review of literature for both workshop training and instructional coaching as forms of professional development. Within this chapter a connection between PD and student academic achievement is explored. Chapter III presents the methodology of the research including methods/design, participants, instruments of data collection, procedures for conducting the research, data and data analysis and summary. Chapter IV presents the results of the research and analysis of data. Chapter V presents a discussion of findings, and recommendations for future research.

CHAPTER II

LITERATURE REVIEW

Professional development is not optional in the field of teaching. Nieto (2009) recognized that stringent licensing requirements adhered to by each state necessitate that all teachers continuously engage in professional development (PD) even after they have met all the university requirements necessary for graduating with a teaching degree. Unlike many professions, where licensure is granted as a one-time fulfillment, teachers are asked to update their pedagogy and teaching-related knowledge periodically. With this requirement in mind, many school districts' options for PD are as varied as the results that each PD opportunity claims to offer.

Professional development is also used as a tool in education reform. "We know the goal of educational reform is quantum improvements in student learning—and that we can get there through good professional development" (Odden, Archibald, Fermanich, & Gallagher, 2002, p. 53). Whether using PD to meet state licensure renewal requirements or to assist educators in general reform, both of which share a common goal for improving student learning, many districts are left with little research supporting PD that will result in improvements in student learning. The purpose of this literature review is to provide an overview of literature about PD in three sections: Professional Development in general, Workshop/Coursework as Professional Development, and Coaching as Professional Development. The issue of time as related to the implementation of new learning will also be discussed.

Professional Development

Professional Development refers to "ongoing learning opportunities available to teachers, and other education personnel, through their schools and districts" ("*Professional development*", 2004, para. 1). Generally speaking, PD provides learning for teachers who then return to their classrooms and teach with a higher caliber of skills than they previously possessed (Odden et al., 2002). The goal in all of this remains to be the improvement of learning for all students (Odden et al., 2002).

Professional development is intended to improve instructional techniques and strategies. Odden et al. (2002) define <u>effective</u> professional development as "professional development that produces change in teachers' classroom-based instructional practice, which can be linked to improvements in student learning" (p. 52). It is changes such as these that should be, though is not always, the goal behind all instructional-based PD. PD that is on-site is often driven by the school's vision and mission statements, or by the school reform needs of the district (Odden et al., 2002). No matter what influence is the driving force behind the decision, the goal remains to offer PD that will create instructional changes that will result in measureable and increased academic student achievement (Odden et al., 2002).

Odden et al. (2002) pinpointed the following six features of effective professional development: form of the activity, duration of the activity, level of participation of teachers, content focus, opportunity for active learning, and coherence in teachers' PD (Odden et al., 2002, pp. 54-55). Numerous researchers (Darling-Hammond &

Richardson, 2009; Fogarty & Pete, 2009; Hall, 2005; Hollins, 2006; Quick, Holtzman, & Chaney, 2009; Viadero, 2010) touched on at least one of the six features of effective PD noted by Odden et al. (2002). However, no one else has ever succinctly connected all six features.

Vanderburg and Stephens (2010) provided the idea of carbon copying the use of pedagogy from coaches to teachers to students. It was their concept, and hope, that coaches would use enhanced frameworks of teaching to model improved techniques while training teachers. For example, when a coach uses graphic organizers to teach reading strategies to teachers, it is expected that the use of the same technique will be used by the teachers when they return to their classrooms. Consequently, the new techniques learned from the instructional coach's modeling may be transferred to the students, thus improving student learning. In contrast however, when given the opportunity to discuss their teaching styles or teaching decisions, often teachers will say that they resort to the pedagogy that they experienced as students, regardless of its effectiveness (Vanderburg & Stephens, 2010)

Although the expectation of PD is for teachers to learn new strategies to help students succeed, some forms of PD may be more effective than others. Instructional changes in the classroom that withstand the test of time should be a result of a teacher's attendance and participation in effective PD (Chappuis, Chappuis, & Stiggins, 2009). The following sections compare two common forms of PD.

Workshop/Coursework as Professional Development

When speaking with educators, the terms workshop and PD become one in the same. Although the two may carry the same meaning for teachers, in reality they are

different. Workshops and coursework are forms of PD, but PD contains more variety than merely workshops and/or coursework. When attending a workshop or taking a course, we assume teachers are reaching a level of proficiency that will enable them to apply their new knowledge to improve student learning.

Many districts that offer PD to their educators mandate participation. It is a positive step to have all staff members in attendance. When all staff members can attend the same PD at the same time they create a large group who, with the same message/knowledge, can make an impressive mark on the changing of instruction within one system (Darling-Hammond & Richard, 2009). However, Neito (2009) really challenges this premise when she noted that these types of PD activities are very unproductive. When administrators select a topic and then hold their teachers captive through the mandated professional development activities, the outcome is rarely as productive as on-site and continuous support for the newly acquired techniques (Darling-Hammond & Richard, 2009). Many people see how it can be beneficial for educators to hear the same message, listen to the questions of their peers and the answers that are provided by the consultant or facilitator; but the productiveness of a mandated workshop or course may end there (Darling-Hammond & Richard, 2009).

In the study done by Chappius et al. (2009), the negative aspects of workshop training were discussed in great length. The authors praised the detailing of information disseminated in a uniform fashion, as well as the shared keenness and interest in the activities learned in a workshop training. The common message and consistent vocabulary that is learned by the educators was another positive attribute to this form of professional development. Unfortunately, the authors noted that when the workshop is

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over the support is also over. This lack of on-site support is a major drawback of this type of professional development (Chappius et al., 2009).

Workshop trainings are not always ineffective. Teachers who attend workshop trainings with an open-mind and a willingness to learn new pedagogy do take away from the workshop meaningful aspects that will eventually improve student learning (Chappius et al., 2009). Teachers who are proactive will make the most of the workshop. It is not the fault of the presenter or the agenda when teachers are unreceptive during these short-term workshops. The presenter may have provided a very interactive workshop, rich in content and information, and yet, invariably there will be those teachers who are unreceptive to any new knowledge, walking away having gained nothing of importance that will promote an increase in student learning (Chappius et al. 2009).

In addition to workshops, districts may offer coursework as professional development for teachers to earn credit toward the renewal of their teaching licenses, which, like workshop training, are to help teachers improve. Neuman and Cunningham (2008) conducted research that contrasted coursework with coursework in combination with coaching. The results of their study were not favorable for coursework alone as noted here: "A more troubling finding throughout our analysis, however, was the lack of change resulting from the professional development course alone" (Neuman & Cunningham, 2008, p. 557). If workshop training and coursework alone are not effective, what is missing to make them catalysts for learning for educators?

In a search to find what makes professional development effective, the study of Fogarty and Pete (2010) offered insight into seven common components or protocols that promote positive changes within instruction based on PD. Within these seven protocols, descriptions of adults as learners and aspects of learning that are sustained beyond the initial training are laid out in easy-to-use terms and explanations. "These seven protocols call for professional learning that is sustained, job-embedded, collegial, interactive, integrative, practical, and results-oriented" (Fogarty & Pete, 2010, p. 32). The majority of the seven protocols call for components that cannot be covered in a one-shot workshop or even throughout a semester long course. The components reach beyond the walls of isolated professional development and are embedded in the outline of a full-time, on-staff instructional coach. In general, the duties of a coach within a classroom follow many of the same protocols that Fogarty and Pete (2010) say make professional development meaningful.

Coaching as Professional Development

Coaching models are beginning to emerge as more and more coaches are employed to fulfill the need for on-site teaching and on-going support. This may be due to the onset of coaching within the No Child Left Behind Act (2001) that noted literacy coaches as a viable form of professional development. Various titles are being used to describe essentially the same role, including "literacy coach," "reading" or "academic" or "instructional coach," "reform coach" or "instructional facilitator" (Denton & Hasbrouck, 2009, p. 151). These terms will be used interchangeably throughout this literature review and research as well. The majority of the literature discussed coaching as professional development in terms of a literacy coach. Not considering literacy coaches to be an entity of their own, the literature reviews that refer to them as such will be considered relevant to coaches in general. Why do school districts use coaches as PD for their teachers? Elish-Piper and L'Allier (2011) reason as follows. "The assumption that underlies literacy coaching is that through the job-embedded, ongoing professional development provided by literacy coaches, classroom teachers will improve their instruction, which will lead to increased student achievement" (p. 84). It is this assumption, along with the professional development requirements contained in the No Child Left Behind Act (2001) that brings about the increased use of coaches in educational systems. The use of coaches in schools is increasing; however a definition of the roles and duties of the coach remains unclear. Yet, coaching has both the possibility and the opportunity to impact students through their respective teachers.

Teachers, much like young students, learn more when they know there is someone at their immediate disposal who is available to provide assistance, reassurance or discuss the implications of the learner's actions. Fogarty and Pete (2010) discussed teachers as learners in a teacher/coach relationship. They indicated that having a coach who has no time constraints for providing conferencing, discussions, and modeling provides what teachers as learners need in order to become comfortable as they make instructional changes. Also, when teachers understand that they are being observed and will be given the opportunity to discuss their pedagogy, their efforts tend to be more premeditated and hopefully more intentional as they adapt new teaching strategies. The focus then becomes set on making changes determined by research-based decisions. Teachers who are provided the support of a coach are provided with the critical factor of making instructional changes that will last (Fogarty & Pete, 2010). When considering the use of a coach to conduct professional development, the role and responsibility of the coach needs to be established prior to hiring for the position. This will ensure that personnel are found who will meet the demanding responsibilities and duties required in the coaching position. Deussen, Coskier, Robinson, and Autio (2007) explain further that for the right coach to be hired, an understanding of their job-related duties must be clearly articulated. Likewise, for a coach to perform their role, their duties must be clearly defined (Deussen et al., 2007). "Understanding the various ways the coach's role is played out is important for the hiring and training agencies, but also for coaches themselves, who have demanding, time-consuming jobs" (p. 4). Consider the implications for any professional position; without a clear role outlined from the beginning, the chances of securing a person who fits the diverse duties of a coach will be hard to fulfill.

What Coaching Is

Coaching recently has been defined as "an approach to large-scale professional development" (Deussen et al., 2007, p. 5). The use of a coach as a means of professional development is a new concept to most school districts, Cassidy and Cassidy (2008) in their annual list of important topics in the field of literacy noted it as a "hot topic" (p. 10), although there is literature on coaching that dates back to the 1980's. To further explain, Deussen et al. (2007) define coaches as those who help teachers in making positive instructional changes that will support student learning. In essence, a coach is someone who is on staff to provide the immediate support that teachers need *when* making instructional changes. The professional development that happens during this process is embedded within the work-context of the teacher, making the learning real-time,

hands-on, and meaningful. Improving student achievement is the crux of a coach's duties. (Deussen et al., 2007)

The use of literacy coaches is on the rise (L'Allier, Elish-Piper, & Bean, 2010). Using coaches to improve the quality of instruction for teachers and thereby their students may also be increasing (L'Allier, Elish-Piper, & Bean, 2010). When considering the effects of a coach in regards to professional development, the time spent attempting to increase the quality of the teaching within a classroom is huge. Coaches who focus their energies on improving teacher practice will see improved student learning as a direct result (Vanderburg & Stephens, 2010). The teachers in Vanderburg's and Stephens' (2010) research reported that they felt good about the changes suggested by their coach that pertained specifically to their individual classrooms. They realized that their students were becoming better readers because of the changes they were making instructionally. Teachers who value the help from their coaches tend to be more successful, being more receptive to suggestions and to discussing what is best for students.

Denton and Hasbrouck (2009) helped to decipher the popularity of the use of coaches,

The Elementary and Secondary Education Act of 2000—an update of the earlier Title I legislation—placed heavy emphasis on the need for highly qualified reading teachers and on the implementation of reading materials and instructional practices that have evidence of effectiveness from scientific research. Subsequent legislation provided not only an incentive, but funding, for the position of the coach. (p. 153) Through the Reading First Initiative under NCLB (2002) the popularity and use of coaches as a line of support for teachers increased. Furthermore, the achievements and accomplishments of Reading First schools demonstrated to the general public that the use of a coach was in part, the reason for heightened student achievement (Denton & Hasbrouck, 2009). The increasing use of instructional coaches beyond reading is due to this success. (Denton & Hasbrouck, 2009)

Benefits of Coaching

There are many benefits to coaching. One benefit might be the expertise gained by the individual teachers through the support of a coach is much like the growth of friendship (L'Allier et al., 2010). Coaches and teachers work side by side, conversing about instructional changes that teachers need to make to improve student learning. Through this professional exchange, a professional relationship emerges, based on a common goal and trust. "Coaches are more likely to produce student reading achievement gains in the classrooms where they coach when they focus on conferencing with teachers, observing classroom instruction and offering supportive feedback, and modeling instruction in classrooms" (L'Allier et al., 2010, p. 552).

