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Cognitive Coaching as Form of Professional Development in a Linguistically Diverse School

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Linguistically Diverse School

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Abstract

While American classrooms are described as linguistically diverse, teachers find themselves unprepared to successfully educate such students. Previous studies indicate that cognitive coaching is one form of professional development that can assist teachers in becoming self-directed practitioners who are able to reflect on their practice and adjust it to meet the needs of various learners, including linguistically diverse students (Batt, 2010; Costa & Garmston, 2002; Joyce & Showers, 2002). This study describes elementary teachers' perceptions of cognitive coaching in a linguistically diverse school: (1) In what ways do teachers perceive cognitive coaching as professional development? (2) How do observed teacher behaviors reflect cognitive coaching? and (3) What changes in their practice of educating linguistically diverse students do teachers report as a result of cognitive coaching? This basic qualitative study focuses on three elementary mainstream teachers educating linguistically diverse students and one coach who used cognitive coaching techniques. Using data from semi-structured interviews and coaching conversations, this study identifies the following emergent themes: elements of reflective practice, creating new instructional applications, embracing the diversity spectrum, facilitating teacher-driven learning, and promoting shared responsibility. The results of this study indicate that teachers who participated in cognitive coaching believe that they (1) reflect on their practice more and on a deeper level, (2) intentionally plan their instruction, (3) adjust their instructional plan in response to their students' needs using more formative assessments, and (4) value their work with the cognitive coach. In addition, cognitive coaching is linked to more responsive teaching, especially with linguistically diverse students.

To Sergio, Carlos, and Emma

Your love and support give me energy as I face new challenges and turn them into

achievements.

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CHAPTER 1

INTRODUCTION

This chapter discusses the current situation in many American schools by documenting the challenges of providing effective instruction. It outlines the statement of the problem as well as the purpose of this study and lists research questions that guide the design of this research project. In addition, this chapter presents delimitations and assumptions of this study, along with the definition of major concepts mentioned throughout this research report.

General Background of the Study

American schools represent a complex and diverse cultural and linguistic landscape. Homogeneous mainstream classrooms which, according to Commins and Miramontes (2006), imply students who are "middle class, native-English speaking, and White" (p. 240) are becoming less common. Currently, 54 percent of students in public schools are white (non-Hispanic), 22 percent are Hispanic, 15 percent are African American, 5 percent are Asian/Pacific Islander, 1 percent are Native American/Alaska Native students, and almost 3 percent are students of two or more races (NCES, 2013). This shows a 5 percent decline in Caucasian students since 2007-2008. Dilworth and Coleman (2014) confirm this trend into the future:

> The racial/ethnic and linguistic diversity of the PK-12 students body has grown
> exponentially. Projections to the year 2021 indicate higher public school
> enrollment for African Americans, Hispanics, Asian/Pacific Islanders, Native

Americans/Alaska Natives, and students of two or more races, and lower

enrollment of whites. (p. 4)

Nationally, the percentage of public school students participating in programs for English

Language Learners (ELLs) increased from 8.7 percent in 2002-2003 to 9.8 percent in

2010-2011, while in Missouri, this percentage increased from 1.4 percent in 2002-2003 to

2.3 percent in 2010-2011 (NCES, 2013). Moreover, 60.9 percent of all public schools

have at least one ELL (NCES, 2013). This demographic change in student population

reflects the 80 percent increase of Limited English Proficiency (LEP) individuals

nationally from 1990 to 2010 (Pandya, Balatova, & McHugh, 2011).

In addition to the demographic diversity of today's classrooms, it is important to

point out that classrooms are culturally and linguistically diverse on multiple measures

(Banks, 2006; Commins & Miramontes, 2006; Miramontes, Nadeau, & Commins, 2011;

Patton & Irving, 2010). The common term "culturally and linguistically diverse students"

refers to "students who may be different from the mainstream culture by ethnicity, social

class, and/or language" (Perez, 1998, p. 8). Language and culture are intertwined

concepts, impossible to separate. Together these concepts shape individuals' identities

(Patton & Irving, 2010). Recognizing that linguistic diversity implies cultural

differences, this research focuses on the linguistic diversity of today's schools and the

role of teachers in meeting diverse needs.

Perspectives on Linguistic Diversity

Classrooms display a spectrum of linguistic differences ranging from monolingual

English speakers to monolingual speakers of other languages in addition to representing a

variety of bilingual profiles in between (Commins, 2008). Investigating linguistic

diversity of today's students, Enright (2011) challenges the traditional understanding of

the term "mainstream" pointing out that "linguistic diversity is becoming the norm in

U.S. classrooms" (p. 81). She suggests the term "new mainstream" (Enright, 2011, p. 80)

to reflect the current composition of American schools. This term describes all

classrooms as linguistically diverse and recognizes such diversity as a typical occurrence

rather than an exception (Enright, 2011).

