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SECONDARY MATHEMATICS TEACHERS’ PERCEPTIONS ON THE USEFULNESS OF INSTRUCTIONAL COACHING IN NEBRASKA

By
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A DISSERTATION

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Abstract

Numerous studies have been completed looking at what item in schools has the biggest impact on student learning. Results frequently produced the answer “the teacher.” With the inception of No Child Left Behind, many schools use teacher-centered interventions as a means of improving student performance. The United States Department of Education suggested instructional coaching as an intervention. Instructional coaching programs are prevalent in elementary schools but are not as common at the secondary level outside of English subjects. The purpose of this phenomenological study was to explore the perceptions of public secondary school mathematics teachers on the usefulness of instructional coaching. It explored interview data gathered from 22 mathematics teachers from public secondary schools in Nebraska. Participants gave their opinions on instructional coaching, their district programs, what characteristics were essential to being an instructional coach, and if possible, how their district programs could be improved. Participants identified common characteristics for a successful coach and provided suggestions for school leaders on how to create or improve a successful district instructional coaching program. The two main adjustments participants felt necessary for their programs to be successful were time and location. Participants believed their coaches were overcommitted within the district or the coaches were not housed within their building and therefore not easily accessible. A framework for a successful coaching program was included as a conclusion to the study. This study added to the existing literature and provided much needed insight into the realm of instructional coaching at the secondary level.
Dedication

I dedicate this accomplishment first to God. He has been with me every step of the way, from deciding to pursue my doctoral degree to finishing my studies. Many prayers have been sent from many people involved in my journey. It is through the blessings and gifts He has given me that I was able to accomplish more than I dreamt possible and now have the ability to affect the masses. Thank you for giving me the courage to begin the program, the guidance to continue through the program, and the skills to finish the program.

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CHAPTER ONE: INTRODUCTION

Background of the Problem

Within the United States, education improvement and reform is at the forefront of many debates, elections, and discussions. This educational focus prompted the formation of the No Child Left Behind (NCLB) Act of 2001. NCLB set rigorous requirements for schools to show they have made adequate yearly progress (AYP) meaning student performance in each category (English Language Learner/Limited English Proficient, Free and Reduced Lunch, Special Education) improved every year (No Child Left Behind [NCLB], 2002). AYP benchmarks were established by the individual states and authorized by the national government (NCLB, 2002). In 2006, the number of schools not meeting AYP was 29%; in 2011 the number increased to 48% (Usher, 2012). This shows nearly half of the nation’s schools did not reach their required performance levels.

National and state standards and tests have been adjusted or developed by various education associations as a means of measuring the success of the nation’s schools and individual student performance. These state tests are important as they are what the government uses to determine which schools are in need of assistance in order to meet AYP (Resnick, 2003). At the time of this study, the state of Nebraska administered a state test in mathematics, reading, and science. These tests determined if the schools met the required AYP. When schools fail to meet AYP for at least two consecutive years, the schools are labeled as needing improvement and are required by the government to implement interventions within the school. These interventions range from basic teacher improvement to district-wide re-staffing and redesigning (Resnick, 2003). The government allocates grant money for the schools as a way of funding these
interventions, with teacher improvement being a main focus (NCLB, 2002). With the pressure of testing and high requirements placed on the schools, interventions are of great importance. As Knight (2007) implied, there is a greater pressure to improve education in America more now than there ever has been.

One method of improving schools is improving teachers. Research shows teacher quality is one of the biggest indicators of student success (Knight, 2007; Polly, Mraz, & Algozzine, 2013; Wenglinsky, 2000). “Teacher quality has a significant influence on students’ achievement, and most professionals agree that it is the critical factor in bringing about improvement in America’s schools” (Polly et al., 2013, p. 297). This information prompted many schools to provide professional development aimed towards teacher improvement with the hopes of school improvement (Knight, 2007; Shidler, 2008). One improvement program developing nationwide is instructional coaching.

**Statement of the Problem**

Based on corporate mentoring models, instructional coaching is a professional development method being used to improve teachers’ instructional methodology and efficacy (Knight, 2007). Unlike common professional development programs for teachers, instructional coaching is a method focused on individual teacher improvement in a one-on-one or small-group setting. Knight (2009) claimed coaching is being highly advocated by districts and asserted coaching was “the most promising” strategy for improving schools and student achievement (p. 1).

Though instructional coaching is a concept whose popularity has varied over the years, it is in an upswing of since the United States Department of Education promoted it as an intervention method (Resnick, 2003). Little research has been completed regarding
the effectiveness of instructional coaching within the classroom or instructional coaching best practices. The data that have been gathered are usually specific in nature to the individual study and commonly gathered in elementary (K-6) school settings. However, of the completed studies, the majority showed positive relationships between instructional coaching and classroom teachers’ all-around performances (Knight, 2009; Polly et al., 2013; Rush & Young, 2011; Shidler, 2008).

With most studies being performed at the elementary level, the research question this study explored was, what are the perceptions of secondary (9-12) teachers in public school settings regarding the usefulness of instructional coaching? Research has shown instructional coaching to be successful at the elementary level (Horne, 2012; Polly et al., 2013; Rush & Young, 2011). However, it is not as common to see instructional coaching occurring at the secondary level. This qualitative study explored the perceptions of public secondary (9-12) mathematics teachers involved in a coaching program on the usefulness of instructional coaching in Nebraska. Specifically, the study explored factors the teachers believed made their instructional coaching program useful or not useful, how their program could be adjusted to maximize usefulness, and what characteristics or qualifications of a coach the teachers believed necessary for the teacher to feel success.

The study was conducted through interviews of public secondary mathematics teachers within the state of Nebraska. The subsequent data were analyzed to find commonalities within participant responses. This study provided insight for school districts contemplating using the instructional coaching program at the secondary level and helped delineate necessary attributes for a program to be successful. It also advanced the current research by adding data focused on programs in secondary schools.
 Purpose of the Study

The purpose of this phenomenological study was to explore the perceptions of public school secondary mathematics teachers on the usefulness of instructional coaching in Nebraska. Instructional coaching was defined as a form of individualized professional development focused on teacher improvement.

Research Questions

With limited research on instructional coaching at the secondary level (Knight, 2009; Polly et al., 2013; Rush & Young, 2011; Shidler, 2008), it is important to discover whether or not secondary teachers find instructional coaching to be useful. It is from this the following research questions were developed:

1) To what extent do teachers support an instructional coaching program?

2) To what extent do teachers perceive instructional coaching improves teaching practices?

3) What characteristics are necessary in having positive instructional coaching relationships between teacher and coach?

4) What elements are necessary in having a useful instructional coaching program?

Method Overview

This qualitative study used a phenomenological exploratory approach. Creswell (2013) described a phenomenological study as one that “describes the common meaning for several individuals of their lived experiences of a concept or a phenomenon” (p. 76). The purpose to this type of study is to use individual experiences to gain an overall understanding of the topic or situation, in this case, instructional coaching. Participants of this study were public secondary mathematics teachers in the state of Nebraska.
involved with an instructional coaching program. Participation in the study was voluntary and ten to forty-five minute interviews were conducted with 21 of the 22 participants. One participant chose to email a response.

**Definition of Terms**

Instructional coaching has been around since the 1970s with a major resurgence happening nationwide between 2005 and 2014 (Knight, 2007; Showers & Joyce, 1996; Wong & Nicotera, 2003). Through the course of the years, instructional coaching has taken on several different names and definitions including instructional facilitating and peer coaching (Cornett & Knight, 2009; Killion, 2009; Knight, 2007). For the purpose of this study the following terms have been defined and used in the given context:

**Adequate Yearly Progress (AYP):** Specific benchmarks of achievement designed and mandated by states and approved by the United States Department of Education (Resnick, 2003)

**Administrative Role:** A person in a position that uses observations and meetings as a means of evaluating a teacher, perceived to be higher in rank than teachers

**English Language Learner/Limited English Proficient:** Enrolled students aged 3-21 with difficulties in speaking, reading, writing, or understanding English so much so that it influences school performance and/or ability to participate fully in society (2012-2013 Nebraska State of Schools Report, 2013)

**Free and Reduced Lunch:** Percentage of students categorically eligible to receive free school meals because they, or any household member, receive benefits under SNAP, FDPIR, TANF or Foster Child. Children from households
with incomes at or below 130% of the Federal poverty level and children who are homeless, runaway, or migrant are also eligible (2012-2013 Nebraska State of the Schools Report, 2013)

**Instructional Coach:** Full or part-time professional developers that “work with teachers to help them incorporate research-based instructional practices” (Knight, 2007, p. 12), also known as instructional facilitator

**Instructional Coaching:** Form of individualized professional development focused on teacher improvement, also known as instructional facilitating

**Needing Improvement:** label given to a school that has not met AYP for at least two consecutive years

**No Child Left Behind Act of 2001 (NCLB):** Federal law enacted as a means of closing the achievement gap between students by holding states and schools accountable for student success

**Mobility Rate:** Percent of students that enter or leave the school between the last Friday in September and the last day of school (2012-2013 Nebraska State of Schools Report, 2013)

**Professional development:** “A continuous process of individual and collective examination and improvement of practice. It should empower individual educators and communities of educators to make complex decisions; to identify and solve problems; and to connect theory, practice, and student outcomes” (American Federation of Teachers, n.d.)
**Proficient level:** Standard level decided by individual states for each student to strive for, percent of students reaching the proficient level determines whether or not schools reach AYP

**Public Secondary School:** A school supported by public (taxpayers) and government funds intended for the education of students in grades nine through twelve

**School Improvement:** Status earned by a school that has not met AYP for two or more consecutive years in each student group (Johnson, 2013)

**Secondary Teacher:** Full-time teacher responsible for the education of students in grades nine through twelve

**Teaching Efficacy:** How effective a teacher believes themself and their teaching methodologies

**Teaching Methodologies:** Content-specific or general teaching strategies used by teachers to reach maximum effort and understanding from students

**Useful:** Having a positive influence; can be large or small scale

**Assumptions**

Within this study, it was assumed that at the participating schools, instructional coaching programs were in place as a method of professional development and teacher improvement. It was also assumed instructional coaches had training in coaching and were familiar with the school system and culture in which they were coaching.