According to L'Allier et al. (2010), another benefit might be the modeling the coach provides to the teachers during the coaching process as they interact with their teachers. Coaches may have numerous conferences with teachers, including, but not limited to, the pre-conferencing and post-conferencing of observations (Showers & Joyce, 1996). Coaches prepare for observations much like teachers prepare for the presentation of their lessons. A prepared coach can easily pick out instruction that is well versed, properly prepared, and delivered with the rate and intensity needed to meet the

instructional demands of all students (L'Allier et al., 2010). When a coach models instruction for a teacher, the level of preparedness needs to exceed that of the teacher. This enables the coach to go beyond the scope of the lesson if needed and to have the broad knowledge-base necessary to answer any questions that may arise during the post-conferencing following the coach's modeling session for the teacher. (L'Allier et al., 2010)

One of the repeated benefits of on-site coaching noted within the literature reviewed was the embedded nature of the learning on the part of the teacher. Steckel (2009) says coaching, because it happens at the classroom level, takes into account the problems with which teachers deal and perhaps is one reason that coaching is thought to be an essential tool for promoting success in school reform. The support that is given through coaching is meaningful and as Fogarty and Pete (2010) pointedly state, "the evidence is clear: Coaching makes a difference" (p. 33). Such would be the opinion of supporters of coaching. Deussen et al. (2007) wrote, the use of coaching is unarguably a positive step forward in education, and when done correctly coaches can foster changed instruction to improve student academic growth.

Although there is a lack of literature that supports the use of workshop training supplemented by coaching, there is valuable literature about coaching alone. The support that teachers receive from coaching is one of the major topics of articles that support the use of coaching as professional development. Denton and Hasbrouck (2009) found coaching to be an acceptable way to provide necessary support for teachers as they improve their instruction. Much of the literature speaks of coaching that occurs in the

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areas of reading and math. Future research and literature in areas outside of these fields are bound to be on the horizon.

The ongoing use of coaching as professional development puts theory into practice where support is at the forefront of learning. In Wei's, Andree's, and Darling-Hammond's (2009) research on teacher learning, a winning feature of coaching, revolves around activities that are focused and ongoing, and are presented and practiced within context rather than in an arbitrary setting. Huebner (2009) notes, "we know that classroom doors are permeable. Engaging teachers in thoughtful conversations about their practice, encouraging them to try out new approaches, and giving them ongoing opportunities to reflect on their efforts are important elements in supporting teacher learning" (p. 90). Coaching does this and more.

While there is a growing body of literature that demonstrates the benefits of coaching, there is a lack of literature that demonstrates the benefits of workshop/coursework combined with coaching. However recent research shed light on the combining of coursework and coaching or workshop training and coaching. In the 2008 study of Neuman and Cunningham, coaching was compared to mentoring as on-site assistance was provided between colleagues. Beyond this simple comparison, Neuman and Cunningham (2008) measured the differences between student achievement of students whose teachers attended coursework in comparison to students whose teachers attended coursework and also received the services of a coach. The authors shared, knowledge alone is fruitless without guided application (Neuman & Cunningham, 2008). The research by Neuman and Cunningham (2008) noted that a connection needs to be made between what is learned in PD and how it will be applied. The results of their

study confirmed that participants who had a combination of workshop/coursework and coaching had a higher incidence of application in practice than their counterparts who received no on-site guidance or those who experienced workshop/coursework professional development only. These findings were consistent across the entire sample (Neuman & Cunningham, 2008, p. 556). Perhaps it is not fair then, to state that coaching is meaningful, without first reflecting upon the professional development that preceded the coaching.

Coaching Models

There are noticeably few models of coaching. Research about coaching does not always include a framework from which to draw the duties and responsibilities of a coach. Current literature describes characteristics of the coaches that were part of their studies, but a widely accepted model is not outlined. Each study within this literature review oulines the model the coaches used as a guide. For example, Walpole, McKenna, Uribe-Zarain, and Lamitina (2010) used the following coaching model:

... coaches had no responsibility to teach children. Rather, their charge was to support teachers as they reflected on and changed their instructional practices. Coaches pursued this goal outside the classroom (through lesson planning, book studies, data analysis, and PD sessions) and inside the classroom (through modeling, observation, and confidential formative feedback). (p. 123)

This model encompasses eclectic duties of coaches.

A second model of coaching follows the guidance provided through an affiliation with Reading First or Reading First Initiatives under NCLB (2002). It is understandable that many districts, regardless of any affiliation with Reading First or Reading First Initiatives, chose to use instructional coaches as part of their PD activities. Kowal and Steiner (2007) agree that as districts "work to improve instructional practice and, ultimately, student learning, many school districts have adopted coaching as a model for teachers' professional development" (p. 1). Undoubtedly there are numerous districts who have used coaching to improve teacher quality for many years, but have not documented or published their results. Recent acceptance of employing coaches to increase teacher performance and student learning will indubitably bring forth literature that documents, supports and shares the trials and tribulations of a coach within a school district's reform process.

As stated earlier, at the present time a tangible, universally acceptable model of coaching has not been established. The model of literacy coaching researched by Elish-Piper and L' Allier (2011) shared options for coaches regarding time management and duties, but to say a model was clearly defined would be misleading. Sadly, "despite the prevalence of coaching in schools and districts across the country, there is not a standard model or uniform definition of an instructional coach" (Kowal & Steiner, 2007, p. 2). This lack of a concrete definition may result in the lack of a consistent coaching model (Kowal & Steiner, 2007).

Characteristics of Coaches

Research implies there is no defined model to which coaches should adhere, although certain features and/or characteristics of coaches have emerged from the literature (Deussen et al., 2007; Elish-Piper & L'Allier, 2011; Kowal & Steiner, 2007). Through the case studies of Kowal and Steiner (2007) we find that three categories of skill are necessary for coaches. First of all, the characteristics of a successful coach should include a broad repertoire of teaching experiences (Kowal & Steiner, 2007). Secondly, coaches need to know their content area thoroughly and the research-based strategies that are proven to help with academic success in that content area (Kowal & Steiner, 2007). Finally, they need to possess an interpersonal personality that will foster collaborative working relationships, build trust, and allow for teacher growth (Kowal & Steiner, 2007). It is imperative that coaches be able to work with other teachers (Kowal & Steiner, 2007). These themes are repeated in some variation throughout the realm of literature on coaching in schools. "There appears to be a consensus that coaching is a form of sustained, job-embedded professional development and that it includes some form of teacher observation. Beyond that general agreement, however there is wide variation in what coaching actually looks like in practice in different implementations" (Denton & Hasbrouck, 2009, p. 155). The use of coaches to improve student academic achievement needs a constant/consistent model. Unfortunately, as noted previously, none could be found in the literature at the time of this research.

Principles of Quality Coaches

Through the works of L'Allier et al. (2010), a synthesis of guiding principles has been established for literacy coaches who provide on-site, on-going professional development to teachers. Each will be discussed briefly. The first guiding principle is that sufficient knowledge in the content area in which the coach will be working is required (L'Allier et al., 2010). Within this principle it is believed that literacy coaches need to possess a certain amount of knowledge in all aspects of literacy instruction. The main role of the coach is to support teachers as they improve their instruction (L'Allier et al., 2010). In order to fully assist teachers with their instruction, literacy coaches need to have a repertoire of their own classroom experiences on which to base their coaching for teachers.

L'Allier et al. (2010) discussed how, at times, administration has the opportunity and authority to choose their coach from their existing staff. When this happens administration can take their best teachers, place them in a position of influence as the coach, and their peers who have seen the results that these teachers have made with their students can then reap the benefits of the appointed teacher's experiences and expertise. This win-win situation sets the groundwork for the type of instructional changes that should be on the horizon with the newly appointed coach. The focused knowledge that the coach has does not exist without the coach's continuous participation in current professional development to further their personal growth and learning (Vanderburg & Stephens, 2010). The professional development that the coach attends can either be conference type professional development or self-generated learning through the reading of current professional journals and publications, blogs and webinars.

The second guiding principle relates how time factors into the coaching process (L'Allier et al., 2010). The duties of a coach often spread beyond the realm of working with teachers. This over-allocation of time jeopardizes the success of the coach. When coaches are asked to perform additional duties throughout their workday, this can take away from their focus, which is working with teachers to improve student learning. Within a coach's day their time can be distributed among many events or factors, many of which supplement their work with teachers and students. To have quality discussions with teachers, data is needed. To understand what students need, coaches need to invest time with students through observations and through assessments. When the coach is

allocated duties outside of the parameters of their educational focus that the ultimate goal of increasing student academic growth will suffer (L'Allier et al., 2010).

According to Deussen et al. (2007) and L'Allier et al. (2010), it is possible for coaches to concentrate on assisting their teachers while attending to the assortment of responsibilities for their time, however the balance of time needs to be kept in check. For optimum success, it is imperative that coaches spend the majority of their time with teachers having meaningful discussions that relate to student learning. "Schools in which coaches spent more time working directly with teachers" . . . "had a greater percentage of students scoring at the proficient level in first and second grade" (L'Allier et al., 2010, p. 547).

In a study by Vanderburg and Stephens (2010), they noted that over two-thirds of those teachers directly involved in their study appreciated the availability of a coach to assist them in the classroom and to provide continuous support. It is through this willingness and the time spent with teachers that student achievement is noted as progressive. From the collective studies noted by L'Allier et al. (2010) indications are "that students benefit when literacy coaches' time is spent working directly with teachers to help them improve their practice" (p. 547).

One area of dissension within the literature is the amount of time allocated to coaching. Many researchers touched on the topic of coaches and how they spent their work week time. Dessuen et al.'s (2007) research compared the suggested or required time set forth for actual coaching and the actual time that was documented as coaching time. The difference was astounding. The coaches in their study worked with K-6 teachers and accounted for 28% of their time as actually coaching (observing instruction,

providing feedback, demonstrating lessons and providing training for teachers). "These figures indicate that state expectations that coaches should spend 60-80% of their time working directly with teachers were far removed from the reality of most coaches' work" (Deussen et al., 2007, p. 10). Many of the aspects of coaching require a considerable amount of time if one is to be an effective coach. To observe, to demonstrate, to provide feedback and/or to train teachers all take a great deal of preparation.

Common to most professions is the ability to work with others in a productive manner. The third guiding principle for literacy coaches is based on that same premise (L'Allier et al., 2010). In the findings of Vanderburg and Stephens (2010), teachers reported that coaches promoted collaboration, validating the need for collaboration both between the coach and teacher and also between the teacher and his/her peers. Through communication, coaches constructed a trusting, professional relationship with their teachers (L'Allier et al., 2010). This foundation of trust is critical. Coaches need to put forth a tremendous amount of energy to establish and confirm the trust of their colleagues. Teachers need to know that when a coach communicates concerns and shares positive affirmations, that it is all done in a confidential manner, thus cementing the foundations of trust. Coaches need to communicate their concerns and share their positive affirmations with teachers in a confidential manner. Coaches who are unable to convey their message when conferencing with teachers or when having unrestricted, datadriven conversations with other teachers, will likely degrade and/or corrupt any trust that has already been established. A collaborative connection needs to be instituted between the coach and their teachers. Coaches who are willing to answer questions, provide resources, and offer suggestions are needed to build working relationships with the

teachers with whom they work. Choice of language is also very important to ensure that their classroom teachers are fully able to understand and comprehend what is being said. These concepts are part of the foundation needed for collaborative relationships to be successful.

Coaches need to establish a trustworthy relationship early on with their teachers, by reiterating their purpose as a coach and by maintaining an active role in the learning process for both the teacher and the student (L'Allier et al., 2010). In Vanderburg's and Stephens' (2010) study, the term collaboration unfolded from the singular form to that of a community growth. "Teachers felt that the collaborative communities established by their coaches allowed them to (a) learn about their colleagues, (b) share strategies they were using in their classrooms, and (c) discuss individual students" (Vanderburg & Stephens, 2010, p. 149). A noted positive attribute to effective PD as reported by Chappius et al. (2009) centered on collaboration. Their determination that providing a regularly scheduled common time for teachers to discuss, to evaluate, and to plan enhanced positive growth in student learning is essential for the success of the program.

For schools that are earnestly striving for school improvement, this collaboration provides an opportunity to address any misguided plans of action and to offer a better, more directed line of instruction for the teachers to use with their students. It is the schools that wish to reform their educational institutions and those willing to make instructional changes that choose PD that will impact all teachers. Collaborative coaching has the potential to assist with educational reform and make instructional changes (Walpole et al., 2010, p. 123).