Investigating Canadian classrooms, D'Silva and Gunderson (2014) discuss the

concept of kinetic diversity, which suggests dynamic development of this term as well as

continuous motion along the continuum of linguistic diversity. The term kinetic diversity

is also applicable to classrooms in the U.S. as it relates to their linguistic diversity. It

addresses not only the diverse composition of American classrooms, but also the ongoing

migration of students from school to school and from state to state. It also describes

policy shifts applicable to ELL teacher preparation and teacher development (Dilworth &

Coleman, 2014; Miramontes et al., 2011; Souto-Manning, 2013).

O'Neal and Ringler (2010) address the issue of linguistic diversity through a

sociolinguistic perspective. They consider language variations based on geographic area,

ethnicity, education, and age. Such a view suggests that there are differences in the

dialects within one language in addition to the linguistic differences among the speakers

of different languages. These variations are manifested through the use of different

syntactical structures, lexicon, and accents (Hudley & Mallinson, 2011).

In his work related to linguistic diversity, John Baugh (2009) points out that in

any student community there are three general categories of students: "native speakers of

the dominant local language . . . native speakers of nonstandard dialects of the dominant

local language . . . and those for whom the dominant local language(s) is/(are) not native"

(p. 272). Regardless of the students' home language or dialect, the goal of each school is

to help students master Standard English that will give them access to content knowledge

in various academic disciplines (Baugh, 2004; Doorn & Schumm, 2013; Souto-Manning,

2013). This, according to O'Neal and Ringler (2010), "can lead us to the assertion that

English language learners (ELLs) encompass not only those who speak another language,

but those who speak a nonstandard dialect as well" (p. 50).

Addressing the issue of linguistic diversity among African Americans, Baugh

(2006) does not support the inclusion of African Americans speaking non-standard

English in the ELL category. At the same time, he recognizes the existence of

"tremendous linguistic divisions between those who trace their ancestry to African slaves

and those who do not . . . , divisions that continue to affect current attitudes about the

linguistic practices of African Americans" (p. 91). Baugh (1999) emphasizes that

African Americans as a racial group represent a linguistic spectrum from Standard

English to vernacular. He emphasizes that the non-standard dialect is significantly

different from the prevailing Standard English and these differences impede educational

achievement of African American students. His conclusion further supports the concept

of "new mainstream" suggested by Enright (2011). This study accepts the views

expressed by Baugh (2009), Commins (2008), and Enright (2011) regarding the spectrum

of linguistic diversity of today's classrooms.

While the demographic background of public schools is changing towards the

increase of racial/ethnic and linguistic diversity, the demographic composition of public

school teachers does not reflect a similar change. In fact, 82 percent of public school

teachers are white non-Hispanic (NCES, 2013). Dilworth and Coleman (2014) also point

out that teachers are not prepared to educate culturally and linguistically diverse students.

They emphasize that only "18 percent of the PK-12 teaching corps are people of color

and . . . far too many educators, regardless of background, struggle to comprehend and

employ the tenets of culturally responsive practice" (Dilworth & Coleman, 2014, p. 1).

Furthermore, Rochelle Moche (2006) points out that even teachers who have a wide

repertoire of instructional strategies face challenges related to educating linguistically

diverse students. In addition, multiple studies report that teachers, who are educating

linguistically diverse students, are not prepared to meet the needs of this student group

because of the lack of appropriate preparation and professional development (Batt, 2010;

Doorn & Schumm, 2013).

Professional Development Models

        One way to address the challenges of providing effective instruction to

linguistically diverse students is to provide professional development that can assist

teachers in meeting the needs of linguistically diverse students (Ballantyne, Sanderman,

& Levy, 2008; Menken & Atunez, 2001; NEA, 2008; Scotchmer, McGrath, & Coder,

2005). "Quality teaching in all classrooms and skillful leadership in all schools will not

occur by accident. Quality teaching requires the design and implementation of the most

powerful forms of professional development" (Sparks, 2002, p. 1). This idea is also

addressed by other researchers (Van den Bergh, Ros, & Beijaard, 2015; Van Veen,

Zwart, & Meirink, 2012) who stress the importance of continuous teacher learning and

describe characteristics of effective teacher development.

Several models of teacher development can assist educators as they refine their instructional practice: Professional Learning Communities (PLCs), critical friends groups, lesson study, cognitive coaching, etc. PLC is a term used to describe a process and a structure that allows educators to collaborate to achieve better learning outcomes for their students (DuFour, Eaker, & Karhanek, 2004; Stewart, 2014; Thessin, 2015). A particular format of a PLC is a critical friends group. This collaborative structure comprises of educators who volunteer to work together to improve their practice by managing their own learning (Burke, Marx, & Berry, 2011; Vo & Nguyen, 2010). Another professional learning approach is a lesson study. Developed by Makoto Yoshida, this teacher-lead form of professional growth promotes teacher collaboration while planning, observing, tracking, and refining their instructional interventions (Amador & Weiland, 2015; Fernandez & Yoshida, 2004; Norwick & Ylonen, 2015).