**Delimitations and Limitations**

Specific limitations and delimitations existed in this study due to the nature of the participants. The study participants were delimited to mathematics teachers employed at
Nebraska public schools with an instructional coaching program in place. This hinders generalization across all school systems. Another delimitation of the study was the timing of the study. Interviews were conducted during the final quarter of the school year. Conclusions may have been different if interviewed at a different time in the school year. Also, the teachers in this study participated voluntarily. It is possible the opinions of voluntary teachers varied from the opinions of teachers that chose not to participate.

One limitation of the study was the difficulty in finding participants that met the necessary criteria (public, secondary, mathematics teachers, involved in an instructional coaching program). Population was limited to teachers in the subject area of secondary mathematics and the state of Nebraska. This significantly limited the pool of potential study participants. This, along with the qualitative nature of the study, disables to ability of the results to be generalized for all levels or subjects taught by all teachers. Another limitation may have come from bias in the wording, grammar, order of questions, and other such aspects of the interview questions. To minimize this limitation, secondary math teachers teaching in a public high school without an instructional coaching program piloted and edited the interview questions.

Being a phenomenological study includes the limitation of relying on the participant’s answers to find themes and develop theories. The researcher used interview answers as truthful statements from the participants and explored the data as such. Teachers may have chosen not to answer truthfully during their interviews without the researcher’s knowledge. The data also revolves around perceptions, which may be interpreted differently depending on the researcher. The results presented are based solely on the researcher’s findings and interpretations.
Significance of the Study

With instructional coaching becoming a major source of professional development for schools, it is important to continue research on its usefulness. Many of the studies completed are elementary and/or middle school focused, while few have concentrated on the secondary level (Knight, 2009; Polly et al., 2013; Rush & Young, 2011; Shidler, 2008). Findings from this study contributed to the research on instructional coaching by including data from the secondary level. This study also supplemented the limited research on teachers’ perceptions of instructional coaching. It is necessary to research teachers’ perceptions on these programs in order to form successful coaching programs. By adding data on teachers’ perceptions to the current literature, other researchers can use this information in conjunction with existing research to determine the overall effectiveness of instructional coaching.

This study may also assist secondary school administrators in the process of enhancing professional development for teachers. Instructional coaching is an option and this study may provide the necessary data to either move forward with design and implementation of an instructional coaching program or to forego the program in preference for another. Success has already been seen in the areas of literacy and reading coaching (Polly, et al., 2013; Rush & Young, 2012; Shidler, 2009). This study helped determine if success was found in the mathematics area, which may help administrative leaders differentiate their coaching based on subject area. This study also provided administrators with information on the characteristics necessary for coaching programs and coaches to be successful. The data also assisted higher education institutions in determining if similar instructional coaching programs could benefit their organization.
Summary

Chapter One reviewed the relationship between the NCLB Act of 2001 and the nation’s push for school improvement. It discussed how instructional coaching has become a popular form of professional development for many schools and is a method implemented to adhere to government-mandated changes for those schools not meeting AYP. While research about instructional coaching and its effectiveness does exist, very little research focused on the area of secondary education has been completed.

This phenomenological study expanded on this area of research and explored the perceptions of public secondary mathematics teachers on the usefulness of instructional coaching. It was conducted with twenty-two participants consisting of public school mathematics teachers in the state of Nebraska who were involved in an instructional coaching program. The study was based on personal interviews and one email with teacher participation being voluntary. The study provides data for administrators and fellow researchers to use in order to assist in decision-making and program development.
CHAPTER TWO: LITERATURE REVIEW

Introduction

The following review of literature has been compiled based on several articles and books the researcher studied. The researcher has done a thorough though not exhaustive review of literature, analyzed the literature resources, and found several themes connecting the research. This literature review begins with a basic overview of the definition and types of instructional coaching. It then covers the various themes found within the literature including professional development, roles, relationships, content coaching, expert coaching and problems/drawbacks. The review ends with literature supporting the use of instructional coaching and the use of instructional coaches as positive change agents inside schools.

Definition and Types

Coaching is an interdisciplinary concept that has spanned the decades and taken many forms. Coaching appears different for each school and situation so there is not one specific definition of instructional coaching (Horne, 2012; Knight, 2007; Steiner & Kowal, 2007). Many types of coaching require different definitions and have different tasks within the school. For instance, there are full-time coaches assigned to specific buildings and/or content areas, part-time coaches who split time between teaching and coaching or between buildings, and coaches that are simply teachers helping colleagues through peer coaching (Horne, 2012). Knight (2009) also described several types of coaching in his writing including cognitive coaching, peer coaching, literacy coaching, classroom management coaching, content coaching, blended coaching, and the regular instructional coaching. Each of these showcases how coaching programs can vary
immensely as a means of meeting local school needs (Steiner & Kowal, 2007). For a better understanding of the various types of coaches, a few have been described.

Cognitive coaches focus on teacher efficacy through the use of deep-thinking, reflective questions between coaches and teachers. This type of coach engages in conversations, observations, and rapport building with teachers to encourage and educate on how to thoroughly reflect on individual teaching practices (Knight, 2009).

Literacy coaches are focused strictly on literacy within schools. They use a variety of scientifically proven methods and tools to improve teachers’ practices and student learning (Knight, 2009). With the emphasis being on literacy, reading, writing, and all other literacy skills are the focus of the coaching initiatives as well.

In an attempt to narrow down a definition, Knight (2009) stated, “Instructional coaches partner with teachers to help them incorporate research-based instructional practices into their teaching so that students will learn more effectively” (p. 18). This definition is very similar to the goal of professional development for teachers.

**Professional Development**

Many different vocations require professional development as a means of staying abreast and knowledgeable of the different developing methodologies and practices (Mizell, 2010). From a general search of teacher professional development and continuing education, the researcher found that many state education agencies require professional development for teachers in order to practice in their field. The issue amid educators is not that professional development is needed; it is that *effective* professional development is needed (Knight, 2007; Wenglinsky, 2000; Wong & Nicotera, 2003).
Why Change Professional Development?

One influencing factor on the resurgence of instructional coaching has been the enactment of the No Child Left Behind Act of 2001 (Cornett & Knight, 2009; Darling-Hammond, Chung Wei, Andree, Richardson, & Orphanos, 2009; Horne, 2012). This Act increased pressure on schools to produce high performing students more consistently than before and forced many schools to focus on school improvement. One method of school improvement suggested and funded by NCLB is that of teacher professional development (NCLB, 2002). “In the 2001 No Child Left Behind (NCLB) Act, over $3 billion was dedicated to the Teacher and Principal Quality Training and Recruitment Fund” (Sumner, 2011, p. 13). This alone gave schools an opportunity to explore the realm of instructional coaching to see whether or not it would benefit their schools.

With teachers receiving professional development on a regular basis, it would seem student learning and overall school success would improve. However, Darling-Hammond et al. (2009) found that while 90% of American schoolteachers had participated in some form of professional development, very few were actually satisfied with the development they had received (p. 22). It was believed that teachers were able to attend these professional development trainings over the course of an hour, a day, or even a couple of days, return to school and then implement their new learning with ease (Showers & Joyce, 1996). However, research has been completed to refute this statement and necessary characteristics in creating successful professional development have been established (Darling-Hammond et al., 2009; Horne, 2012; Knight, 2005, 2007).
Successful Professional Development

Researchers have defined several characteristics of what makes professional development successful. Perhaps the characteristics most closely associated with this study would be those listed by Darling-Hammond et al. (2009), which indicated that professional development should:

- be intensive, ongoing, and connected to practice,
- focus on student learning and address the teaching of specific curriculum content,
- align with school improvement priorities and goals, and
- build strong working relationships among teachers.

Horne (2012) suggested follow-up meetings and trainings as another necessary characteristic of professional development. Polly et al. (2013) claimed there should be a direct link between professional development learning and classroom integration and practice. Often, teacher professional development meetings have little or no follow-through after teachers leave and the meetings commonly occur at an outside location. This is completely opposite of many researchers descriptions and beliefs of what an instructional coaching program as a form of professional development should entail (Knight, 2007; Horne, 2012; Polly et al., 2013).

Instructional Coaching

Traditional professional development is usually done in a large group format with instruction meant for all teachers of all backgrounds and content areas. However, when using coaching as a form of professional development, it becomes much more personal and teachers have more control over their learning (Horne, 2012). Knight (2007) simplified the connection between instructional coaching and professional development
when he stated, “Teachers engage in professional development every day – they just don’t do it with professional developers. Teachers learn from each other all the time, sharing lesson plans, assessments, activities, and ideas about individual students” (p. 3). In an effort to create more meaningful professional development, instructional coaching programs focus on this type of teacher-to-teacher interaction. The roles and relationships of instructional coaches vary depending on the school, cooperating teacher and situation. However, there are several commonalities found throughout the research.

**Roles**

Knight has been studying instructional coaching for over twenty years in partnership with the University of Kansas (2007). Through his research and studies, he determined the best way to incorporate an instructional coaching program into a school is to ensure both the instructional coach and teacher possess and maintain a partnership mindset. This mindset consists of the core principles of equality, choice, voice, dialogue, reflection, praxis and reciprocity (Knight, 2007).

These partnership mentality principles are similar to those found in other research. For instance, Steiner and Kowal (2007) listed interpersonal skills (voice and dialogue), pedagogical knowledge, and content expertise (praxis) as effective coaching skills. Shilder (2009) discussed the importance of coaches and teachers to be able to listen and observe one another to gather information and form the next steps (dialogue, reflection, praxis, reciprocity). Also, Polly et al. (2013) referred to the significance of teachers seeing instructional coaches as personal and professional resources in forming positive coach and teacher relationships (partnership). This research highlights not only the role of the coach, but the relationships needed for a coaching program to be successful.
Relationships

Instructional coaching is a method that could alleviate some of the isolation found in teaching. Horne (2012) supplemented this idea when he described schools as being structured in such a way that teachers are alone with few opportunities to collaborate with colleagues. With coaches and teachers working together in partnerships, relationships are formed. Research has shown positive relationships between teacher and coach to be vitally important for the success of an instructional coaching program (Horne, 2013; Johnson, 2013; Knight, 2007; Shidler, 2009).