L'Allier, Elish-Piper and Bean's (2010) fourth guiding principle is "Coaching that supports student reading achievement focuses on a set of core activities" (p. 548). According to L'Allier et al. (2010) the activities that matter the most to student achievement are as follows:

- Administer assessments and share results with a classroom teacher
- Explain results, offer suggestions for grouping and help with development of differentiated instruction
- Observe instruction and offer supportive feedback to enhance and fine-tune instructional implementation of best practices
- Conference with teachers to discuss instruction, curriculum and students
- Model instruction in an classroom, for teachers to see best practices in action with students

As noted by Vanderburg and Stephens (2010), coaches support teachers while focusing on one common set of activities, which more often than not, are activities that are research-based teaching practices. The activities that coaches perform outside of this common set of activities may inadvertently enhance the growth of the teachers; but it is the focus and concentration on this common set of activities that are most meaningful to student achievement. The goal of literacy coaching is to increase academic student growth by supporting teachers in their instruction (L'Allier et al., 2010). Walpole et al. (2010) found that coaching linked positively to changes in teachers' practice.

A fifth guiding principle for coaching, "Coaching must be both intentional and opportunistic" (p. 549). Coach's efforts need to be suited to the needs of the teachers and at the same time the coaching needs to be adaptable, supplementing the positive teaching

that is already taking place within the classroom. The teachers in Vanderburg's and Stephens' (2010) research believed their support to be individualized and based on their teaching needs. This customization helps both the teacher and the coach to grow educationally. The teachers obviously benefited from the direct support they received from their coach at times that were conducive to learning. The coach, in return, grew by articulating the teacher's instruction during the conferencing which occurred before and again after the modeling/observation.

Coaches will have different goals for different teachers, based upon the teacher's experience, the observations they have made as a coach, and the student-generated data. "The key is that coaches have road maps that guide their work, and they understand the need to modify and readjust, if necessary" (L'Allier et al., 2010, p. 549). In Vanderburg's and Stephens' (2010) study, teachers stated that the coach guided and made their growth personal without feeling attacked or insulted.

Teachers will speak of the 'teach-able' moment; coaches too have 'teach-able' or 'coach-able' moments with their teachers (L'Allier et al., 2010). Through casual conversations and through unannounced classroom observations, coaches are given the opportunity to seize the moment and share through modeling and side-by-side teaching. Likewise, post-conferencing discussions may lead to further opportunities for coaching. In Vanderburg's and Stephen's (2010) research, the coaches were expected to guide their teachers through conferences based on the observations of the teacher's instruction. After observing a teacher in action the coach has the unique opportunity to sit down with the teacher, ask questions about why the teacher chose to do what they did during their lesson and to make suggestions to the teacher about what changes might be beneficial to change in the future. These coachable moments are a precious commodity.

The sixth principle of literacy coaches states, "Coaches must be literacy leaders in the school" (L'Allier et al., 2010, p. 550). As a coach, their role as a literacy leader is to support the professional growth of their teachers through collaboration and individual assistance (L'Allier et al., 2010). One of the underlying facts about coaches is that they are put into numerous leadership roles, are assigned as chairs of committees, and are asked to work with specialized personnel (L'Allier et al., 2010), oftentimes with their leadership roles centering around the area of literacy. What is often detrimental to the coaching profession is the addition of duties outside of the literacy field. Coaches are frequently asked to act as substitute teachers, monitor lunchrooms, and monitor recess and/or bus duty. The duties that are added to the coach's day that have no relation to literacy instruction, data review, assessment in reading or conferencing with teachers are not a practical use of a coach's time. On the other hand, leadership roles that augment the instructional practices of teachers are a valuable use of time by coaches.

The understanding that good coaching takes time is reiterated in L'Allier et al.'s (2010) seventh principle. Despite the amount of teaching experience, leadership experience, and/or literacy knowledge that a coach may or may not have, it is imperative that new coaches and experienced coaches both realize that "coaches continue to learn, develop positive relationships with teachers, and modify what they do as they evolve as literacy coaches" (L'Allier et al., 2010, p. 551). Relatively speaking, the allocation of time for coaches changes as coaches evolve within their positions. Initially, coaches were given very little guidance and often were well into their first year(s) of employment

as a coach before they were given any formal training or at times, even a job description (Deussen et al., 2007). In fact, prior to 2005 the coaches in Reading First schools were left with little assistance and, collaborated together as coaches/learners (Deussen et al., 2007).

Workshop Training and Coaching Together

Numerous articles were found that discussed workshop training and coaching as separate entities in professional development. Additional literature was sought that incorporated the use of workshop training and coaching as a combined effort, or workshop training that was supplemented with on-site coaching. Such articles were rare.

In the work of Kowal and Steiner (2007), they shared that "the emerging body of empirical research on coaching indicates that instructional coaching has great potential to influence teacher practice and, ultimately, student performance" (p. 6). It is this great potential that leads to the willingness of schools and districts to employ instructional coaches. With all of the complex strategies introduced through PD, it is realistic to think that ongoing assistance will be needed to implement new instructional practices correctly, "... coaching was intended to situate and support this complex instructional model" (Walpole et al., 2010, pp. 117-118). The authors also noted "coaching was used to optimize implementation of the materials" (p. 124) that had been learned through previous PD. The coupling of workshop training and coaching seems to be a foundational piece in relation to building instructional changes for teachers to use right inside of their classrooms. It is clear that more research linking workshop/coursework training and coaching as PD is needed.

Locating literature connecting workshop training and coaching may have helped to further explain why workshop trainings frequently are given negative feedback in research (Vanderburg & Stephens, 2010). Vanderburg and Stephens (2010) shared that more assistance is needed beyond the dissemination of classroom ready packets or scripted manuals that are to be used by the teachers. They also stated that teachers require more knowledge, intertwined with more hands-on training to fully implement the strategies taught at common workshops. Furthermore, teachers reported that through the help of their coaches they were able to fully understand the importance of selfimprovement and were better able to implement research-based instructional practices as suggested and modeled by their coaches (Vanderburg & Stephens, 2010).

The Issue of Time

One area of concern that turned up repeatedly in the literature on PD was the how time, or a lack thereof, factored into the implementation of PD by teachers. Hall (2005), understanding the importance of time for teachers, discussed the use of technology as a means of providing teachers with a time-efficient tool to both implement newly acquired teaching strategy knowledge and a means of accessing information and support for PD. It would be ideal for teachers to have time to learn the new information as well as have time for reflection and processing of it. Teachers need extended periods of time for PD and also time expanded beyond the initial PD to be effective learners. Darling-Hammond and Richardson (2009) note, "Although time is not the only variable that matters, it is often a prerequisite for effective learning" (p. 49).

Time is a factor that needs to be well thought-out for both the teacher and the coach when considering PD. McCombs and Marsh (2009) noted a lack of time for

coaches to work with teachers as a major obstacle. The study by Quick, Holtzman and Chaney (2009) advocated for time to be set aside for teachers to receive feedback, to have on-going conversations about their PD sessions, and most importantly, to be provided time for planning and practicing newly acquired strategies (p. 48). L'Allier et al. (2010), in their second guiding principle, state that time may factor into the coach's duties adversely by committing too much time to activities outside of their intended role as a coach. When surveyed in the study by Al Otaiba, Hosp, Smartt and Dole (2008) teachers noted that they wished to use their planning time as a time for their coach to give them feedback. The teachers in this study questioned why administration did not provide more release time, or alternatively, provide substitute teachers to give teachers more time with their coaches (p. 143). Hall (2005), understanding the importance of time for teachers, discussed the use of technology as a means of providing teachers with a time-efficient tool to both implement newly acquired teaching strategy knowledge and a means of accessing information and support for PD.

Summary

Professional development has become a key factor in attempting to adhere to the current educational goals for increasing student academic achievement (Odden et al., 2002). Odden et al. (2002) conclude that to reach this goal for students, teachers need to make instructional changes. Professional development is necessary for teachers to improve practice through new knowledge and skills and to continue to grow as teachers (Chappius et al., 2009). This challenge requires effective, pertinent and meaningful professional development.

Professional development and coaching are present in schools and school districts for the purpose of initiating and sustaining academic student achievement. Literature connecting the implementation of professional development and coaching as a form of professional development is limited, as noted in the above literature review. Descriptions of models of coaching, the use of coaches and an explicit definition of a coach and his/her duties are also sparse. With the wide variety of coaching models that currently exist and the demanding issues of educating the youth in our society, there is an urgent need for a precise measure to assess the use and effectiveness of coaches as a form of PD. Additional literature linking workshop trainings in conjunction with the use of instructional coaching is needed to determine to what extent student achievement can be associated with a workshop plus coaching PD model.

Much of the current evidence leads to the insufficiency of workshop training alone to change practice. There is sparse evidence that coaching can help to change practice but this body of literature is growing and what does exist shows positive results in making instructional changes and increasing student academic growth. Workshop training and coaching, when used together as PD, has very limited documentation. This study will address the use of workshop training and coaching together in an attempt to demonstrate the efficacy of this approach for PD in order to achieve the greatest academic success for all students.

CHAPTER III

METHODS AND PROCEDURES

Methods/Design

The final evidence for successful PD exists in gains in student academic progress. This research study evaluated instructional coaching as a form of professional development, specifically, its impact on student academic growth. Also, this study concentrated on two forms of PD and sought to make connections between the PD and how it affected academic student growth. This mixed-methods study included both quantitative and qualitative methods. Using both methods assisted in answering the research questions posed by the researcher. The use of quantitative methods allowed the researcher to analyze student test data utilizing statistics. The use of qualitative data, collected in open-ended instructional coaching logs, allowed the researcher to analyze and describe emerging themes. The use of qualitative methods also helped to explain the statistical results. Within this explanatory mixed-methods design, quantitative research methods initially were thought to have priority, but the qualitative methods proved to be equally beneficial. This chapter contains sections identifying the design and describing participants, instruments, procedures for data collection and data analysis within this research project.

Design

This study involved the use of data collected during the fall quarter of the 2011/2012 school year in grade five classrooms at an elementary school located on a Native American Reservation in grade five. The study received Institutional Review Board approval from the University of North Dakota in the summer of 2011. As outlined in the requirements set forth by the Institutional Review Board, permission was secured from the administration of the school district for which this study took place. Pre-/post-test data was collected in the content area of science specifically teaching vocabulary related to designated science units within a period of six consecutive weeks. Pre-test data was collected once at the onset of the study and post-test data was collected once at the conclusion of the study. Student participants completed assignments as directed by their classroom teachers. No additional work was expected outside of fulfilling the standards and benchmarks as noted in the school district's policy and procedure manual.

The data was analyzed using SPSS, a statistical analysis tool, to determine whether there was a statistically significant difference when utilizing instructional coaching in addition to workshop training. Additionally, field notes from the instructional coaching meetings and sessions were written, reviewed, and analyzed for qualitative aspects of instructional coaching that contributed to teacher development in the area of vocabulary instruction in science. This qualitative data assisted the researcher in understanding the impact of application of strategies learned by teachers during workshop trainings. Learning about whether or not teachers apply new teaching strategies, and if and how these strategies were applied with fidelity, provided the researcher with pertinent, usable, and necessary data.

Participants

The sample population was in-service teachers employed at an elementary school on a Native American Reservation. One hundred percent of the population of students at this elementary school receives free and reduced lunch, and all students within this grade range are classified as Native American in race. This workshop was provided for teachers in grades three through five. This study focused on grade five, which was determined by the number of teachers who agreed to participate in the coaching portion of the study. All grade five teachers were required by the administration of this school district to attend the four-hour vocabulary instruction workshop. The topic and context of the workshop was assigned by the administration of the school district. The topic was initially based on teacher suggestions from the previous school year and was agreed upon by the school improvement team as being in alignment with the school's reform efforts.

Teachers

There were a total of six grade-five teachers who took part in the workshop training. Four out of the six teachers in attendance agreed to participate in the study. Teachers who agreed to participate were randomly assigned to be in the control group and/or the experimental group. Two teachers were placed in each group. The combined total years of experience for the two teachers in the experimental group is 19, the control group teachers have a combined total of 14 years of experience.

Students

The classrooms of the four teachers had a combined total of 81 students. Out of the 81 students, 56 students and parents dually agreed to be part of the study.

Instruments

Pre- and post-tests of vocabulary knowledge were given to students during each science unit conducted during the six weeks of this study. These tests consisted of ten matching questions, fourteen fill-in-the-blank questions with a word bank provided, three multiple-choice questions and four essay questions. The publisher of the science series used at this school generated the tests used in this study. The tests were included with the teacher's edition and resource books. The pre- and post-tests were scored by the participating teachers, identifying information was removed from the tests, number coding was employed and finally the tests were hand-delivered to the researcher. The researcher manually entered the scores into an excel worksheet and data was stored on the researcher's laptop that uses both a network password along with a separate personal password to gain entrance into the hardware/software. Electronic data did not have any personal information, nor was there any connection between the numerical coding of the tests and the students' name, personal information or consent forms.

Procedures

This six-week study began with workshop training on vocabulary instruction for all teachers in grade five at an elementary school located on a Native American Reservation. Three procedural cards (see Appendix A-C) for vocabulary instruction were provided along with an explicit explanation as to how the vocabulary cards were to be utilized in the areas of science. This explanation of procedural card usage included the theory behind the procedures written on the cards and a complete detailing and modeling of the procedural cards by the facilitator of the workshop. During the workshop, all teachers were given time to practice the procedures and were provided with individual feedback on their implementation from the instructional coach. The facilitator made marginal notes on the participants and their progress in using the procedural cards. Time was provided by the school district, while the participating teachers were on salary, to complete the preparation work for the procedural cards. Preparation work included compiling a uniform word bank from the science series to be used by all teachers. All grade five teachers, regardless of their participation within this study, aided in the preparation work and were asked by the administration of this school district to implement the procedural cards. This preparation time was not included within the fourhour vocabulary instruction workshop training; rather it was provided later the same day while the workshop training was still fresh in their minds. Each teacher prepared a separate section of the first science unit and shared their work with their peer teachers.

The two participants in the control group did not receive any further professional development with regards to the vocabulary instruction beyond what they received during the workshop training. The instructional coach/researcher provided the following additional training to the two participants in the experimental group three to five times per week: pre-conferences with teachers regarding their vocabulary related lessons in science; modeling of the procedural cards within the classroom in the presence of the participating teacher's students; observation of the procedural card implementation by the participating teacher within their classroom; and post-conferences with the participating teachers following the implementation of the vocabulary lessons within the content area of science. Each modeling/observation/conferencing session between the instructional coach and participating teachers in the experimental group was logged by the coach and detailed field notes were written following each of the above training sessions.

Student achievement data in the form of pre-/post-tests was used as the measure to determine whether or not additional coaching made a difference in academic student academic growth. As noted earlier, tests were given at the beginning and end of each science unit for all classrooms, and instructional coaching occurred in two classrooms (experiment group) but not in the other two classrooms (control group). Student progress was noted as an increase in test score percentages in matched data sets. For example, if student A scores a percentage that falls within the letter grade range for a "C" on the pretest and then scores a percentage within the letter grade "B" or "A" range this increase from one grade level to a higher grade level indicates academic student progress for student A. On the other hand if student A had scored within the same letter grade range on their pre-test and post-test this would denote a lack of academic student progress.

A combination of qualitative methodologies was used in this study. The first method used was action research. Creswell (2008) states that action research is beneficial in education because a specific problem is addressed, focus is on solving the problem, reflection of practice and implementation is done, and the improvement plan is evaluated. The model of instructional coaching used at this school district reflects this model of action research in education. The researcher in this study was also the instructional coach; thus this qualitative project reflected action research. Initially, an observation of the teacher's direct instruction to students was completed. Secondly, the instructional coach and the classroom teacher met to have a discussion about what actions needed to be taken based on the observation. Lastly, a plan was outlined with the understanding that a cycle of observing, discussing and planning would be followed to implement and evaluate the plan (Glesne, 2011). This action research plan addressed a specific problem, in this case, inadequate student academic achievement. The observations were completed within the teachers' classrooms and the discussions with the instructional coach/researcher were based upon the how the teacher implemented the teaching strategies. Finally, a plan was outlined to help the teacher reach the goal of increasing student academic achievement. This action research utilized both qualitative and quantitative data for this study as the instructional coach/researcher's discussion with the teachers were based on both the observations made in their classrooms and also on the science pre-test data collected at the onset of this study.

Field research methods (Creswell, 2008; Glesne, 2011) and participant observations (Creswell, 2008; Glesne, 2011) were also used in this study along with action research. The instructional coach/researcher had previously established herself as part of the culture of the school, as she has been employed by this elementary school since 1994, and has been an instructional coach since 2004. Negotiating entry was not an issue because of her previously established professional acceptance as an instructional coach. Working relationships had already been solidified so trust building was not an issue. When the instructional coach/researcher stepped in to model instructional strategies within the established context of the participants' classrooms, she became an active participant in the study.

Field research overlapped with participant observation, with the classrooms in this study being considered as "the field". The instructional coach/researcher observed the participants in their classrooms as they implemented their newly acquired vocabulary instruction strategies. The instructional coach/researcher took detailed notes during the

observations, the participants reviewed the notes for validity and the researcher coded the notes and analyzed the notes for emerging themes.

Data and Data Analysis

Quantitative data was analyzed using the statistical software package SPSS, version 19. The goal of the analysis was to determine whether a statistically significant relationship existed when utilizing instructional coaching in addition to workshop training as compared to workshop training alone.

The instructional coach/researcher analyzed the data by using inferential statistics in the form of *t*-tests to compare the data. A type I error rate of .05 was used. The dependent variable was created by calculating a difference score between pre-test and post-test scores. In other words, each student's pre-test score was subtracted from their post-test score in order to create a difference score that approximated the amount of learning that had taken place for each student over the course of the six-week period. The independent variable of interest consisted of two levels that corresponded to the type of training each teacher received: workshop and instructional coaching, or workshop training alone. These corresponded to the experimental and control groups, respectively.

SPSS, statistical computer software, was used to compile, aggregate and analyze the test score data collected. Descriptive statistics, the measures of central tendency, mean, and median were all calculated by SPSS. Measures of variability, such as standard deviation, indicated the distribution of the scores along with a range of scores noting the difference between the highest and lowest scores on the science tests for each student. The net or difference scores were compared from Time 1 (pre-test) to Time 2 (post-test) for each individual student. Dr. Steven LeMire, the statistical advisor on this research study, was sought for his expertise and advice to determine the final analytical assessments.

The primary means used in this study to gather qualitative data were coaching logs and transcriptions from conferencing sessions between the instructional coach and the participating teachers. The coaching logs consisted of observational forms used during classroom visits, notes added to forms during the conferencing sessions and the instructional coach's personal notebook. A self-made form for collecting data during observations was created and used (Appendix D). This form included demographic information noting which teacher was being observed, the date, time and duration of the observation, along with three columns for the researcher to write descriptive field notes, reflective field notes and open-ended questions to be used for discussion during the observation post-conference.

All conferences between the coach and the participating teachers were recorded on a digital voice recorder. The instructional coach/researcher transcribed the conferencing sessions at the conclusion of each session. Notes were made in the margins of the instructional coach/researcher's coaching logs during the conferences to document nonverbal communication such as facial expressions and gestures, and at times the body language of the teacher during the conference (Emerson, Fretz, & Shaw, 1995). Thematic analysis of the instructional coach/researcher logs was used to examine the information gathered before, during and after each coaching session.

Recordings were transcribed into a Word (Microsoft Office) document by the researcher. Within 48 hours, transcribed notes and observation notes were given to the participating teachers for their review. After being reviewed by the participating

teachers, the transcriptions were printed with two-inch margins to provide ample room for the researcher to jot notes, to write follow-up questions or open-ended questions for later use during conferences and to aid in data analysis (Creswell, 2008). The document was triple-spaced and printed for the open coding, the initial phase of the coding, to be completed by the researcher. All words were transcribed as dialogue text and facial expressions and gestures were noted parenthetically.

Classroom observations occurred between three to five times per week. Observations were supplemented by both pre- and post-conferences between the instructional coach/researcher and the participating teacher. The purpose of the classroom observations was two-fold. First of all, observations within a classroom are a key part of every instructional coach's duties. Notes that are collected through classroom observations assist the instructional coach in having meaningful discussions with the participating teacher following the observations. Secondly, the classroom observations assisted the instructional coach/researcher in determining to what extent the participating teacher has mastered the instructional strategies learned during the workshop training and how well they are implementing those strategies in the natural setting of their classroom. Both of these were noted in the instructional coach's/researcher's logs and also in the margins of her notebook during the discussion periods.

Emerson et al. (1995) stated "the field researcher must be able to take up positions in the midst of the key sites and scenes of other's lives in order to observe and understand them" (p. 2). The instructional coach/researcher for this study followed their advice. Thus, this instructional coach/researcher had dual observation roles. The role of a participant observer was used during some of the observation periods when the instructional coach/researcher was an active member in the classroom, either while modeling the instructional strategies as outlined in the workshop training for vocabulary instruction, or during side-by-side teaching with the participating teacher. Other times, the role was that of a nonparticipant observer, such as when the instructional coach/researcher sat in the back or the side of the classroom taking observational notes on the implementation of the vocabulary instruction strategies demonstrated by the classroom teacher (Creswell, 2008).

Preliminary coding was completed at the conclusion of the six-week period. "Qualitative researchers code to discern themes, patterns, processes, and to make comparisons and build theoretical explanations" (Glesne, 2011, p. 194). Open coding was used to develop categories; then focused coding was used to systematically code for core concepts as themes emerged (Emerson et al., 1995). Codes were visually represented in a graphic organizer both to classify and arrange the codes and also to systematically sort out the emerging themes or patterns across times and across coaching sessions to form relationships among the codes (Appendix E). A codebook was used to both define the codes used by the researcher and also to sustain core concepts within those codes. Codes were derivatives of the words and phrases used by the participating teachers during the conferencing session. This application of utterances by the participants is referred to as in vivo codes (Rouston, 2010).

Method of Validation

Validity, or trustworthiness, of the qualitative data collected for this study was capitalized on by using the three forms of validating findings as stated by Crewsell (2008): triangulation, member checking, and auditing. Triangulation is a process in which data is examined through multiple sources, ensuring accuracy and credibility. The three sources used to comprise this data were the researcher's observation logs, transcribed conference dialogues and marginal notes made by the researcher linking the observations and discussions were used. All data used in triangulation had previously been reviewed by the participating teachers for accuracy, as noted next in member checking.

Member checking was used to increase and ensure accuracy of the notes taken during observations and also the transcriptions of the dialogue between the instructional coach/researcher and the participating teacher during conferences. All observational notes written on the self-made forms and transcribed conferences were given to the participating teacher within 48 hours after the observation or conference took place. This speedy return of data to the participating teacher promoted accuracy and credibility as the information and conversations remained fresh in their minds.

Lastly, an external audit was completed by a colleague outside of the study who reviewed the qualitative data. This colleague has worked on the school improvement team for the past 28 years and has served as an auditor for The North Central Accreditation team in conjunction with the North Dakota Department of Public Instruction. The external audit was beneficial for validating the findings of this study and also in helping the researcher to succinctly communicate the themes and findings.

Summary

It was important to conduct this research in an attempt to improve the educational opportunities for teachers in the area of vocabulary instruction thereby improving the academic achievement of their students. This research will add to the growing research base related to instructional coaching and student achievement. The use of both quantitative and qualitative research methodologies helped to answer the research questions posed during this study.

The findings of this research study are described in detail in Chapter IV of the researcher's dissertation.

CHAPTER IV

RESULTS

The purpose of this study was to explore instructional coaching as a form of professional development, specifically, its impact on student academic growth. Within this study, two forms of PD were implemented and connections between the PD and how it affected academic student growth were analyzed. In this chapter, two sections are used to report the findings of this study. The first section is the presentation of quantitative data and data analysis as they relate to research questions one and two. The second section presents the qualitative data and data analysis gathered from the codes, categories and themes related to research question three.

Quantitative Data and Data Analysis

Quantitative data was collected to answer the following two research questions:

- To what extent do teachers utilize newly acquired knowledge and strategies demonstrated within workshop training with on-going assistance to improve student academic growth?
- 2. Is there a difference in student academic growth in the area of vocabulary instruction by participants who receive the services of an instructional coach in addition to the workshop training when compared to participants who receive workshop training alone?

Data were analyzed using the statistical software package SPSS, version 19. The goal of the analysis was to determine whether a statistically significant relationship existed when utilizing instructional coaching in addition to workshop training as compared to workshop training alone.

The researcher analyzed the data by using inferential statistics in the form of *t*tests to compare the data (Mertler & Vannatta, 2010). A type I error rate of .05 was used. Descriptive statistics, and measures of central tendency were calculated. The dependent variable was created by calculating a <u>difference</u> score between pre-test and post-test scores on student tests. In other words, each student's pre-test score was subtracted from their post-test score in order to create a difference score that approximated the amount of learning that had taken place over the course of the six week research period. The independent variable of interest consisted of two levels that coincided with the type of training each teacher received: workshop and instructional coaching, or workshop training alone. Means and standard deviations for each classroom can be found in Table 1.