Instructional coaching usually occurs one-to-one or in small groups and may span a time frame anywhere from a few days or weeks, to entire semesters or school years (Knight, 2009). This provides time for relationships to build and success to be gained. Shidler (2009) added a caveat to this when she stated, “More time is not always better. It is the type and quality of interaction that becomes a deciding factor” (p. 459).

Knight (2009) claimed one of the factors involved in positive teacher-coach relationships was ensuring open non-evaluative dialogue and observations between the coach and teacher as equal partners. He also claimed that coaches needed to enter into the program with humility so as not to appear arrogant and thus be unsuccessful building a positive effective partnership with their teacher(s) (Knight, 2007). McCrary (2011) also supported this claim in her research claiming individual characteristics of coaches and their relationships play an important part in how successful partnerships will be.
Knight (2007) additionally referred to the importance of positive relationships between instructional coaches and administration. He stated,

The instructional coach should be the right-hand person of the principal when it comes to instructional leadership in schools, but the principal must remain the instructional leader. No matter how effective an IC is, the principal’s voice is ultimately the voice that is most important to teachers (p. 190).

Showers and Joyce (1996) claimed the relationships of instructional coaches with administrators and teachers produced a greater sense of camaraderie and focus for faculty, which in turn created faculty cohesion and avenues for shared decision-making and methodological implementation. All of this research provides evidence to the importance of positive relationships between coaches, administration, and teachers.

It is clear relationships between coaches, teachers, and administrators are incredibly important. These relationships can have positive or detrimental influences on the overall success of the instructional coaching program (Horne, 2012; Knight, 2009; McCrary, 2011). Often, the teacher-coach relationship is stronger when the coaching is focused on content (Horne, 2012; Polly et al., 2013; Shidler, 2009).

**Content Coaching**

With multiple forms of instructional coaching existing in the educational world, few types have as much of an overall influence as that of instructional coaching focused on content (Horne, 2012; Knight, 2007; Polly et al., 2013). When asked in studies what would have had an effect on the success of coaching programs, many teachers referenced having their coaches actually possess degrees in or knowledge of the content area (Horne, 2012; Polly et al., 2013; Rush and Young, 2011). Shidler (2009) also found this type of
focused instructional coaching to be more effective than general coaching. This honed approach can revolve around specific teaching methodologies or a specific content area, similar to the way literacy coaches focus on literacy and its components.

This phenomenological study focused on the content area of mathematics. McCrary (2011) found that “teachers are most satisfied with instructional coaches who possess a level of mathematics expertise that contributes to an increase in the mathematics knowledge” (p. 94). When analyzing the studies focused on the area of coaching in mathematics, similar opinions were found. Polly et al. (2013) found that in order for mathematics coaches to be successful in supporting a classroom teacher, they needed to have knowledge of both the standards and curriculum of the school. This knowledge is important so both the coach and the teacher are focused on the material as much as they are focused on the process. When coaching is equally focused around content and methodology, the coaching program seems to be the most effective for teachers. When the program strays from the actual content, problems may occur.

Problems/Drawbacks

While there are several positives to having an instructional coaching program, problems have been suggested that might influence a school’s eagerness to establish such a program. For instance, many teachers find it difficult to have another teacher or adult in their classrooms (Horne, 2012; Knight, 2007; Rush & Young, 2011). Instructional coaches and administration must be aware of this fear and try to alleviate it before any instructional coaching program is adopted. Within his research, Horne (2012) found that “more experienced teachers tended to be uncomfortable with classroom observations and
were afraid that information would be shared with administrators” (p. 50). This fear seems to be a common feeling for teachers new to the instructional coaching partnership.

Other problems have been cited including a lack of training, limited funding, and limited evaluation of the program and/or coaches (Horne, 2012; Knight, 2007; Polly et al., 2013). Confirming this statement, Wong and Nicotera (2003) specified a large need for the coaches to be trained on effective professional development and methods of instructional coaching. Knight (2007) continuously referenced the need for coaches to not only have initial training, but to have constant training as they continue to develop.

**Support for Coaching**

Much of the literature and completed research found positive correlations between instructional coaching and student success, teacher efficacy, and teacher implementation of various methodologies (Knight, 2007; Teemont, Wink, & Tyra, 2010; Wong & Nicoterra, 2003). Edwards (2001) identified nine outcomes that could be expected through the use of an instructional coaching program (p. 1):

a) Increase in student test scores and other benefits to students

b) Growth in teacher efficacy

c) Increase in reflective and complex thinking among teachers

d) Increase in teacher satisfaction with career and position

e) Increase in professional climate at schools

f) Increase in teacher collaboration

g) Increase in professional assistance to teachers

h) Increase in personal benefits to teachers

i) Benefit to people in fields other than teaching
Several of these outcomes were visible in other research as well. For instance, Polly et al. (2013) found that coaches in general and in specific content areas were linked with positive gains in both implementation of research-based methodologies and student learning outcomes. They also found positive gains in the area of mathematics when an instructional coaching program was in place. All of this research provides a strong background for any school interested in beginning an instructional coaching program.

**Coaches as Positive Change Agents**

Multiple studies have shown instructional coaches as having positive impacts not only on the individual teachers they work with, but also the school as a whole (Knight, 2007; Polly et al., 2013; Rush & Young, 2011). Showers and Joyce (1996) found a domino effect occurred when teachers worked with coaches. After working with a coach, the teachers were able to present and model new strategies for colleagues not involved with the instructional coaching program. Showers and Joyce (1996) discovered that “teachers who had a coaching relationship…practiced new skills and strategies more frequently and applied them more appropriately than did their counter parts” (p. 14). These coaching relationships had positive results on both the teacher’s methodology usage and their general outlook on teaching (Johnson, 2013; Knight, 2007).

Knight (2009) found coaching increased teachers’ beliefs about their effectiveness within the classroom. He also claimed effective coaches have the ability to help teachers grow and improve to an extent they were not aware of before and in turn help others around them. Johnson (2013) summarized the role of instructional coaches when he said, “The goal of the coach is to provide job-embedded support and model research-based
best practices with organized methods that are sustainable. Instructional coaches are leaders who help develop and promote instructional leadership within a school” (pp. 2-3).

**Summary**

While most of the sections in this literature review demonstrated positive results from using an instructional coaching program, negatives were also identified. Research has been both quantitative and qualitative in nature, looking at student success, teacher improvement, and general opinions of teachers, coaches, and administrators.

There is still a need for research studying instructional coaching program’s impact on student performance and overall school influences over extended periods of time. Additionally, with most of the research focused on instructional coaching programs at the elementary level, more research needs to be conducted at the secondary level. There also seems to be a discrepancy in research findings revolving around coaching effectiveness in secondary school settings. Some researchers (Knight, 2007; McCrary, 2011) found positive results, while others (Horne, 2012) found negative results. It is important now, to investigate the reasoning behind these findings and delve deeper into secondary teacher perceptions on the usefulness of instructional coaching in various subject areas.
CHAPTER THREE: METHODOLOGY

Introduction

With the government requiring schools in the improvement stage to implement reform initiatives, instructional coaching has become an avenue embraced by many schools (Cornett & Knight, 2009; Darling-Hammond et al., 2009; Knight, 2007; NCLB, 2002). However, much of the research studying the effectiveness of instructional coaching has taken place in elementary or middle school settings. With information being limited in the secondary school arena, it is important research is completed focused on the secondary area. This phenomenological study explored the perceptions of public secondary mathematics teachers on the usefulness of instructional coaching in Nebraska.

The researcher chose a qualitative study design focused on individual teachers and their personal perceptions. Within the qualitative realm, the researcher chose a phenomenological approach. This type of study collects data from participants that have undergone or been in similar situations. For this study, each participant was involved in an instructional coaching program. Commonalities were found among participant responses and the researcher used this data to develop “a composite description of the essence of the experience for all of the individuals” (Creswell, 2013, p. 76).

Research Questions

At an elementary level, instructional coaching has been linked to positive gains in teacher efficacy, methodology adoption, and student learning (Polly et al., 2013). This study aimed to contribute data to the research base on instructional coaching, but at the secondary level and content area of mathematics. The researcher collected and analyzed data from the secondary education venue as a means of enhancing general information on
SECONDARY MATHEMATICS TEACHERS’ PERCEPTIONS ON THE USEFULNESS OF INSTRUCTIONAL COACHING IN NEBRASKA

instructional coaching while exploring the perceptions of public secondary mathematics teachers on the usefulness of instructional coaching. The following research questions were developed to guide this qualitative study:

1) To what extent do teachers support an instructional coaching program?
2) To what extent do teachers perceive instructional coaching improves teaching practices?
3) What characteristics do teachers feel are necessary in having positive instructional coaching relationships between teacher and coach?
4) What elements do teachers feel are necessary in having a useful instructional coaching program?

Description/Rationale of Participants

With instructional coaching mainly based in elementary and middle schools (Darling-Hammond et al., 2009; Polly et al., 2013; Shidler, 2009), participants that met the specified criteria for this study were difficult to find. Creswell (2013) identified this difficulty in relation to having each participant experience the same type of phenomenon. For this study, teachers had to have met the following criteria to participate in the study: (a) teach at a public high school, (b) teach mathematics, and (c) be involved in an instructional coaching program. These criterions were chosen in order to gain a study sample different from the data that research has already studied. Four Nebraskan schools with an instructional coaching program in place were chosen as focus schools in the study. The population of the schools was between 1,000 and 2,250 students with varied
SECONDARY MATHEMATICS TEACHERS’ PERCEPTIONS ON THE USEFULNESS OF INSTRUCTIONAL COACHING IN NEBRASKA

demographics. From these four schools, twenty-nine teachers were asked to participate. Twenty-two participants met the criteria and agreed to participate in the study.

Little research has been completed exploring instructional coaching at the secondary level and little or no research has been completed focusing on the area of mathematics (Horne, 2012; Johnson, 2013). This is one reason why this study was of particular importance for the education and research communities. This study also provided secondary administrators and higher education institutions information on teacher perceptions about the usefulness of coaching and coaching programs.