Data Check

The data on the dependent variable are normally distributed and appeared bellshaped, as can be seen in Figure 1.

In order to analyze these data using a *t*-test, several assumptions about the data must first be met. First, participants must be randomly selected for any treatment groups. In the case of this research, students were randomly placed into classrooms with a specific teacher, and those teachers were then randomly selected to either receive the experimental teaching methods (Treatment Group) or continue with the current teaching

Table 1

	_		Pre-Test		Posttest		Difference Score	
Group	Classroom	Ν	Μ	SD	М	SD	М	SD
Control	1	12	50	22	66	28	16	24
	2	15	36	24	61	25	25	20
Totals		27	41	24	63	26	21	22
Experimental	1	12	37	15	79	13	43	11
	2	17	36	16	73	18	37	19
Totals		29	36	15	76	16	39	16

Descriptive Statistics by Classroom and Experimental Group

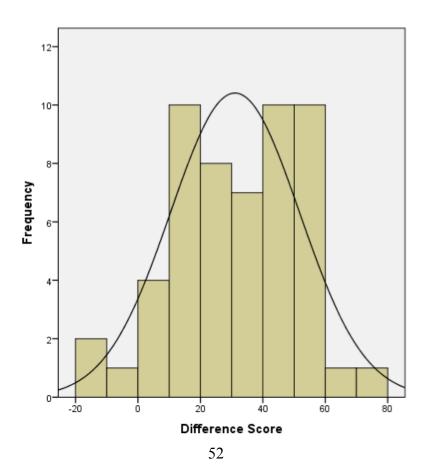


Figure 1. Histogram of difference scores.

methods (Control Group). The second assumption for a *t*-test requires that the variance component between groups must be roughly equivalent. In other words, the standard deviation of the control group must be approximately the same as the standard deviation of the experimental group. A Levene's test was conducted and found to be non-significant (F(1, 52)=1.69, p=0.20) indicating that the assumption of homogeneity, or equality, of variance was met in the data. Finally, in order to use a t-test, the distribution of scores on the dependent variable must follow a normal distribution. Figure 1 shows the frequency distribution of scores for the dependent variable used in this study, the pre-post difference score. Although the distribution of scores is not perfectly normal, it approximates a normal curve, and thus meets the third assumption of the *t*-test.

Results

Pre-Test Equivalence

Before running any analyses to determine whether differences in student learning existed based on the professional development program, a *t*-test was first run on pre-test scores to determine whether the experimental and control groups were on an equivalent level from the beginning. As noted earlier, no evidence was found (t(40)=.93, p=.36), demonstrating there was no evidence of difference. Thus, any statistically significant results found between experimental and control groups on the post-test can be assumed to be due to differences in the teaching and learning that occurred during the six-week implementation of the experimental group.

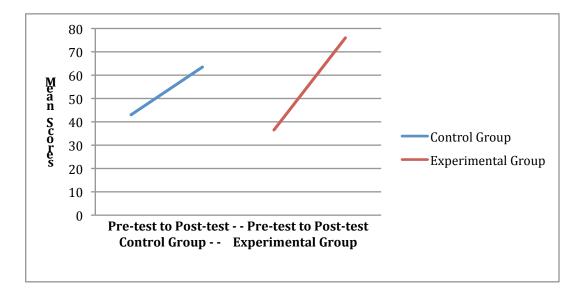
Group Comparisons

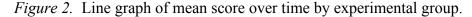
To determine whether instructional coaching had an impact on student learning, a second *t*-test was conducted comparing the difference score, which represents the change in scores from the pre-test to the post-test, for each of the experimental groups. A statistically significant difference was found between groups, with the Experimental group gaining more from pre-test to post-test than the Control group (t(52)=3.55, p<.001, d=0.97). The Cohen's *d* effect size of 0.97 represents a large effect of treatment. In other words, the difference between the treatment and control groups is large. Table 2 displays descriptive statistics for the difference score by group. Figure 2 presents a graphical representation of the growth in both groups from one time point to the next.

Table 2

Group	Ν	М	SD	SE	Effect Size
Control	25	21.32	21.57	4.31	0.97
Experimental	29	39.48	15.92	2.96	

Descriptive Statistics by Experimental Group





Results show that teachers utilize newly acquired knowledge and strategies demonstrated during workshop training with on-going assistance from an instructional coach to improve student academic growth. Results also show that there is a significant difference in student academic growth in the area of vocabulary instruction by participants who receive the services of an instructional coach in addition to the workshop training that originally taught the strategies when compared to participants who receive workshop training alone.

Qualitative Data and Data Analysis

This section describes each of the three themes that were established. The codes and categories that emerged into themes are elaborated on, with examples and excerpts from observation notes and pre- and post-conference sessions. The last portion of this section addresses the final assertion developed from the qualitative data that was gathered in hopes of answering the following research question: 1. What themes emerge during the instructional coaching process that provide evidence of teacher development (skill and understanding) in the area of vocabulary instruction?

Throughout this section, it may be helpful to look ahead at the Data Analysis Chart (Appendix E). Funneling information from the codes, into categories, then themes and into the final assertion is graphically displayed in the chart. In the following sections, the experimental group teachers are referred to as Teacher A and Teacher B, the control group teachers are referred to as Teacher C and Teacher D.

Theme 1: Teachers A and B harbor a great deal of insecurities about their teaching, about what their coach thinks of their teaching, and they express a need for professional validation from others. The codes within this theme included "Insecurities in Teaching", "Worries about what the Coach Thinks", and "Need for Validation". The codes were made based on the impression Teacher A and Teacher B provided through their statements during pre- and post-conferencing sessions, as well as actions that were noted during observations of their implementation of the vocabulary instruction strategies.

Insecurities in teaching. Insecurities in teaching were noted in both the preconferences and the post-conferences with Teacher A, and mostly in the post-conferences with Teacher B. During an initial pre-conference, Teacher A shared,

I'm really scared that I will do something that will make me look like a bad teacher while you are watching me teach science; I mean, I'm used to you being in my classroom during reading and I'm okay with what I need to teach there, but now that you are coming during a different subject I feel like I'm starting all over again.

My observational notes also indicated insecurities, "Teacher A's hands trembled during the first observation" (August 24, 2011).

Teacher B demonstrated very few, if any, visible signs of insecurity in her teaching; however, during post-conferencing Teacher B asked numerous questions that infer insecurity about implementing the approach to teaching vocabulary, such as: "Can I still do my experiments and my regular beginning of year thing I do on the scientific method?" and "Should I make binders for the kids so we don't waste time drawing out the Frayer's Model?" During one post-conference session Teacher B, asked:

How will I know if this type of vocabulary instruction is working for all of my kids? I mean, will I be able to tell if they are learning the words just by using that step 4, checking for understanding? Cuz I don't want to be surprised by stinky test scores when we get there.

In summary, both Teacher A and Teacher B reported being insecure in certain aspects of the vocabulary instruction strategies; however, their lack of confidence did not deter them, rather they used the opportunity to ask questions, request help and/or talk themselves through whatever aspect of the strategy that was causing them to be unsure of themselves.

Worries about what the coach thinks. Both Teacher A and Teacher B worried about what the researcher might think about them as teachers. There were a number of comments that were made by Teacher A about such worries, for example: "you must think my planning and prep work is make-believe with the mess I have here on my desk";

or "if I had more time to organize my stuff, I'd have an easier time finding it when I need it, I bet your desk is always neat and all this stuff has its own place, right?"; and "I'll look a lot smoother in front of my class then I do practicing with you…"

Teacher B had similar comments throughout the research period regarding this code. But while Teacher A talked about herself when expressing worries, Teacher B also worried about her para's inadequacies and how this might reflect on her. She shared, "my help doesn't do a good job of keeping records" or

... my aide isn't much of a self-motivator or anything like that, I have to be the one to tell her what to do, and I don't know how to do these new vocabulary teachings very good yet myself so what am I suppose to tell her to do with them?

The actual implementation of the vocabulary strategies by both Teacher A and Teacher B appeared instructionally strong. For example, as per the modeling of the procedures, both teachers often called for unison oral responses, ensuring participation within the entire group. Monitoring of progress was constant, and both instructors utilized the help of their paraprofessionals to work with students that may have been prone to attention issues or frequently in need of redirection to avoid distracting the group.

Need for validation. The teachers' insecurities and worries about what their coach might think played a major part in the teachers' desire for validation. It was obvious in speaking with Teacher A that she was concerned about "teaching right" and giving her students "what they need in the right way" so they could learn from the content of her science instruction. Teacher A relied on feedback from her coach to

determine whether her instruction was meeting the needs of her students. This feedback was mostly sought during post-conferences, with Teacher A questioning the accuracy of her implementation of the instructional strategies for teaching vocabulary: "Were my questions on the right track when I was asking the students to give me non-examples?" and

How did I do with the scaffolding of questions when my kids were using the vocabulary words in their own sentences? I was giving them enough help without just giving them the words that I wanted to hear in the sentences, right?

Teacher A's need for confirmation in her teaching abilities did expand beyond the immediate academic achievement of her students. She stated:

... my students' NWEA scores in science are important to me even if they aren't important to administration, I want them to do good, not just so I look good on my evaluation, but so they can hold their own when they get to middle school.

Teacher A's students' NWEA scores offered the support she was seeking and verified that she was teaching her students what they needed to know.

Teacher B also sought the instructional coach's validation. During observational times, she would stop instruction, look directly at the researcher and say, "Am I doing that right?" After assuring her that in fact she was following the correct procedures, she continued to ask for validation from the researcher by looking at her and lifting her eyebrows, as if to ask, "Is that correct?" A quick 'thumbs-up' sign by the researcher provided her with the reassurance she was requesting and the lessons continued.

Theme 2: The personal teaching experiences in science, their own educational experiences and their love of teaching have defined Teacher A and Teacher B professionally. "Personal teaching experiences", "Own Education", and "Love of Teaching" were three codes that led to the category of "Defining Teacher A and Teacher B". Evidence relating to each of these codes will be discussed in this section.

Personal teaching experiences. The experiences Teacher A has had in teaching grades four and five in this school district for the past 14 years have shaped her perception of what teachers should expect from their students and also what students should expect from their teachers. During a pre-conference session, Teacher A shared, "I know what I want my students to be able to do at the end of the year, and I know what administration wants them to do, none of that has changed since I started here way back when." In the field notes gathered by the researcher, Teacher A often shared her expectations with her students at the beginning of her lesson. Teacher A positively presented her expectations by saying:

At the end of this unit you will not only be able to define the vocabulary words I have written on the board, but you will know them so well that you'll

During an observation, it was noted that Teacher A had written the following on the board, "Learners are winners!" (August 24, 2011). When asked about the statement she shared:

be able to use them like you've known them since you were in first grade.

...it seems like my kids do better if I tell them they can do better, so I try to throw out as many good things as possible. Not sure if it does make a

difference for everyone, but it seems to make some of my kids know that I believe they can ace their assignments.

Teacher B shared many of the same perceptions. Unlike Teacher A, she has taught for only four years, but she had the experience of teaching in a smaller school district for one year and often compared the two experiences when discussing the expectations she had for her students. Teacher B remarked on how the students in her previous school acted the same as the students at this school:

The kids at XYZ School had way more of their own experiences, and when I was teaching vocabulary they all wanted to share them with everybody else. Not just telling us stories about what they've done that somehow goes with the vocabulary, like in social studies when we are talking about historical places and three of my nine kids had been like to Medora, they had lots to share. It was more than that though, it was the vocabulary they have when they come to school versus the vocabulary they learn when they get here. I almost want to say that they didn't need actual vocabulary instruction, because of how they talked, but I know better than that, I know that they have to learn school vocabulary and vocabulary too goes with each different subject at school. It's just that they had so much more to begin with, like their cup was already half full when they showed up off the buses.

In her previous school she had only nine students in her classroom, with only one section of that grade level; whereas at this school she has 21 students and there are six sections in her grade level. In talking about her personal experiences as a teacher at her previous school, Teacher B said: I was able to give the kids more attention, like when I was walking around monitoring them at their desks and when I was teaching too. I could give all nine of them the chance to answer—even if they didn't want to (she giggled)—because with just that many kids there was much more time for them. For each of them individually. During vocabulary instruction we heard everybody's stories and crazy sentences. Even the made-up stories. Made me really get to know them all when they have those individual chances to answer and add to the room.

Teacher B used her past experiences to formulate instruction that allowed her to do more monitoring and allowed her students more individual voice. Teacher B used the procedural cards explicitly and often took the procedures one step further; having students partner and discuss their examples and non-examples while she and her paraprofessional monitored their discussions and guided them in a constructive manner to keep their vocabulary acquisition on track.

Teachers' own education. The education of Teacher A and Teacher B was remarkably similar. Both Teacher A and Teacher B were from the same area and actually attended the same elementary, middle and high schools—although at different times. In fact, the school in which they currently teach is their former elementary school stomping ground. In one joint conference between Teacher A, Teacher B and the instructional coach, a lively reminiscing evolved, with Teacher B saying: "we never had this kind of instruction when I was going to school here, and I'm happy to say it makes me proud that I'm doing better than my own teachers did". Teacher A concurred with Teacher B saying: "Can you imagine Mrs. X teaching and having Amy Jo walk in to observe her,

heck, she'd have to wake her up to get her to teach so she could observe!" The lively camaraderie they shared was entertaining to listen to, and it was refreshing to hear Teacher A and Teacher B agree that their instructional practices differed from their own learning experiences as students in positive ways. Teacher A stated:

What we are doing now in this building compared to what we got as kids is making a difference in how much our kids are learning. I kind of wish this would have been the way they taught when I was here. What I teach and what I remember learning here, it's a big difference. It makes me mad and it makes me happy at the same time. At least now we know what to do, some teachers anyway, but I know that I know what needs to be done for kids to learn.

Previous experiences have helped to shape the instructional practices that both Teacher A and Teacher B now use. Their statements are those of reflection of their own experience as learners.

Love of teaching. A love of teaching is apparent in both Teacher A and Teacher B. The accomplishments they have made in changing their instruction are just a drop in the bucket compared to the devotion they have to make those changes *for* their students' achievements. Our first pre-conferences happened before school started, with the newness of their classrooms as the backdrop. Teacher A had her desks lined up, with her students' books, workbooks, and other learning materials piled neatly on each desk. Teacher B had a similar set up, but with their books already tucked inside their desks and their nameplates secured to their desks. What set their pre-student preparation apart from other teachers was the personal postcards that Teacher A and Teacher B wrote to each child and had tucked into their students' pile of supplies. Teacher B shared: "We (Teacher A and Teacher B) worked on our postcards together, with our paras, so each of our kids would know we are excited to have them in our class. Kind of a 'welcome to my room' card." The notes said such things as: "Welcome to Grade 5! Can't wait to get to know you!" or "I've been anxious to meet you—we have tons of fun learning activities planned for you and your classmates!" The postcards were signed by both the classroom teacher and their paraprofessional.

Teacher A reportedly rearranged her students' desks more than once. She shared: I think I've sat in every chair in this room, looked around, checked to see if I could see the board without other desks like right in front of me. And then I looked around and thought, 'now what will distract this kid that sits at this desk?' You know, kind of see the room from where they all will be sitting for most of the day. Try to make it as nice and distraction-free as possible.

The excitement of meeting their 'new' students and the promise of a new year demonstrated their love of teaching and the potential of fresh learning. On numerous occasions, Teacher B stated: "I really enjoy teaching science, its fun for me and the kids. I think because I love it that's what makes it more fun for us."

Theme 3: Loyalty to Reading First guidelines, following protocol, and being prepared may be the foundation for the use of procedures that are used in science instruction for both Teacher A and Teacher B. A sense of loyalty to initial Reading First guidelines may be the foundation for the use of procedures that are used in science instruction for both Teacher A and Teacher B. Questions frequently surfaced regarding the logistics of procedures as well as concerns about being fully prepared to teach and, at times, these concerns served as motivation to do the necessary prep work. The three codes that comprise this category are "Loyalty to Reading First Guidelines", "Logistics", and "Prep Work".

Loyalty to Reading First guidelines. It was evident that both Teacher A and Teacher B have had previous experience working within strict guidelines, and both believed in the foundational principles of Reading First. Reading First guidelines, as adopted by this school include the following: every school day will include 90 minutes of uninterrupted direct instruction in reading; every instructor will have complete fidelity to the reading program as outlined and described in their teacher's edition; differentiated instruction will be used to meet the needs of each individual learner; and a Response to Intervention protocol will be used to insure all students are provided with appropriate instruction (Administrative Meetings, 2004-present). To assist in making all of this happen at this particular school, two full-time instructional coaches were hired in 2004, and they have remained on staff through the duration of this school's participation in its state Reading First program. Teacher B relied heavily on the procedures provided by the instructional coach, and often related what she was doing currently to previous learning: "like I said, what we do in reading I do that in science and social studies normally and it helps those kids who have a hard time paying attention...it helps them focus if they are busy with note taking". Teacher A may feel less of a loyalty to Reading First guidelines, but has a strong desire to conform to what she is assigned—she held:

Reading First rules are the meat of how all the teachers here seem to teach, you know they complain about how strict the rules are and how admin and coaches are in and out of their rooms but when they go to teach other subjects, like even math, they use the same stuff they use to teach during reading. Especially the stuff that I hear they learned from Reading First trainings about, like, you know, good teaching stuff or teaching practices. Results happen because of what we know that works, especially in how we teach, like the things we do in reading.

Logistics. Logistics are the specific processes established in adhering to a procedure. In this study, logistics refers to adhering to the teaching practices of the new vocabulary instruction strategies. The established process of the procedures taught during the workshop were revisited during pre-conferences, post-conferences and during side-by-side teaching between the coach and the teachers as well as during modeling provided by the coach. Concern for following the established process of the procedures often followed statements of insecurity by the teacher, for example, Teacher B during a post-conference meeting asked: "Was I not doing it right, because you said an adaption of the model? Cuz I was adapting but maybe adding too much fluff and chatter and not enough umph." After clarification that, in fact, she was not only doing the procedural card correctly, but that she also employed other instructional techniques, demonstrating her expertise as a teacher, there was noticeable signs of her relaxing, as she sighed loudly after the clarification and the compliment. Her questions regarding the process and practice of the procedures, while following a positive classroom management model, became very deep. One question stands out:

I don't want to be 'mean-teacher', and I don't want to be 'push-over teacher'. I want to be 'you-learned-a-lot-in-my-class teacher'. How do I make sure I stick to all of this (vocabulary instruction strategies) after your study is over?

Her desire to know more in order to better serve her students was evident as she continued to periodically ask questions.

During one side-by-side teaching experience, she interrupted the coach's modeling of the Frayer's Model and asked for further clarification: "Where do I find nonexamples for scientific terms if they're not provided in the text?" Teacher A was less concerned with the established process of the procedures of the vocabulary instruction, rather she was very agreeable and often asked: "Is there anything else I should be doing?" When probed to explain what she meant by "anything else", she said:

You know, do I stick just to these procedure cards or do I do all that's listed in the teacher's edition? Like, I mean, does this replace anything in the teacher's edition or just add to it?

Logistics for Teacher A consisted of her doing what she termed "the right thing". Teacher A was very compliant and very willing to adapt to new teaching strategies, she stated: "I'm willing to do whatever I need to do, or I should say what our motto is here, right, I'll do 'whatever it takes' so my kids learn everything they need to learn while they're in my class".

Prep work. 'Prep work' is a term that was used by Teacher A and Teacher B during pre- and post-conferencing sessions. When asked to define this term, Teacher A shared: "It's all the behind the scenes stuff we teachers do before the kids get to school each day." Teacher B, grabbed her smartphone, searched the word 'prepare' in her

dictionary application and while smiling said: "It's to make ready in advance—so yeah, it's what Teacher A said."

Prep work was discussed at great lengths throughout the research period. Even toward the end of the interim of this research both teachers continued to discuss "Prep Work". Initially this was expected, but the researcher did not predict having as many or as frequent conversations about the necessity of preparing for the lessons. Teacher B spoke regularly about a lack of time to prepare: "I really enjoy science, but there isn't a lot of prep time. I usually go with what has worked in the past and when there is a teachable moment that pops up I go with it." In talking about the use of procedural cards she said:

They make my job of teaching science easier when it comes to the actual teaching part, but man it's like more time is needed to do all the prep work for the cards if you want us to do them right.

Teacher A utilized the work of her peers, and after the completion of the workshop, when time was allowed to be fully prepared for the initial science lessons, she interacted with her peers, then gathered copies of their work. When asked about her level of preparedness prior to her first lesson she stated: "I am done, I pulled together what we did as a group, and I worked on the science words, so I feel ready". Although both teachers implied that more time to prepare for their lessons would be appreciated, neither teacher used a lack of time to prepare as an excuse for any procedures the instructional coach asked them to practice or to change.

Assertion

From the emergence of codes to the assertion of categories and themes that developed from the data collected through pre-conferences, post-conferences and classroom observations, an assertion emerged. Teacher A's and Teacher B's professional worries about themselves, their students, and the perceptions their coach had as well as who they were professionally led them to make professional decisions to follow the instructional guidelines set forth and to be fully prepared to teach their students this particular vocabulary instruction strategy.

The final chapter will provide discussion, recommendations and reflections of this study.

CHAPTER V

SUMMARY, CONCLUSIONS, RECOMMENDATIONS, IMPLICATIONS, AND REFLECTIONS

The final evidence for successful PD exists in gains in student academic progress. This research study evaluated instructional coaching as a form of professional development, specifically, its impact on student academic growth. Also, this study concentrated on two forms of PD and sought to make connections between the PD and how it affected academic student growth. The research questions that were addressed in this study were:

- To what extent do teachers utilize newly acquired knowledge and strategies demonstrated within workshop training with on-going assistance to improve student academic growth?
- 2. Is there a difference in student academic growth in the area of vocabulary instruction by participants who receive the services of an instructional coach in addition to the workshop training when compared to participants who receive workshop training alone?
- 3. What themes emerge during the instructional coaching process that provide evidence of teacher development (skill and understanding) in the area of vocabulary instruction?

This study revealed that teachers who participated in workshop training and who also had an on-site instructional coach to provide on-going professional development on the strategies learned during the workshop training had classrooms where students made greater academic achievements in science vocabulary directly related to the on-site coaching. Many school districts are employing coaches as a type of PD for their teachers (Neufeld & Roper, 2003). Although little has been documented to provide evidence of coaching as a model of PD that will positively impact student achievement, there is reason to believe that the use of coaching coupled with other PD forms may be a way to improve the learning and teaching in schools (Neufeld & Roper, 2003). The major task of an instructional coach is to provide PD to teachers and to support teachers in a system that will improve the learning of their students (Blachowicz, Obrochta, & Fogelberg, 2005). Steckel (2009) while attempting to explain the use of coaches in the school reform process stated, "There is a strong expectation that embedded professional development characterized by opportunities for collaboration will improve instructional practices and student achievement across academic content areas" (p. 14). This researcher holds a similar opinion after analyzing the data from this study.

The intent of this final chapter is to tie together all that has been gathered and learned from this research. This chapter begins with a summary of the findings of the study as they relate to current literature. Next, conclusions and recommendations for future research are discussed, followed by an outline of implications for practice. The final section of this chapter contains the researcher's reflections on the research experience.

Summary of Findings in Relation To Current Literature

The purpose of this section is to address each research question and examine what was learned from the study in relation to current literature on the topic of professional development. Quantitative data was collected to answer the following two research questions:

- To what extent do teachers utilize newly acquired knowledge and strategies demonstrated within workshop training with on-going assistance to improve student academic growth?
- 2. Is there a difference in student academic growth in the area of vocabulary instruction by participants who receive the services of an instructional coach in addition to the workshop training when compared to participants who receive workshop training alone?

When considering to what extent teachers utilize newly acquired knowledge and strategies demonstrated within workshop training it is important to keep in mind that the teachers have much to consider in the implementation. The teachers need to think differently about how and what they will be teaching (Showers, 1982). Teachers also need to re-organize themselves, their instruction and their expectations for student responses based on their new knowledge (Showers, 1982). All teachers in this study were provided with time during the initial workshop training to begin this reorganization of their lessons. This time was intended for the group of teachers to work collaboratively to fully prepare their upcoming vocabulary lessons using the procedural cards that were supplied during the training. Both the control group and experimental group of teachers worked together to prepare the vocabulary lessons.

This reorganization of lessons was a major step in preparing the teachers to put into practice the newly acquired vocabulary instruction techniques. This opportunity provided both groups of teachers with the necessary time to contemplate the proper use of their recently learned strategies (Showers, 1982). This time to prepare the lessons for both the control group and the experimental group set the stage for each to use the lessons in their classroom. Showers' (1982) study mirrored the findings of this study, in regards to the use of lessons prepared and/or modeled during training by the participating teachers in their classrooms after completing the training.