Instrumentation

With this study exploring individual teacher perceptions on their involvement in instructional coaching programs, it was important the data gathered conveyed the true essence of participants’ thoughts and feelings. These human-interest data were gathered through the use of personal interviews and one email response. Creswell (2013) cited interviews as a common form for collecting data for qualitative studies.

The researcher began by asking various Nebraska school district administration, instructional coaches, field experts, and teachers for possible candidates who were willing to participate in the study. The researcher then used snowball sampling as a means of reaching the “target population” (Atkinson & Flint, 2001, p. 2). Possible candidates were contacted to determine if they met the specified criteria and were willing to volunteer their time for the study. The researcher discussed a time and a venue for interviews with the willing participants and planned on interviews lasting between thirty and forty-five minutes. Upon completion, the interviews actually lasted between ten and forty-five minutes. Each interview was recorded using the digital recording program
Garage Band and saved to a password-protected file to ensure confidentiality. During the interviews, the researcher also documented field notes on non-verbal communication such as body language and facial expressions. The interviews provided the teachers an opportunity to speak freely about their experiences within the instructional coaching program while contributing information for educational research as a whole.

The interview questions created by the researcher were tested using a group of teachers within the researcher’s school, as a means of receiving feedback on the clarity and intent of each interview question. The questions generated served as a guide for the interview, but the researcher allowed the conversation guide the interview more than the scripted questions. As a mathematics teacher, the researcher was aware of possible bias appearing in the questions and bracketed her personal opinions. Following Creswell’s (2013) suggestion, the researcher attempted “to take a fresh perspective toward the phenomenon under examination” (p. 80). The researcher used bracketing to reflect on her background and preconceived ideas. This bracketing took the form of a list describing areas she believed bias may enter the study. This bracketing helped the researcher prevent bias from entering the study during the interview and while analyzing the data.

Throughout the interview, the researcher was aware of proper exploratory questioning and comments. They were not leading nor did they suggest an opinion able to be gleaned by the participants. This was true for the questions and comments that were verbalized and the non-verbal communication as well. The researcher used field notes to record observations made during the interviews. This provided an added element to the interview and assisted in the completion of successful data gathering.
The Researcher’s Role

As a secondary mathematics teacher in Nebraska, the researcher had a common link with the study participants. This link may have helped or hindered the researcher as the interviews were conducted. Having the same background as the participants opened the lines of communication between the researcher and the teachers. It may have also increased open participation during the interview. This math background allowed for ease and understanding of different terminology used regarding education and/or mathematics. The researcher was aware the study strictly focused on mathematics teachers and used her awareness to guard against allowing bias to enter the interviews in the form of opinions about methodologies and best practices in mathematics education.

The main difference between the study participants and the researcher was the participation in an instructional coaching program. The researcher had not had this experience and was therefore free of personal experience and/or opinion referencing the usefulness of an instructional coaching program. With the researcher using bracketing, the interviews themselves and the study as a whole was free of bias.

Data Collection Procedures

Data collection began in March of 2014 and was completed by the end of April 2014. Interviews were completed with the participants that met the criteria and were available for a face-to-face interview. One participant declined an interview, but sent the researcher an email describing her thoughts on the usefulness of instructional coaching. Participants were informed their responses would be kept confidential and that their participation was voluntary. Participants were also informed of their power to withdraw from the study at any time without consequences and had the opportunity to add or redact
information from their interview responses upon receipt of their transcripts. One of the goals when doing interview research is to reach saturation within participant answers. The researcher was able to reach saturation at each of the four schools. Saturation in various categories was also met amongst the entire interview set.

**Data Analysis Plan**

With multiple interviews taking place, it was important for the researcher to have a means of analyzing the individual interviews as a complete set of data. In order to meet the goals of this study, in the time allotted, the researcher used an online service, Rev.com, to transcribe verbatim the interviews conducted. An audit trail from the dissertation committee was used and transcripts were shown to the participants as a member check, ensuring the participant’s true thoughts and feelings were represented and allowing them the opportunity to correct or redact information provided and add any information they felt necessary. The researcher also transferred these transcripts into another computer software program, NVivo, for analysis and insight. This program found similarities and distinguished patterns between the various interview transcripts.

The researcher further analyzed the data manually using open coding to separate the interviews into smaller sections to analyze. Axial coding followed this with the researcher using the interview questions as a guide for analysis. The researcher then completed a literature analysis comparing the study outcomes to the current research.

Each of these sections of analysis contributed to the researcher’s triangulation of data. Creswell (2013) refers to triangulation as a process that “involves corroborating evidence from different sources to shed light on a theme or perspective” (p. 251). The researcher’s sources included interviews, field notes, literature, one written response, and
pilot responses. Every source of data used assisted in the development of the researcher’s
discovered themes. One form of triangulation also occurred through the researchers use
of multiple sites for interviews and teachers with various teaching experience. This
triangulation was incorporated as a means of increasing the validity of the study.

Quality and Verification

The researcher had a pilot group of teachers review the interview questions to
ensure they were clear and focused on the research questions. The researcher also gave
each participant the opportunity to review his or her interview transcripts to ensure
accurate representation of their thoughts and feelings. The researcher’s committee served
as outside auditors. The researcher maintained an audit log describing the connections
between the data and each step completed as the study and data analysis progressed.

Ethical Considerations

There were ethical considerations kept in mind for not only the study but for the
researcher and participants as well. Participants were made aware their participation in
the study was voluntary and that they would not be receiving any monetary compensation
for their time or answers. The researcher also ensured the anonymity of the participants
through coding and other data analysis procedures. The study design received IRB
approval prior to any interviews being conducted. In order for the study’s results to be a
meaningful addition to the current research, this study was both ethical and valid.

Summary

This qualitative phenomenological study sought to answer the question, what are
the perceptions of public secondary mathematics teachers on the usefulness of
instructional coaching in Nebraska? Data were gathered through interviews and email
correspondence with voluntary participants providing insights detailing their experience with an instructional coaching program. The participants were mathematics teachers in Nebraskan public secondary schools involved in an instructional coaching program. The researcher used bracketing to keep personal beliefs and opinions out of the study as much as possible. This was seen not as a matter “of forgetting what has been experienced but of not letting past knowledge be engaged while determining experiences” (Creswell, 2013, p. 79). The researcher adhered to IRB requirements with regards to completion of the study. Each of these precautions was taken as a means of ensuring study validity.
CHAPTER FOUR: FINDINGS

Introduction

This phenomenological study explored the perceptions of public secondary mathematics teachers on the usefulness of instructional coaching in Nebraska. The researcher chose interviews as her main source of data and gathered several different opinions and ideas on instructional coaching in general and the programs in place at the participating schools. Chapter Four begins with a review of the methodology and the procedures used to analyze the data. The researcher then reports on the demographics of the participating schools and teachers as a reference and comparison for the reader. The chapter concludes with a data summary categorized by themes and research question.

Review of the Methodology

This qualitative study used a phenomenological approach. Participants were public, secondary, mathematics teachers in Nebraska involved in an instructional coaching program within their school. Participation was voluntary with data gathered from face-to-face interviews of twenty-one participants and one participant submitting an email response. Interviews were completed within the teachers’ school of service and lasted between ten and forty-five minutes. Each interview was recorded using Apple’s Garage Band program and stored in a password-protected file. The interviews were then transcribed verbatim using the Rev.com service. Participants were advised demographic information would remain de-identified to keep personal identities anonymous.

Each interview began with the researcher explaining the purpose of the study and asking for the participant’s teaching experience. The researcher used a broad set of questions (Appendix A) to guide the interview. However, the researcher allowed the
interview responses to generate sub questions. Simultaneously, the researcher took notes on observations focused on non-verbal communication. The researcher listened to each interview at least twice to gather commonalities and ensure proper transcription. Within each school, the researcher was able to reach saturation, as well as with the interviews as a whole. Each saturation point offered understanding of the themes within the study.

The researcher had a common connection to the participants as a public secondary mathematics teacher. However, the researcher had never been personally involved with an instructional coaching program. Prior to the interviews, the researcher used bracketing to identify and avoid any personal or professional bias from entering into the study.

**Data Analysis Procedures**

Once interviews were conducted, the researcher used Rev.com to transcribe the interviews verbatim. The researcher listened to each interview while reviewing the corresponding interview transcript and corrected any transcription errors found. The researcher then provided participants their transcripts and a one week timeframe to change, add, or redact transcript information provided during the interview.

The researcher used open coding and divided the data into smaller sections individually focused on a theme. The researcher continued with axial coding and found commonalities within the broad categories. These commonalities became the basis of the data analysis themes and the answers to the research questions.

**Participant Demographics**

**School Demographics**

Participants were chosen from four Nebraska high schools. Each high school had a population between 1,000 and 2,250 students. The various demographics of the four
schools can be seen in Table 1 (2012-2013 Nebraska State of the Schools Report, 2013).

The researcher chose to show each school’s percent population of free and reduced lunch students, ELL students, and the school mobility rate. This table shows the study data gathered was from teachers at schools representing various populations.

Table 1

*Population Demographics of the Four Participating Nebraska Schools*

<table>
<thead>
<tr>
<th></th>
<th>Free and Reduced Lunch</th>
<th>ELL</th>
<th>Mobility Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>School #1</td>
<td>68.3%</td>
<td>11.1%</td>
<td>15.1%</td>
</tr>
<tr>
<td>School #2</td>
<td>50.8%</td>
<td>2.5%</td>
<td>9%</td>
</tr>
<tr>
<td>School #3</td>
<td>64.4%</td>
<td>4%</td>
<td>11.5%</td>
</tr>
<tr>
<td>School #4</td>
<td>26.1%</td>
<td>0.9%</td>
<td>4.6%</td>
</tr>
</tbody>
</table>

As stated in Chapters One and Two, some schools are choosing to participate in instructional coaching as an adjustment meant to meet government standards. Table 2 (2012-2013 Nebraska State of the Schools Report, 2013) shows each participating school’s percent of students that scored at the proficient level for three consecutive school years. Because the study participants were math teachers, the researcher analyzed the mathematics portion of the Nebraska State Mathematics Assessment (NeSA-M).
Table 2

*NeSA-M Percent Proficiency of the Four Participating Nebraska Schools*

<table>
<thead>
<tr>
<th></th>
<th>2010-11</th>
<th>2011-12</th>
<th>2012-13</th>
</tr>
</thead>
<tbody>
<tr>
<td>School #1</td>
<td>46</td>
<td>50</td>
<td>54</td>
</tr>
<tr>
<td>School #2</td>
<td>44</td>
<td>49</td>
<td>43</td>
</tr>
<tr>
<td>School #3</td>
<td>47</td>
<td>41</td>
<td>46</td>
</tr>
<tr>
<td>School #4</td>
<td>75</td>
<td>65</td>
<td>70</td>
</tr>
</tbody>
</table>

When schools do not reach AYP for two or more years in a row, they must make changes within the school and department. These changes need to show the schools are working towards improvement. In order for a school to meet AYP, each individual student demographic must make adequate yearly progress. Table 3 (*2012-2013 Nebraska State of the Schools Report*, 2013) reports each participating school’s AYP results for NeSA-M for both the 2011-12 and 2012-13 school years. These were overall AYP results figured from all student demographic groups.

Table 3

*NeSA-M AYP Results for the Four Participating Nebraska Schools*

<table>
<thead>
<tr>
<th></th>
<th>2011-12</th>
<th>2012-13</th>
</tr>
</thead>
<tbody>
<tr>
<td>School #1</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>School #2</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>School #3</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>School #4</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Though the AYP results varied, and some schools met their required progress levels, all four schools for both school years were labeled by the government as “needs improvement”. Chapter One referenced that a school must reach AYP for each demographic group in the school in order to remain at an adequate government status. Therefore, even if a school meets AYP in general, they may not reach the required progress for each individual demographic group and thus need improvement.

Teacher Demographics

Twenty-nine teachers were contacted and asked if they would like to participate in the study and twenty-two teachers agreed. The teaching experience of the participants ranged from two months to thirty-seven years. Six participants taught three or fewer years. Six participants taught between four and nine years. Three participants had been teaching for ten to fifteen years and seven participants taught for sixteen or more years. There were ten male and twelve female participants. Twenty-one of the participants were interviewed with one participant choosing to submit a response via email.

Results

The author chose to organize the data based on common themes. The information was further sorted by teaching experience to see if commonalities existed in participant answers. These themes led to general answers to the four research questions of the study:

1) To what extent do teachers support an instructional coaching program?

2) To what extent do teachers perceive instructional coaching improves teaching practices?

3) What characteristics are necessary in having positive instructional coaching relationships between teacher and coach?
4) What elements are necessary in having a useful instructional coaching program?

The interview responses provided similar arenas the teachers most frequently mentioned when discussing their thoughts on instructional coaching. Answers were analyzed and connections were found. The researcher identified seven different themes.

**Identified Themes**

**Theme #1: Usefulness**

Twenty-one out of the twenty-two participants believed instructional coaching was helpful and useful. This showed an overwhelming support of instructional coaching programs. These positive responses held various caveats and/or ideas about what the participants believed would make an instructional coaching program or instructional coach useful. Individual areas the participants found instructional coaching to be most helpful and useful were also described. These areas included instructional strategies, new ideas, feedback, current research, and school culture.

One participant did not think instructional coaching was useful. The participant believed that she personally had enough information and did not require the use of an instructional coach; “I don’t want or need someone trying to help me.” General thoughts on instructional coaching were not given from this participant but rather specific thoughts on the coach and coaching program used in her district were described.

**Sub-theme: Veteran teachers.** Thirteen of the twenty-one participants that responded positively to instructional coaching being useful believed that instructional coaching could be useful for both new and veteran teachers. Of these thirteen, eleven described the lack of willingness for veteran teachers choosing to participate in the program. They explained many veteran teachers already, “…have their management
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style;” “...have an idea of what they’re doing or going to do;” “...feel like they don’t need as much help or something;” and “...are more set in their ways.” Yet, each of these respondents still felt instructional coaches could help the veteran teachers. They believed that coaches could help “...if you are switching courses, to something you haven’t taught before;” get “...the perfect outcome that I’m looking for;” and “... think about things that maybe they didn’t think about before or they thought about and they forgot.”

Sub-theme: Inexperienced teachers. The eight other respondents stated instructional coaching was much more useful for inexperienced teachers. While they were not against veteran teachers using them, they believed the program would benefit new teachers much more. Their explanations included these statements: “That whole getting ideas piece is so important for new teachers;” “A brand new teacher, might need a year or two of coaching until they’re really comfortable with what they’re doing;” and “Being a new teacher, it is just knowing that I have somebody I can rely on”.

Theme #2: Mandatory Participation

Though results were mixed, more people believed participation in an instructional coaching program should be mandatory to some degree. Often their reasoning revolved around the idea that, “If it was a volunteer program, there would be a lot of teachers who would not do it.” Four teachers gave ideas of minimum requirements for involvement in the program including, “...maybe once a month just to touch base;” “...make sure that all of your teachers are utilizing that resource, but you encourage them to utilize it in a way that they’re going to feel most comfortable with;” and “...at least two lessons”.


Those that implied it would be better if the program were voluntary stated participation should be an option. They said, “I think you see more implementation of changes when it’s teacher initiated and teacher chosen type professional development.”

**Theme #3: Common Backgrounds**

The majority of comments relating to this theme revolved around the two categories of subject specific and age specific. This difference was discovered through participant responses and individual perceptions and opinions on the interview questions.

**Sub-theme: Subject specific.** Of the 21 participants that felt instructional coaching would be useful, three of them did not feel it was necessary to have a coach be subject specific, but each felt it would be helpful. One of these teachers believed that it would depend on who was receiving the coaching. The teacher believed if the focus was on general classroom strategies, then content would not have an impact. Another of these teachers believed they possessed enough knowledge and resources related to their content or were comfortable enough finding resources on content. The third teacher stated, “Instructional strategies are not content-exclusive. They are classroom management.”

These three teachers varied in classroom experience from one to fourteen years.

However, being content-specific was a point of emphasis for several teachers. With this study’s participants all being math teachers, thoughts were usually focused on the subject of mathematics. This was one of the biggest downfalls noted about the individual district or school programs in which the teachers were participating. Several teachers from two of the schools felt the coach’s lack of preparation and knowledge in mathematics severely limited the coach’s effectiveness. One teacher stated their coach was “…not quite the expert on that high a level math” and that this lack of knowledge set
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a barrier up between the teachers and the coach. Another stated, “Not just how you teach but what you teach is important.” One participant focused on specific subjects stating,

I think a lot of the other areas can go together, Science, Social Studies are just information, but with math when you get into techniques and just the way the kids think, it needs to be a math background. I don’t think that is true for all contents like I said, but math I think you really need a good solid background in math, and current research in math and best practices in math.

Another teacher also commented their instructional coach had great ideas, but with a lack of math background, difficulty was found trying to associate the information with a mathematics classroom. The methods were geared more towards the general classroom.

Although three teachers did not think it necessary to have subject-specific coaching, they did agree with the others that it would improve the coach/teacher relationship. All twenty-one teachers interviewed felt instructional coaches should be subject-specific and have a mathematical background in order for the coach and instructional coaching program to be most useful for the teachers.

**Sub-theme: Age specific.** Participants also discussed the importance of the instructional coach having a background in and experience with the secondary level. The thoughts and comments varied between experience with students of specific ages in years and grade level and age in reference to the specific math classes and levels such as Algebra and Calculus. One of the main areas of complaints about the teachers’ programs was the lack of the coach’s experience at the high school level. One teacher stated,

I’ve taught middle school, high school, and a community college and I will tell you, all three levels are different. How you approach things, how you interact
with your clientele is different. What works with a seventh grade brain is not
going to work with an eleventh grade brain. They’re just different.

Within the four schools where participants taught, two of the coaches had middle school backgrounds, one had an elementary background, and one had high school experience before more recent administrative experience. One participant related a story about their K-12 instructional coach being asked to help in an elementary classroom and not having any idea of how to present the information to this age group. The teachers not only believe an instructional coach should be subject-knowledgeable, but they should also be experienced and knowledgeable at the secondary level.

Theme #4: Job Description

Within the interviews, the researcher asked participants to describe what they would write in a job description for an instructional coach. Multiple answers were given and from these answers the following sub-themes were formed.

Sub-theme: Personality. Of the twenty-one interviews conducted, twelve believed an instructional coach’s personality was as important or more important than their professional duties. These participants began with a description of the person rather than the duties the job would entail. Descriptors frequently used within those responses included, people person, great communicator, advocate for the teachers, easygoing, open minded, and approachable. The respondents then continued to describe the tasks they believed an instructional coach should be responsible for participating in and completing.

Sub-theme: Knowledgeable. Six of the interview respondents began answering this question by referencing knowledge. However, the form of knowledge they discussed varied. A couple teachers said content-knowledge was the most important aspect. Others
began by discussing the coach needing knowledge of instructional strategies and using that knowledge to create coaching plans, share ideas, and provide feedback.

**Sub-theme: Responsibilities.** One responsibility, related to knowledge, opined by several interviewees was that of being current with the research. This included attending conferences, researching professional development, researching brain and child development, and staying up-to-date on current teaching trends and strategies.

Another responsibility requirement teachers promoted was the instructional coach seeking out the teacher to begin the instructional coaching process rather than relying on the teacher to find and meet the coach. This included the coach observing the teacher and their classroom providing both quick and substantial feedback and possibly creating a coaching plan. One teacher included, “They would have to commit some serious time to observation and feedback” in their response. Another stated, “That person would have to spend a lot of time in your classroom, watching you.” Along this same idea, another suggested providing teachers an opportunity to view other classrooms to gather new strategy ideas. The instructional coach would teach lessons in the observer’s classroom, thus allowing the teacher to leave and observe other master teachers or coaches.

**Theme #5: Current Program Characteristics**

Many interview responses revolved around describing the specific instructional coaches at the schools rather than the program as a whole. The number of positive and negative comments varied from school to school based on the program, but also varied from person to person. The opinions of the respondents were broad and saturation was met individually within three of the four schools and within the study as a whole to provide the following positive and negative comments.
Sub-theme: Positives. The two main positives mentioned most frequently by teachers were the willingness of the coach to help the teachers and the positive encouragement given to the teachers. Teachers in each school mentioned being individually contacted by their instructional coach. They reported the coaches sought them out to see how they were doing and how they could assist the teachers.