Subsequent phases of Showers' (1982) study demonstrated the use of designed lessons by coached teachers rather than by those who were not coached, as they were more inclined to suspend the use of the new skills or strategies. This proved to be true in the study reported here. Through casual conversations with teachers from the control group of this study, the researcher learned the following from Teacher C, "I felt no pressure to use the vocabulary strategies during science class because I knew you weren't coming in to observe me using them, so I just didn't use them most days." When asked to approximate how many days Teacher C actually used the vocabulary strategies during the six-weeks of instruction, the response shared was, "I'd say I used the procedural cards you gave us the first few weeks, the ones we all worked on together during your workshop. After that I didn't take the time to use them." As with Showers' (1982) research, teachers in the initial phases used the newly acquired skills, but when asked to design their own lessons based on the new skills only those teachers who were being coached continued with the process.

Merely acquiring new knowledge and strategies to be used in the classroom was not the intent of the workshop training; rather the intent was to combine newly acquired knowledge with the transfer of the training into classroom practices. If the purpose was solely to become aware of the strategy perhaps workshop training alone may have

sufficed, but the researcher also set out to determine whether a significant difference in academic student growth would result from participating teachers who attended the workshop training in conjunction with classroom-based instructional coaching assistance. Showers' (1982), concluded that the newly acquired skills and strategies from workshop training would have no influence on student learning if said skills never found their way into the classrooms, thus her concern centered around the transfer of training as noted by coaching within the participating teachers' classrooms. Showers' (1982) study indicated that coached teachers spent approximately twice the time instructing on conceptual and theoretical levels of processing rather than at the factual level as did the teachers who were not coached (p. 16). Unfortunately, the transfer of training in Showers' (1982) research did not affect the student outcomes as she had initially speculated as both the coached and non-coached teachers had students with similar essay scores on post-tests (p. 27). The findings of this study demonstrated what Showers' failed to present; the academic growth of students in the experimental group was greater than those in the control group.

The study of Sailors and Price (2010) is comparable to this current study, in that it too compared the academic growth of students of teachers who attended workshop training alone with those who combined workshop training with classroom-based instructional coaching in the area of reading. The results of Sailors' and Price's (2010) study support the findings of the study reported here. The students in the full intervention group (coaching and workshop) scored remarkably higher (average 11.27 points) than the students in the partial intervention group (workshop alone) (Sailors & Price, 2010, p. 314). The findings of this study and that of Sailors and Price (2010) support the use of

instructional coaching as a form of professional development that may positively affect student academic growth.

Instructional changes were reported as significant in the study by Steckel (2009); student scores were not reported, rather Steckel noted that "teachers and principals believed that these [instructional] changes had made a difference for students" (p. 16). The findings of this study agreed and went a step further by reporting student gains. Ross (1992) also found that student achievement was greater for students whose teachers had the benefit of a coach in a study of grade 7 and 8 classrooms. The findings of the study reported here concurred and expanded the grades affected to grade 5. Both quantitative data depicting the increase in students' academic achievement as well as qualitative data detailing specific instances and characteristics of coaching sessions that were beneficial in making instructional changes that positively impacted student growth were presented.

The third research question addressed in this study was answered through a collection of qualitative data that was coded and categorized into themes from which the final assertion was derived:

What themes emerge during the instructional coaching process that provide evidence of teacher development (skill and understanding) in the area of vocabulary instruction?

Instructional changes happen through the coaching process (Steckel, 2009). Instructional changes that are effective make the learning of the students the primary focus (Blachowicz et al., 2005). Showers' (1982) research provided similar results to this current study, the results of which pointed toward a significant effect for the coaching of teachers in relationship to the transfer of training. The observational notes by the

researcher of this study indicated a high level of transfer of training as procedural cards and instructional strategies taught during the workshop training were readily observed in use in the experimental classrooms. In the case studies of coaches presented by Steckel (2009), the teacher testimonies concurred with this study too, in that the evidence provided indicated significant changes to instruction and student literacy development that was positively affected by the instructional changes.

The experimental group of teachers in this study consisted of a combined thirtyone classroom observations within the six-week period. All but two observations provided evidence of a transfer of training from the workshop into classroom practice which concurred with the results of Showers' (1982) study. It was through classroom observations and pre- and post- conferencing with teachers within the experimental group that the researcher sought to understand the difficulties and successes the teachers experienced as they put into practice their newly acquired vocabulary instruction strategies. The major reason cited by the experimental group teachers for having difficulties had to do with a lack of time to fully prepare for their science vocabulary lessons.

Steckel (2009) vouched for the use of coaches to provide teachers with necessary practice opportunities where feedback, reflection and collaboration could be used to improve the learning of students. In this study, the use of pre-conferencing provided teachers with scheduled practice time in implementing the instructional strategies and procedural cards. During classroom observations, the researcher took notes that were later used to provide feedback to the teachers, who then reflected on their experiences and in collaboration with their instructional coach made instructional changes to improve student learning. The methods used by the researcher/instructional coach reflected that of Steckel's (2009) study. Steckel (2009) and this research are in agreement; instructional coaching is beneficial in improving student learning. The use of coaches in Showers' (1982) study increased the ease in which the skills were used, and at the same time decreased anxiety in the use of the newly acquired skills and through the reinforcement provided by the coach. The same was true for this study.

Steckel (2009) noted that a teacher's willingness to be observed may be increased by the willingness of the coach to portray their observation in a privileged manner, to watch the teacher at work and to be able to provide feedback (p. 20). Teacher A stated, "I like having you come into my room to observe, because I know between the two of us that my kids are getting the best end of the deal. You know, 'two heads are better than one." She continued to talk about her willingness to be observed by a coach as she said, "I know you can teach beside me and also teach for me if that's what is needed". Steckel (2009) stated the main ingredient in making consequential changes that are self-sustaining is intrinsic motivation from the teachers rather than mandating change. In this study, Teacher B was very motivated to use the new teaching strategies and her willingness to make changes to her instruction was evident. During post-conferencing sessions, her motivation and willingness to make instructional changes were driving forces in her agreeable use of the newly acquired instructional routines.

The support (Sailors & Price, 2010; Steckel, 2009) and companionship that Showers (1982) wrote about was reciprocal between coaches and teachers. Likewise, shared encouragement and companionship was noted in this study. The use of "nonevaluative, non-judgmental" coaching attributed to the mutual respect shared between the coach and teachers (Steckel, 2009, p. 16). Ross (1992) detailed that all teachers had greater efficiency in their instructional practices when they worked with a coach. During observations in the experimental classrooms, this researcher noted changes to instruction based on discussions between the teacher and the coach. The collaboration in this study was in agreement with the greater teacher efficiency as noted by Ross (1992).

Also notably similar between Showers' (1982) study and this current study were statements that included assisting teachers in preparing the use of their strategies during teaching as well as the conversations that consisted of future plans for upcoming lessons. It was noted by Steckel (2009) that as teachers become more skilled in using specific strategies, they will begin seeing the positive outcomes for their students through the use of these skills. The teachers' willingness to discuss what worked in their practice also increased. This researcher found this to be true. The willingness to share what they found to be successful in their instruction came quite easily for both teachers. Postconferences, after what Teachers A and B perceived to be successful lessons, were much lengthier and the discussions were livelier than post-conferences when either teacher was less confident in their instruction.

Conclusions

The use of coaches to improve instruction and increase the quality of teaching is spreading across the nation (Saphier and West, 2009). The positive effect on student academic achievement due to the use of coaches in combination with workshop training is evident in this study. Workshop training alone may not build the self-sustaining use of newly acquired strategies and/or knowledge. The consistent support and feedback of a coach is also required. Throughout this research process a critical understanding of the relationship between a teacher and coach was examined. The use of a coach to improve the instruction and quality of the teaching within a classroom was outlined and discussed between the teacher and the coach. Data were provided to demonstrate the significant results of the use of a coach in combination with workshop training. The difficulties and experiences of the teachers in the experiment group were shared and categorized into themes from which a final assertion evolved.

Although this research provided insight into the combined use of two forms of PD, it was limited by the small-scale of the research itself and also by the geographical restriction and lack of demographic diversity. The results of this study concur with the results of similar studies, but it does not propose to be extensive by any means. The importance of this study lies within the results themselves, as well as in the demonstrated success of the research process, reporting process and the development of future research topics.

Recommendations for Future Research

Based on the findings of this research study, there are numerous avenues for additional research. First of all, due to the demographic group of this study being 100% Native American, conducting this research with a diverse population of students would make the results more easily generalizable across populations of other ethnic backgrounds. Secondly, the participating teachers in this study all had previous instructional coaching experience. Future research using participants who have not had experience with an instructional coach may provide insight into the initial acceptance of the help provided by an instructional coach and perhaps provide insight into possible resistances to change for some teachers. A case study of individual instructional coaches

may provide information that relates to what works for instructional coaches and what does not work, likewise, a model of coaching and/or characteristics of successful coaching could be documented in a day-to-day manner, which may enlighten those who have no coaching model to follow. Finally, the length of this study was a six-week period. Future research, following the use of strategies learned during workshop training throughout an entire academic year may provide insight into the sustainability of newly acquired knowledge by participating teachers who attend workshop training alone in comparison to those teachers who attend workshop training that is coupled with instructional coaching.

Implications for Practice

This study provides instructional coaches with both quantitative and qualitative data that positively demonstrates the academic student growth of students for those whose teachers have attended workshop training and have had an instructional coach in their classroom to assist them in implementing the newly acquired instructional strategies. This study presents real-life evidence of how an instructional coach interacts with teachers before, during and after instruction. The examples shared in this study may provide a model of coaching for other instructional coaches to emulate in their own practice. This is important because of the lack of consistent coaching models that have been researched and documented. It is also important because of the increased number of instructional coaches that are employed and used as professional development for practicing teachers.

Implications for Educators

This study provides information for teachers to understand the interactions between an instructional coach and classroom teachers. When instructional coaches begin working with teachers there are many unknown factors that teachers encounter. This study begins to unravel these unknown factors for teachers, in hopes of making the transition to collaboration smooth and student focused. Students have a greater chance for learning when they are with effective teachers. Allowing coaches to work with teachers to help them be more effective may result in greater gains in academic student progress.

Policy makers need to know what forms of PD help teachers be more effective. Coaching assists teachers in being more effective. Administrators can learn from this study how best to support both their instructional coaches and their classroom teachers. The need to bond together, as a team, extends beyond the working relationship between the coach and the teacher, the cooperation and backing of the administration for the instructional coach is instrumental in assisting teachers as they make instructional changes in their current practice. Administration should provide learning opportunities for instructional coaches to enhance and support them as they assist their teachers.

Policy makers need to understand the time instructional coaches require to be successful. Piling on duties outside of their coaching duties that keep them from being in classrooms lessens their effectiveness. This study provides a snapshot of what instructional coaches and teachers do as they work together. The literature reviewed documents the necessity of providing ample time for coaches and teachers to work together and for teachers to reflect and be given feedback. There may come a time when

instructional coaches are no longer included in either federal funding through grants such as NCLB (2001) or when school district budget cuts result in the extinguishing of their positions. This study provides evidence that indicates instructional coaches, when used in combination with workshop training, can positively impact academic student growth. Policy makers need to make financial decisions for PD based on what is best for students. This study provides evidence for a model of PD that assists teachers as they make instructional changes that result in academic student growth.

Reflections

During this research, I had numerous turning points in my own learning. First of all, the lack of documented coaching models was both disheartening and a relief. It was disheartening, because I anticipated finding answers for many of my own questions about how best to be an instructional coach. It was a relief to know that I had not missed the literature in my previous searches for a model to use in my day-to-day activities as an instructional coach. Saphier and West (2009) warned of how not to approach the role of coaching, by pinpointing the weakest and neediest teachers, rather than empowering and using the strongest teachers as exemplary models of instructional coach, I was motivated to continue my literature review beyond the requirements of my research project, opening my eyes and my mind to a variety of ways instructional coaches can be utilized across the entire realm of elementary classrooms.

It was gratifying to see the results of the pre-test/post-test data that demonstrated a greater academic achievement in students whose teachers participated in workshop training that was supplemented by the assistance of an on-site instructional coach. The

pre- and post- conferencing sessions were guided by the responses of the teachers. When either teacher provided a statement, the researcher/coach asked for further clarification. If the teacher posed a question, the researcher/coach would answer the question and probe into the question deeper to help determine the origin of the question or the reason behind it. This model followed the advice of Steckel (2009), which called for teacher initiated topics of conversation or teacher directed questioning.