Many teachers described their coach helping them try new strategies within their classrooms. There were several references to the coach physically entering their classrooms and either assisting the teacher in implementing a new strategy or demonstrating the strategy for the teacher. For instance, one teacher reported,

She’s willing to come in and lay it on the line and try to help you out and show you how she would do it. And is willing to let a teacher observe her because then they’re going to be more willing to have her in the room if she’s going to be willing to teach with them in the room.

Another promoted their coach saying, “If we need him to come in and teach a class, or do intervention, to help, he is here for us.” Some teachers that did not reference this, pointed out they believed their coach would be willing to enter their classrooms and co-teach with them, but the teachers had yet to seek them out for this invitation.

Positive encouragement and feedback was the other item continually described during the interviews. Eleven teachers noted their coach was observing and offering suggestions for the good of the teacher and the classroom rather than the teacher being critiqued or evaluated. This positive was prominent for some teachers, as they have had multiple instructional coaches during their teaching careers, with many feeling as though they were being evaluated with former coaches.
Sub-theme: Negatives. The primary negative opinion made evident by the interview participants was the availability of the coach. The description of a lack of availability was often followed up with the reasoning of being spread too thin amongst the district buildings. Every participating school’s instructional coach had multiple buildings and grade levels they were responsible for coaching. Multiple respondents affirmed the coach was “spread too thin” and thus believed they were at a disadvantage.

Eight teachers referenced the lack of knowledge or grade-level knowledge as a major detriment to the instructional coaching program. Again, many teachers believed this was a necessity when assigning someone the role of instructional coach. Knowledge of the school and district itself was another item discussed by a couple teachers. One complained their coach was unaware of how to handle specific situations because the coach had not been in the classroom and around the culture for enough time.

When referring to previous coaches, four teachers iterated they had felt as though they were being evaluated. One went on to say, “It felt like we were being spied on.” Another teacher affirmed this view by stating the instructional coaching program was formerly seen “... as an evaluative tool from district admin (administration).” This negative feeling directly contrasted the positives they perceived with their current coach.

One other negative discussed by the participants was a lack of definition of what the instructional coach was actually used for in the school and their specific responsibilities. Some responses along this idea included, “I guess I don’t even know what their job description is;” “Our coach has not explained why he has adopted our department;” “I honestly don’t know what ours does;” “I don’t even know if that’s his job;” “It lacks a clear definition of what their job is. I think that I don’t know what they
want as a district;” and “I guess I don’t know for 100 percent sure what instructional coaching is.” Time and availability, lack of knowledge, evaluative, and lack of job description were the four negative areas most frequently mentioned.

**Theme #6: Adjustments for a More Successful Instructional Coaching Program**

As made somewhat evident by the previous responses, one of the main areas teachers suggested be adjusted was the number and location of the instructional coaches. Teachers stated this change would allow the coaches to focus more time on the individual teachers and not be spread too thin. This was affirmed by one teacher’s statement that the way their program was currently set up did not “…give that individual enough time to actually spend more one-on-one time” with teachers. Nine teachers included the lack of time and presence, as a concern the district should address.

Another suggestion made by the teachers was hiring instructional coaches with knowledge for the placement they are receiving. This includes content knowledge and grade level expertise. Some teachers took this further and stated they would like to see instructional coaches “…still in the classroom at least for maybe two periods…still teaching at least one class.” The teachers felt this was important as a way of keeping the instructional coach connected to the classroom and teachers situations.

Again, connecting the negative descriptions with the adjustments, participants referenced the need for a proper job description for the instructional coach. One teacher requested training for the teachers describing, “Here’s who she is, here’s who he is, and here’s the things that they can do for you.” Another teacher continued this thought and brought other stakeholders into the response stating, “The instructional coach needs to have a clearly defined job description, and that needs to be known across everybody—
students, teachers in the building, parents. People need to know what the purpose of having an instructional coach is.” Number, location, knowledge, and job description were each given by participants as possible adjustments to improve and/or sustain the success of their district’s instructional coaching program.

**Theme #7: Ideal Instructional Coaching Program Characteristics**

There were several different responses revolving around the participants’ idea of a successful coaching program. Three teachers stated they would like one instructional coach for each grade area (K-6, 7-8, and 9-12). One of these teachers stated, “I think our instructional coaches are really busy at the middle school between the three of them.” Another related grade level and subject area saying an ideal world would be “…having one for high school and one for the Middle School Math Department.”

Six teachers believed it would be best if there were one instructional coach for each building within the district. One of the main reasons for distributing the instructional coaches in this manner was availability. Many teachers felt their coach was not present enough to make a difference or ask for assistance. One teacher affirmed, “I think if she was contacting me more, I maybe would utilize her more.” Another teacher continued, “I’d like to know if I need help they are here…even if I don’t need it.”

Three other teachers took the ideal distribution one step further by stating they would like the instructional coaches to be allocated one per building and per subject area, namely for Math, English, and other subjects. Each respondent mentioned the cost of this but deferred back to it being their “ideal” instructional coaching setup. While the opinions of the participants varied, each felt it was necessary to have multiple instructional coaches distributed across the district in order to be most successful.
The purpose of this study was to explore the perceptions of public secondary mathematics teachers on the usefulness of instructional coaching in Nebraska. Within the study, there were four research questions the researcher aimed to answer:

1) To what extent do teachers support an instructional coaching program?

2) To what extent do teachers perceive instructional coaching improves teaching practices?

3) What characteristics are necessary in having positive instructional coaching relationships between teacher and coach?

4) What elements are necessary in having a useful instructional coaching program?

Interview responses, identified themes, and existing literature have provided the following summarized results for the research questions. The themes previously discussed fit well within the research questions as visible in Figure 1.

![Figure 1. Summary of findings. This figure relates the findings to the research questions.](image-url)
General Support

The first research question asked about the participant’s support of instructional coaching. Twenty-one of twenty-two respondents believed instructional coaching was useful. They were in favor of it in their school and department so long as the coaching was done properly. Knight (2007) referred to instructional coaching as a form of professional development for teachers. Many of the interviewees believed the same based on their responses. One of the respondents stated, “There are a lot of teachers that could definitely benefit from the instructional support, getting strategies, content ideas.” Another participant went on to say, “I think that they are extremely helpful, and they can provide insight on so many different things.” Commonalities spanned the participant’s entire range of teaching experience (2 months – 37 years). The extent of how supportive the participant’s were of a program varied depending on the program’s design.

Teaching Practices

Similar to research question one, question two asked about teacher’s perceptions on instructional coaching’s ability to improve teaching practice. Seven participants believed they had highly positive experiences with their current coaches and/or programs. Each of these respondents believed their coach was not only helpful, but also provided resources and ideas that improved their classroom teaching or classroom management practices. One participant stated, “I’ve utilized her with ideas on a topic that I was struggling with to really know how to get kids engaged.” Another teacher added that the coach suggested a strategy for the classroom and followed-up with the teacher on how well it worked and what could be adjusted to make it more productive in the classroom.
The other respondents believed instructional coaching could improve teacher practices if the program were designed differently from what they experienced or if the coach was different. One of the main complaints was time. Many respondents believed that if the coach was available more or if the instructional coach’s home office were in their school, the teachers would utilize the expertise of the coach more often. The researcher also found participants believed they would be more receptive to receiving and utilizing instructional coaching if their coach was knowledgeable, educated, and/or experienced in the area of not only mathematics, but at the secondary grade level as well. Each participant agreed having a content specific coach would be beneficial.

**Relationships**

Responses revolving around what characteristics were necessary to having positive instructional coaching relationships between a teacher and a coach varied. The main characteristic given by participants was time. The teachers believed that if a relationship were to form, it would require focused time. The idea of time was discussed both in terms of actual minutes and meetings with the coach as well having the coach on location and available to the teachers. One respondent said, “I don’t know how thin she’s spread. I think if she was contacting me more, I would maybe utilize her more.”

Another characteristic commonly stated in the interviews was that of a partnership mentality. Participating teachers wanted to know their instructional coach was working with them instead of forcing a preconceived agenda upon them. Several participants felt as though their instructional coach was working for the administration, somewhat as a spy, rather than for the teachers and their improvement. One participant insisted, “I felt like I was being evaluated all the time.” In reference to a prior coach, another participant
stated, “It kind of came across as if she was judging you.” This partnership mentality is at the forefront of Knight’s (2007) research and description of instructional coaching.

There were teachers that felt a partnership mindset was already in place between themselves and their coach. One teacher described the coach saying, “I don’t feel like I’m being evaluated and I feel she really wants to help.” Similarly, another participant described the coach as coming across as a partner with the coach telling the teacher, “I am not an administrator, I’m not here evaluating you.”

Necessary Elements

Time and Location. As previously mentioned, the main elements teachers identified as necessary for a successful instructional coaching program were time and locale. The majority of participants interviewed believed their coach was overwhelmed with the amount of teachers they were responsible for coaching. The coach at each school either had multiple schools with numerous teachers they were trying to coach or simultaneously held another position within the district which took away some of the time that may have otherwise been spent coaching. Knight (2007) felt it necessary to have the coach focused solely on coaching in order to have a successful program.

Along with the necessity of time was location. Participants often noted the difficulty in finding the instructional coach and/or meeting with the coach. Teachers were often unaware of when their instructional coach was available for meetings or classroom observations and were thus unable to utilize their coach. One teacher reflected on this and believed for the coach to be successful, “They’re not going to be bouncing around in other buildings and having to travel.” Other teachers reflected on being unsure of when their coach was in their building or available to meet with teachers.
Coaches. Though not a tangible element, another necessary item often mentioned by teachers was that of simply having a good coach. When asked about what their job description for a coach would be, the majority of respondents began with a statement about personality. Of the descriptions from the interviews, the five most common words used were people-person, approachable, nonjudgmental, trustworthy, and creative. A graphic displaying the twenty-four most frequently used descriptors may be seen in Appendix B. Knowledge of content, grade level, and teaching strategies were likewise named as important factors for a successful instructional coach. Many participants also believed teaching experience was a factor in being an effective coach and maintaining a successful and useful instructional coaching program. Teachers believed this knowledge connected the coach with the classroom teacher by providing common ground.

Summary

Chapter Four presented participant demographics, explained themes developed by analyzing interview data, and provided categorized answers to the research questions. Overall, participants found instructional coaching to be useful. Respondents identified several characteristics they wanted to see in a coach and criteria they believed would create a successful instructional coaching program. These included ideas on mandatory participation in the program, common backgrounds, personalities and responsibilities of the coach, and the number and location of coaches within a district. These ideas were summarized using the data gathered. The existing research and literature supported the general findings of the research questions. The information was reported in a non-biased format portraying the teachers’ perceptions on the usefulness of instructional coaching.
CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

Introduction

With educational reform and improvement at the forefront of many discussions and debates within the United States, it is important to study the various avenues school districts are choosing to take towards improvement. When schools do not meet their predetermined AYP for two or more consecutive years, they are required to make changes and demonstrate they are working towards improvement. One of the interventions being chosen by many schools is instructional coaching. This form of professional development focuses on teacher enhancement with the hopes of student and overall school improvement. However, little research has been completed on the effectiveness of instructional coaching, especially at the secondary level.

This chapter summarizes the study, reviewing the purpose, research questions, data collection, data analysis, and major findings. It presents findings related to the literature and surprises encountered by the researcher. The chapter discusses implications for action and concludes with a list of recommendations for further research.

Summary of Study

The purpose of this study was to explore the perceptions of public secondary mathematics teachers on the usefulness of instructional coaching in Nebraska. This study added to the existing literature by providing data from the secondary level. This study also provided information for administrators and school board members about designing instructional coaching programs and how to make them successful. The study was based around the following research questions:

1) To what extent do teachers support an instructional coaching program?
2) To what extent do teachers perceive instructional coaching improves teaching practices?

3) What characteristics are necessary in having positive instructional coaching relationships between teacher and coach?

4) What elements are necessary in having a useful instructional coaching program?

**Review of Data Collection and Analysis**

This phenomenological study explored the perceptions of public secondary mathematics teachers on the usefulness of instructional coaching in Nebraska. Twenty-nine people were asked to participate with twenty-two agreeing. The participants’ teaching experience varied between two months and thirty-seven years. They came from four public high schools in Nebraska with populations from 1,000 to 2,250 students of various demographics. Twenty-one of the participants completed face-to-face interviews with one person electing to submit an email response to the researcher’s interview request. All interviews were recorded using Garage Band and transcribed verbatim through Rev.com. A member check was included giving participants an opportunity to edit the transcripts ensuring their true thoughts and beliefs were represented.

The researcher used bracketing to identify any bias and help eliminate it from the study. The researcher’s committee provided an audit trail and participant data was coded to ensure anonymity within the study. Data was coded throughout the analysis with the researcher looking for patterns and commonalities. The researcher then identified several themes and subthemes that clearly presented the participants’ perceptions on the usefulness of instructional coaching.
Major Findings

Upon review of the data, the researcher found patterns and commonalities among participant responses, which aided in the development of seven themes:

- Usefulness for veteran and inexperienced teachers
- Mandatory or voluntary participation in an instructional coaching program
- Common subject and age backgrounds
- Job descriptors of an instructional coach including personality, knowledge, and responsibilities
- Current participant program characteristics both positive and negative
- Adjustments for a more successful instructional coaching program
- Ideal instructional coaching program characteristics

These themes organized participant responses to better understand the perceptions and also helped answer the research questions. The researcher found twenty-one of the twenty-two participants found instructional coaching useful. However, many of the participants felt their district or school program needed improvement, with several believing their program or their coach was not at all useful. Twenty of the twenty-one participants that found instructional coaching useful, had suggestions for their district or school to improve the success and/or usefulness of their program or coach. They believed that in order for the instructional coaching program to have an influence on teaching practices, changes would need to be made to the program or coach.

The other parts of this study explored specific characteristics and elements participants felt were necessary to have a successful relationship between instructional coach and teacher and a useful instructional coaching program. Participants named
several different characteristics describing what participants felt were important in an instructional coach. Figure Two represents the twenty-four most commonly named characteristics from participant interviews.

Figure 2. Characteristics of an instructional coach. This figure represents the 24 most descriptors given by participants describing an instructional coach.

Each research question focused on revealing teachers’ perceptions about ideal instructional coaching programs and instructional coaches. In sum, participating teachers in this study wanted instructional coaching in their districts and felt it was useful. With some adjustments, participants believe their district or school programs could be better utilized and thus more successful and useful.
Findings Related to Literature

This study varies from the existing literature on instructional coaching because it focuses not only on secondary schools, but also on the area of mathematics. If studies have ventured into the secondary level, they most commonly revolved around coaching teachers in the subjects of literacy, English, and/or reading.

Despite the research questions of this study varying from those researched in existing studies, several similar conclusions were drawn. One study in particular closely mirrored the findings of this study. Horne’s (2012) study about teachers’ perceptions on instructional coaching had some similar conclusions as this study. For example, Horne (2012) concluded that coaches should not serve in a supervisory role. This was an issue clearly identified within this study and an issue Knight (2007) is also adamant about in his description of an instructional coach. Several participants of this study felt their instructional coach was serving in this supervisory role and one participant described the coach as “an evaluative tool from district admin”. When discussing the job description of an instructional coach, a partner rather than an evaluator was a common characteristic.

This partnership mentality was not only a focal point for Knight (2007), but coincided with another of Horne’s (2012) conclusions that coaches should focus on relationships with teachers. Relationships described a key piece of having a successful coaching program for the participants of this study. Multiple participants referred to their coaches as being a support for the teachers. Polly et al. (2013) further supported this with the statement, “when teachers see the instructional coach as a support and a resource, they are better able to establish collaborative, trusting relationships with teachers as they work together to address the needs of students” (p. 299).
Another similar conclusion Horne (2012) made was that coaches should be taken out of the building less for meetings and other duties. Based on participant responses, this study agrees with Horne’s findings since the two biggest complaints of participants in this study were a lack of quality coaching time and location of the instructional coach. Knight (2009) affirmed this idea with the general thought that “Principals and other district leaders need to ensure that they do not ask coaches to do so many non-coaching tasks that they rarely have the opportunity for sustained coaching” (p. 20).

Similar to this concept, Horne (2012) concluded that coaches should have all non-coaching job responsibilities that conflict with their coaching removed. While several participants in this study agreed, there were some that believed it was important for the instructional coach to stay connected to the classroom by remaining a teacher for part of the day. One said it would be helpful to have their coach “still in the classroom at least for maybe two periods or something. Still teaching at least one class.” Another participant reiterated this stating, “they could be half-time teacher and a half-time coach.”

One other similar conclusion between this study and Horne (2012) is the idea that the right person needs to be serving as the role of instructional coach. The participants of this study described what makes a person the right person by listing characteristics including having the coach be a people person, easygoing, and nonjudgmental. Knight (2007) referred to personality as being one of three variables that are “the most important predictors of the success of a coaching program” (p. 32). Knight (2007) also stated, “A good coach can see something special in you that you didn’t know was there and help you to make that something special become a living part of you” (pp. 15-16). These similarities helped affirm the results and conclusions of this study.
Surprises

Creswell (2013) wrote, “Phenomenologists focus on describing what all participants have in common as they experience a phenomenon” (p. 76). Beginning this study, the researcher was unaware as to what responses would be given by participants. During the bracketing experience, the researcher identified possible responses as to why or why not the participants would believe instructional coaching to be useful. This expansive list was worrisome with finding saturation becoming a cause for concern. The surprise came when the participants gave similar answers regardless of their location, school demographic, or teaching experience. The biggest surprise of this type being the vast majority of responses that instructional coaching was useful.

Another surprise from before the study was the number of schools that already had an instructional coaching program in place for secondary mathematics teachers. While it was difficult to find schools in Nebraska, other states had several schools with programs already in place. The lack of secondary research led the researcher to believe programs were not prevalent, however they were present in other states. The researcher struggled to find Nebraska schools, but once found, was surprised at the willingness of the districts and schools to participate in the study. The schools were interested in the results and demonstrated an enthusiasm to use the results to improve their programs.

During the actual interviews, one surprise that continued to occur was the length of each interview. The researcher envisioned interviews lasting between twenty and forty minutes. However, the majority of interviews were completed within ten or fifteen minutes. Given an invitation and description of the study in advance, the participants gave clear responses and had good ideas about the type of questions that would be asked.
One final surprise that occurred during the study was the lack of a common job description of an instructional coach. Each school had different ideas on the instructional coach’s purpose and what activities and responsibilities they could expect from their coach. At each school, there was at least one participant that asked the researcher to provide a definition of what an instructional coach was. Along with this surprise was the background of the instructional coach at each school. The backgrounds were quite varied along with the participant reactions to the coach’s background.

**Implications for Action**

This study added to the extant literature on instructional coaching. It also helped fill the gap in literature formed by a lack of research at the secondary level. This study could assist administrators and fellow educational researchers in determining the overall usefulness of instructional coaching in its entirety as a program. Based on literature findings and the study participant’s majority responses being that instructional coaching is useful for secondary mathematics teachers the researcher recommends that secondary schools turn to instructional coaching as a source of professional development. The researcher provided a framework, visible in Figure 3, for secondary mathematics instructional coaching programs and recommends its use as a guide when designing a new or updating a current instructional coaching program.
Figure 3. Instructional coaching framework. This figure outlines five areas for schools to focus on to build an instructional coaching program.

- **Instructional coaches need to be on site.**
  
The main purpose of instructional coaches is to provide a form of individualized professional development for teachers. This includes being available for teachers when questions or concerns arise about their teaching style or classroom management. Participants in this study repeatedly referenced their coach was unavailable for meetings or questions. The participants who had a coach on site were much more positive about their experience and the usefulness of instructional coaching in general. Being on site helps build relationships between the coach and the teacher and helps teachers adjust to seeing the instructional coach around the building and in the classrooms.