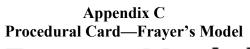
I anticipate that the results of this study will allow other instructional coaches the benefit of making appropriate adaptations to their own coaching models based on the evidence provided through the themes and assertions. I expect that further research paired with this research will provide necessary foundational structures to determine a consistent model of coaching that can be used in a variety of schools with diverse populations of students and teachers. Finally, it is my hope that instructional changes, based on strong coaching, will continue to improve the learning of students as well as the quality of teaching. APPENDICES

Appendix A Procedural Card—Before Instruction

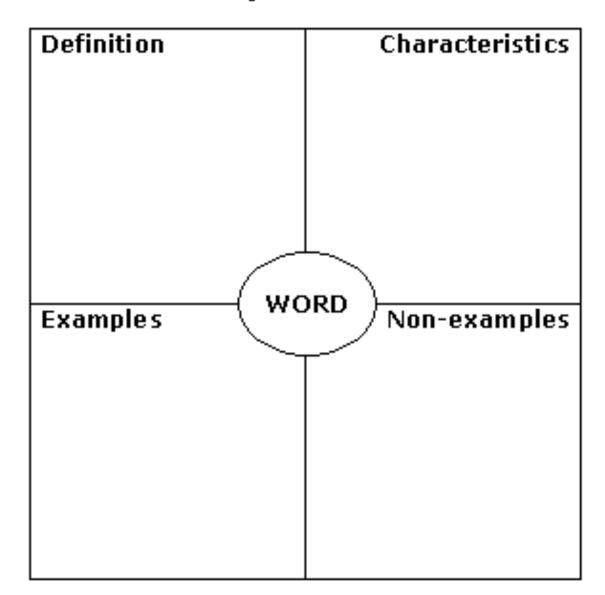
PROCEDUR	Es: Use in Combination with Template #17.	V
Step 1	Introduce the Word A. Write the word on board. B. Read word. Students repeat. c. Repeat for unfamiliar words.	EXAMPLE "This word is <i>reluctant.</i> " "What word?"
Step 2	Present a Student-Friendly Definition A. Tell students explanation, or, B. Have students read explanation with you.	"Reluctant means you are not sure you want to do something." "When you are not sure you want to do something, you are"
Step 3	Illustrate the Word with Examples • Concrete examples • Visual representations • Verbal examples	"If your mother asked you to try a new food, you might be <i>reluctant.</i> " "You may be <i>reluctant</i> to watch a scary movie."
Step 4	Check Students' Understanding Option 1: Deep processing questions Option 2: Examples/Nonexamples Option 3: Students generate examples Option 4: Sentence starter	"Why would a student be <i>reluctant</i> to go to a new school?" "Would you be <i>reluctant</i> to go to recess on a warm, sunny day?" "Tell your partner something you would <i>be reluctant</i> to do." "Tell you partner something a cat might be <i>reluctant</i> to do. Start your sentence by saying, 'A cat might be <i>reluctant</i> to ' Then tell why."

Appendix B				
Procedural Card —After Instruction				

B D A* (1	T)		RUCTION					VP	
PROCEDURES: Use in combination with Template #17.									
1.	Yes/No	/Why	EXAMPLES Would it be <i>disgusting</i> to eat earthworms? Why? Would a <i>disgusting</i> trash can smell good? Why?						
2.	Comple	tion Activity	I was very <i>persistent</i> when (). Things that can be <i>confined</i> are ().						
3. Graphic O				Same	Opposite	Go Together	No Relation		
		ing relationship	harmit-odd			X			
		en vocabulary	hørmit-loner	X					
	words		protection-shell			X			
			Have students explain why they marked each box.						
	Word L		How surprised would you be if a dog started <i>bantering</i> you? a rabbit <i>trudged</i> through the garden? Least Surprised						
5.	Senten	ce Substitution	When the math test was over, Poloma was very happy.						
_			When the math test was over, Poloma was very (<i>relieved</i>).						
6.	Meanin Writing	gful Sentence	Students write a sentence answering who, what, when where, why, how questions. During the past week, what have you been urged to do? Why would a teacher be impressed with one of her students?						
Western Regional Reading First Technical Assistance Center									



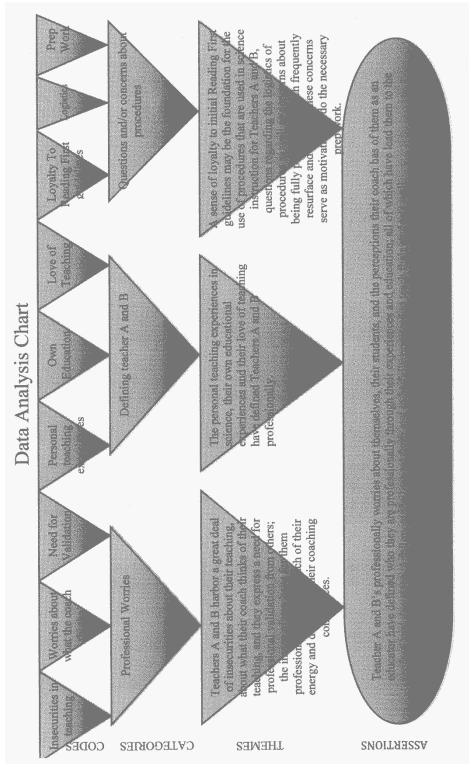
Frayer Model



Appendix D Observational Chart Classroom Observation

Teacher:		Date:	
Subject:			
Time In:			
Observations	Reflection	IS	Questions/Concerns

Appendix E Data Analysis Chart



REFERENCES

- Al Otaiba, S., Hosp, J. L., Smartt, S., & Dole, J. A. (2008). The challenging role of a reading coach, a cautionary tale. *Journal of Educational and Psychological Consultation*, 18, 124-155.
- Blachowicz, C. L. Z., Obrochta, C., & Fogelberg, E. (2005). Literacy coaching for change. *Educational Leadership*, 62(6), 55-58.
- Boreen, J., Johnson, M. K., Niday, D., & Potts, J. (2000). Mentoring beginning teachers. Portland, ME: Stenhouse Publishers.
- Business dictionary. Retrieved from http://www.businessdictionary.com/definition/ workshop.html
- Cassidy, J., & Cassidy, D. (2008). What's hot for 2008? Reading Today, 25(4), 10-11.
- Chappuis, S., Chappuis, J., & Stiggins, R. (2009). Supporting teacher learning teams. *Educational Leadership*, *66*(5), 56-60.
- Creswell, J. W. (2008). *Educational research: planning, conducting and evaluating quantitative and qualitative research*. (3rd ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- Darling-Hammond, L., & Richardson, N. (2009). Teacher learning: what matters? *Educational Leadership*, 66(5), 46-53.

- Denton, C. A., & Hasbrouck, J. (2009). A description of instructional coaching and its relationship to consultation. *Journal of Educational and Psychological Consultation*, 19, 150-175.
- Deussen, T., Coskie, T., Robinson, L., & Autio, E. (2007). "Coach" can mean many things: Five categories of literacy coaches in Reading First. (Issues & Answers Report, REL 2007-No. 005). Washington, DC: U.S. Department of education Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational laboratory Northwest.
- DuFour, R., DuFour, R., Eaker, R., & Karnanek, G. (2004). Whatever it takes: How professional learning communities respond when kids don't learn.
 Bloomington, IN: National Educational Services.
- *Ed.gov us department of education*. (n.d.). Retrieved from http://www2.ed.gov/policy/ elsec/leg/esea02/index.html
- Elish-Piper, L., & L'Allier, S. K. (2011). Examining the relationship between literacy coaching and student reading gains in grades K-3. *The Elementary School Journal*, 112(1), 83-106.
- Emerson, R. M., Fretz, R. I., & Shaw, L. L. (1995). Writing ethnographic fieldnotes. Chicago, IL: The University of Chicago Press.
- Fogarty, R., & Pete, B. (2010). Professional learning 101: A syllabus of seven protocols. *Phi Delta Kappan*, *91*(4), 32-34.
- Glesne, C. (2011). *Becoming qualitative researchers: an introduction*. (4th ed.).Boston, MA: Pearson Education, Inc.

- Hall, D. (2005). Moving from professional development to professional growth. *Learning & Leading With Technology*, 32(5), 36-38.
- Hollins, E. R. (2006). Transforming practice in urban schools. *Educational Leadership*, 63(6), 48-52.
- Huebner, T. (2009). The continuum of teacher learning. *Educational Leadership*, 66(5), 88-90.
- Kowal, J, & Steiner, L. (Photographer). (2007). *Instructional coaching*. [Web]. Retrieved from http://www.centerforcsri.org/files/ CenterIssueBriefSept07Coaching.pdf
- L'Allier, S., Elish-Piper, L., & Bean, R.M. (2010). What matters for elementary literacy coaching? Guiding principles for instructional improvement and student achievement. *The Reading Teacher*, *63*(7), 544-554.
- Mandel Morrow, L. (2003). Make professional development a priority. *Reading Today*, 21, 6-7.
- Marzano, R. J. (2007). The art and science of teaching: A comprehensive framework for effective instruction. Alexandria, VA: Association For Supervision and Curriculum Development.
- McCombs, J. S., & Marsh, J. A. (2009). Lessons for boosting the effectiveness of reading coaches. *Phi Delta Kappan, 90*(7), 501-507.
- Mertler, C. A., & Vannatta, R. A. (2010). *Advanced and multivariate statistical methods*. (4th ed.). Glendale, CA: Pyrczak Publishing.
- National Institute of Child Health and Human Development, NIH, DHHS (2001). *Put reading first: Helping your child learn to read*. Washington, DC: U.S.

Neufeld, B., & Roper, D. (2003). Coaching: A strategy for developing instructional

capacity. Washington, DC: Aspen Institute Program on Education and Annenberg Institute for School Reform.

Neuman, S. B., & Cunningham, L. (2009). The impact of professional development and coaching on early language and literacy instructional practices. *American Educational Research Journal*, 46(2), 532-566. doi:10.3102/0002831208328088

Nieto, S., (2009). From surviving to thriving. Educational Leadership, 66(5), 8-13.

- North Dakota State Government. (2012). Licensure. Retrieved from http://www.nd.gov/espb/licensure/renewal.html
- Odden, A., Archibald, S., Fermanich, J., & Gallagher, H. A. (2002). A cost framework for professional development. *Journal of Education Finance*, *28*, 51-74.
- Onchwari, G., & Keengwe, J. (2009). Teacher mentoring and early literacy learning: a case study of a mentor-coach initiative. *Early Childhood Education*, *37*, 311-317. doi: DOI 10.1007/s10643-009-0346-8
- Professional development. (2004, August 04). Retrieved from http://www.edweek.org/ ew/issues/professional-development
- Quick, H. E., Holtzman, D. J., & Chaney, K. R. (2009). Professional development and instructional practice: Conceptions and evidence of effectiveness. *Journal of Education for Students Placed at Risk, 14*, 45-71.
- Roulston, K. (2010). *Reflective interviewing: a guide to theory and practice*. London: SAGE Publications Ltd.
- Ross, J. A. (1992). Teacher efficacy and the effects of coaching on student achievement. *Canadian Journal of Education*, 17 (1), 51-65.

Sailors, M., & Price, L.R. (2010). Professional development that supports the

teaching of cognitive reading strategy instruction. *The Elementary School Journal*, *110*(3), 301-322.

- Saphier, J., & West, L. (2010). How coaches can maximize student learning. *Phi Delta Kappan*, *91*(4), 46-50.
- Showers, B. (1982). *Transfer of training: The contribution of coaching*. Washington,DC: National Institution of Education.
- Showers, B., & Joyce, B. (1996). The evolution of peer coaching. *Educational Leadership*, 53(6), 12-16.
- Steckel, B. (2009). Fulfilling the promise of literacy coaches in urban schools: What does it take to make an impact? *The Reading Teacher*, *62*(1), 14-23.
- U. S. Department of Education. (2001). No child left behind. Washington, DC.
- Quick, H. E., Holtzman, D. J., & Chaney, K. R. (2009). Professional development and instructional practice: Conceptions and evidence of effectiveness. *Journal of Education for Students Placed At Risk, 14*, 45-71.
- Sailors, M., & Price, L.R. (2010). Professional development that supports the teaching of cognitive reading strategy instruction. *The Elementary School Journal*, 110(3), 301-322.
- Semadeni, J. (2010). When teachers drive their learning. *Educational Leadership*, 67(8), 66-69.
- Vanderburg, M., & Stephens, D. (2010). The impact of literacy coaches: what teachers value and how teachers change. *The Elementary School Journal*, *111*(1), 141-163.

- Viadero, D. (2010). Intensive teacher training in math fails to lift exam scores, study says. *Education Week, 29*(29), 1-16.
- Walpole, S., McKenna, M.C., Uribe-Zarain, X., & Lamitina, D. (2010). The relationships between coaching and instruction in the primary grades: evidence from high poverty schools. *The Elementary School Journal*, 111(1), 115-140.
- Wei, R., Andree, A., & Darling-Hammond, L. (2009). How nations invest in teachers. *Educational Leadership*, 66(5), 28-33.