- **Instructional coaches need to have a secondary mathematics background.**
  
In order for teachers to place their trust in an instructional coach, they need to know their coaches understand where they are coming from and the content they are
instructing. Participants found asking for help incredibly frustrating when the advice given was not specifically related to mathematics or the grade level they were teaching. This specificity requires knowledge of the mathematical content as well as state and national standards and objectives. Understanding the flow and connection between topic areas in mathematics allows coaches to assist teachers to the highest possible degree. This can in turn have a positive impact on student achievement.

- **Instructional coaches must possess the “right stuff”**.

  Personality was the main characteristic participants insisted as necessary for a successful relationship between coach and teacher. Filling the position of instructional coach needs to be well researched and analyzed before a candidate is chosen. This includes understanding the culture of the school and/or community. Understanding the culture brings an added sense of trust between the teacher and instructional coach. The instructional coach needs to understand what would work inside the specific school with the enrolled students and be able to provide suggestions with that culture in mind.

- **The instructional coach’s responsibility needs to be coaching first**.

  When instructional coaches are given multiple roles and duties within the school or district, their time on coaching decreases. Again, the purpose of instructional coaching is to be a source of professional development for the teachers. Taking coaches away from the school, the teachers, and the coaching opens gaps for mistrust and leads to misunderstandings in how coaches interact with the teachers. Time was the biggest factor participants listed as making their instructional coaching unproductive. Teachers want coaching, but they need the coach to be available to help.
Some participants believed coaches would still be effective and possibly more effective if they were in the classroom as a teacher part-time as well. The researcher recommends full-time coaches, but understands the reasoning behind the participant’s belief that being in a classroom keeps the instructional coach grounded and connected to the classroom teacher. If it is necessary for a school to have the coach within the classroom as a teacher, the researcher recommends multiple coaches so each period of the day has a coach available as a resource for the teacher.

- **Proper implementation of the program must include a job description and introduction for the instructional coach.**

Many of the teachers interviewed stated they were unsure of the job description of their coach. They confessed not knowing what the instructional coach’s actual purpose was or how the coaches could assist the teachers. To avoid this confusion and encourage participation in the program, school administration needs to provide a job description and information on how the instructional coach can assist the teachers. If the teachers understand the instructional coach is there to help them, not evaluate them, they will be more open to the interaction with the coach. This introduction needs to include informing teachers how they can reach the instructional coach when they are seeking help. If the instructional coach is on site, this process should be fairly simple.

This framework was created based on responses within this study. It is important school and district administrators review the participant responses and study findings prior to implementing a program to provide an awareness of the perceived downfalls and potential positives a secondary mathematics instructional coaching program may have.
Recommendations for Further Research

This phenomenological study explored the perceptions of public secondary school mathematics teachers on the usefulness of instructional coaching. It found teachers support an instructional coaching program and believe it can be an incredibly useful tool when the program is properly designed and implemented. Many participants wanted to see results that an instructional coaching program is effective. In order for this to happen, further research needs to be conducted involving teachers and students. With instructional coaching being listed as a possible intervention for failing schools (NCLB, 2002), it is important the effects are visible and positive. A longitudinal study may be performed with schools that have already implemented or are about to implement an instructional coaching program. The study could examine students’ test data as a measure of success. This would provide results based over multiple years and an overall view of the instructional coaching program’s effectiveness and usefulness in the school or district. This may also occur across several schools to form a general conclusion on the usefulness of instructional coaching as a nationwide intervention.

Another study may be conducted in a different subject area than mathematics. Mathematics is a subject area where the material builds upon itself. For students, a lack of understanding one skill can lead to a lack of understanding for multiple skills in the future. This may not be the case in other subject areas and an instructional coach may have different results in a separate subject. Teachers in another subject may also have varying perceptions on the usefulness of instructional coaching. This same study design could be utilized and conducted in a separate subject area. This would add to the existing literature and provide another source of information at the secondary level.
Participants in this study and Knight (2007) have contended that instructional coaching is often in the schools but the teachers and administration are unaware of it occurring. With instructional coaching taking on various interpretations and definitions, another useful study would be looking at the definition and job description different schools, teachers, and coaches have formed for instructional coaching or instructional coach. Finding a common ground and description may help schools and districts form successful and useful instructional coaching programs.

Summary

Twenty-two public secondary mathematics teachers in Nebraska participated in this phenomenological study to determine teachers’ perceptions on the usefulness of instructional coaching. The researcher interviewed twenty-one of these teachers and received an email response from one. Interviews were transcribed verbatim, coded, and analyzed. The study found an overwhelming positive response to the usefulness of instructional coaching. In general, teachers were in favor of properly implemented instructional coaching programs and are supportive of the program continuing in their school/district. The researcher recommends each secondary mathematics department implement an instructional coaching program that follows the following framework:

1. Instructional coaches need to be on site.

2. Instructional coaches need to have a secondary mathematics background.

3. Instructional coaches must possess the “right stuff”.

4. The instructional coach’s responsibility needs to be coaching first.

5. Proper implementation of the program must include a job description and introduction for the instructional coach.
With proper implementation, planning, and design, instructional coaching can provide a wanted source of professional development for schools and teachers. The large focus on educational reform and improvement is forcing schools to adapt and adjust to ways of learning and teaching. One adaptation being recommended by the government and growing in popularity across the nation is instructional coaching (NCLB, 2002; Knight, 2007). This study added to the existing literature on instructional coaching and provided a secondary education viewpoint and much needed source of information. District and school administration may find great benefit from this study when designing, adjusting, or implementing an instructional coaching program.
References


http://dx.doi.org/205.154.84.199


Appendix A

Personal Interview Guiding Questions

1. How long have you been teaching?

2. What are your thoughts on instructional coaching, in general?

3. What are your thoughts on the instructional coaching program in your district?

4. How did you hear about your instructional coaching program? And/or instructional coach?

5. What factors aided your decision to participate in the program?

6. Tell me three characteristics your instructional coach possesses, or practices your instructional coach participates in that makes them successful.

7. What characteristics of your coaching program did you find useful or helpful?

8. What characteristics of your coaching program did you find useless or impractical?

9. Of the methods and practices provided and created during your time with your instructional coach, which ones do you feel were most beneficial and you will continue to incorporate into your classroom?

10. After your experience with your instructional coaching program, do you see yourself using your coach as a resource in the future?

11. If you were to have an honest conversation with your district superintendent, what would you say needs to be adjusted within the coaching program in order for the program to be more or continue being successful?

12. If you were writing the job description for an instructional coach, what would it be?
Appendix B

Characteristics of an Instructional Coach
My name is April Buschelman and I am a student in the EdD program at Creighton University in Omaha, NE. I am currently in the process of beginning my dissertation study to receive my EdD in Educational Leadership. My dissertation is revolving around instructional coaching and I was wondering if [redacted] would be willing or able to participate in my study. I am not sure if your district uses instructional coaches, but I am searching for participants in Nebraska. In particular, I am looking for secondary (9-12) math or science teachers that have been or are currently involved with an instructional coaching program. The study would be a basic survey and/or interview on the usefulness of instructional coaching and the district would be allowed access to the results. If this is something you are willing to help with or know of someone different I could contact, I would greatly appreciate it.

Also, if you know of any other school districts that are using instructional coaching, I would be incredibly thankful for those names as well.

Thank you for your time.
Participant Invitation

Good morning!
My name is April Buschelman and as referred to in his email, I will be coming to to perform interviews as a part of my dissertation study. I am currently in the doctoral program at Creighton and am looking at the perceptions of secondary math teachers on the usefulness of instructional coaching. The interviews will be painless and will be approximately 30 minutes in length. I have attached a letter explaining your rights as participants and a little more information on the study.

I am planning on being in . If you are going to be around and are willing to participate and interview, please let me know what time you are available and I will try to accommodate. I am hoping to be available before and after school as well, so let me know what works. Thank you again for your help and participation and I look forward to speaking with you all!

If you would like further information please feel free to contact me personally.
Appendix E

IRB Approval

March 24, 2014

April Buschelman, MS, EdDc
Interdisciplinary EdD Program in Leadership

RE:
IRB #: 14-17020
TITLE: SECONDARY TEACHERS’ PERCEPTIONS ON INSTRUCTIONAL COACHING

Dear Ms. Buschelman,

Thank you for submitting the above mentioned proposal to the Institutional Review Board office for review. This project has been determined to be exempt from Federal Policy for Protection of Human Subjects, as per 45CFR46.101 (b) 2. This IRB approval is for a 3 year period. The following documents were received, reviewed, and approved:

1. Application for Review of Exempt Status (per 45CFR46.101 (b) 1/2/3): Educational Research/Observation, Survey, Interview received via email on March 18, 2014
2. Study Design (No Date)
3. Agreements from participating schools:
   a. 
   b. 
   c. 
   d. 

Continued approval is conditional upon your compliance with the following requirements:

1. Compliance with the Creighton University IRB policies and procedures
2. Problems must be reported using the Reporting Form for Reportable New Information. Problems requiring report can be found in the IRB Policy 134 “Reportable New Information”
3. All protocol amendments and changes to approved research must be submitted to the IRB and not be implemented until approved by the IRB. Please use the modification form when submitting changes to protocol or consent documents.
4. This study cannot continue after the expiration date, which is March 23, 2017.
5. You are required to submit a renewal/termination prior to this date. If you wish to continue the project, the renewal must be in the IRB office on week prior to the expiration date.

If you should have questions during the course of this project, please call the IRB office at (402) 280-2126 and one of the administrators will assist you, or you may email the office at irb@creighton.edu.

Sincerely,

[Signature]
Patricia Nowatzke, RN, MHSA, CIP
Director, Institutional Review Board

The Creighton University is fully accredited by the Association for the Accreditation of Human Research Protections Program, Inc. © (AAHRPP)

Creighton University has an Assurance on file with the Department of Health and Human Services: Assurance Identification No. FWA 00001078, the expiration date: July 6, 2016
IRB Registration Numbers: IRB #1Biomedical IRB # IRB0000155 (Expiration July 13, 2015); IRB #2 Social Behavioral IRB # TIRB20067 (Expiration July 13, 2015)

Creighton University has an Assurance on file with the Food and Drug Administration (FDA) Assurance Identification No. FWA00001078, the expiration date July 6, 2016
IRB Registration Numbers: Registration/Identification No.IRB0000155