This research study focuses on cognitive coaching, a form of professional development which, according to Costa and Garmston (2002), can assist teachers in developing into reflective practitioners who are able to set a goal, identify its success indicators, select suitable instructional strategies, and reflect on their experience.

According to Costa and Garmston (2002), cognitive coaching is a professional development form that can provide opportunities for reflection, thinking about previous teaching experience, and planning future actions. It is a conversation that does not judge or give answers. It allows teachers to engage in intentional planning and reflection thus developing teachers' cognitive processes and capacities. Cognitive coaching prompts teachers to think; it leads to learning of new skills. In a cognitive coaching process, a coach assists the teacher in becoming a self-directed learner (Costa & Garmston, 2002;

Knowles, Swanson, & Holton, 2011). The concept of self-directed learning permits

teachers to independently identify the areas of their practice that may need improvement

and master these areas at their own pace.

Statement of the Problem

Linguistic diversity in American classrooms and teachers' lack of preparedness to

effectively educate such students are two reasons for more research on possible remedies

that can assist teachers in their work with linguistically diverse students. Cognitive

coaching offers a promising model for professional development that may lead to

sustained changes in teaching and assist teachers in their work with linguistically diverse

students.

Purpose of the Study

The purpose of this study was to understand how elementary teachers in a

linguistically diverse school perceive their participation in cognitive coaching in relation

to their professional growth. Teachers' perceptions about cognitive coaching and their

narratives about its value and challenges are the focus of this study. Knowing teachers'

perceptions about cognitive coaching as a form of professional development could assist

the researcher and other coaches in more targeted coaching conversations with the

teachers.

Research Questions

This research study aims at investigating elementary teachers' perceptions of

cognitive coaching used as a form of professional development in a linguistically diverse

school. The following research questions guide the design of this study and the choice of

methods used for data collection and data analysis: (1) In what ways do teachers perceive

cognitive coaching as professional development? (2) How do observed teacher behaviors

reflect cognitive coaching? and (3) What changes in their practice of educating

linguistically diverse students do teachers report as a result of cognitive coaching? These

questions provide a schema for understanding teachers' interpretation of cognitive

coaching and its influence on their professional growth, particularly in regards to

educating linguistically diverse learners.

Researcher's Background

This study is a result of my professional and educational journey. It is a way of

locating a niche for my research interests and my professional calling within the context

of current teacher professional development. I consider it important to share my

professional background to explain my decision to work on this project.

For over six years, I taught linguistically diverse students as their English for

Speakers of Other Language (ESOL) teacher in Millbrook Elementary and worked with

students outside of their mainstream classroom. I also became interested in ways to assist

mainstream teachers in their work with linguistically diverse students, which prompted

me to research ways to engage in effective professional development. In August 2011, I

became a coach involved in conducting formal coaching cycles with individual teachers

using cognitive coaching (Costa & Garmston, 2002) strategies. In 2011-2012, I

completed an 8-day Cognitive Coaching Training offered through the Center for

Cognitive Coaching[1]. This 8-day training focused on developing the identity of a

mediator of people's thinking, utilizing three mediative maps for planning, reflecting, and

problem-resolving, distinguishing between support functions and categories of feedback,

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[1] Information about cognitive coaching seminars can be retrieved from:
http://www.thinkingcollaborative.com/seminars/cognitive-coaching-seminars/

and utilizing the coach's toolkit of pausing, paraphrasing, and questioning. While the information on the above mentioned topics can be obtained by reading the work of Costa and Garmston (2002), the 8-day seminar allowed me to learn more about cognitive coaching skills while observing coaching conversations and participating in coaching assuming various roles. I was surprised to find out how emotional coaching conversations may be. This substantiated the need to develop trust with the teachers I coach. The training sessions of this seminar were spread out over the course of the semester. This structure allowed me an opportunity to practice cognitive coaching skills in between the training sessions and receive additional guidance and feedback during the sessions. One element of this seminar that had a great influence on my cognitive coaching identity is the importance of using cognitive coaching approach as a default setting that frames all conversations with the teachers. The shift to other support functions can be used when necessary, but not as a starting point of a conversation.

When I first started in Millbrook as a cognitive coach, the school culture could not be described as collaborative. Teachers were working in isolation, gathering together only for mandated staff meetings and grade level meetings during which general school operating information was shared with all staff. It was difficult to plan collaborative work that involved teacher dialogue during the grade level meetings because teachers were used to non-participatory sessions. With the increasing expectations from the school district and the state, Millbrook had to make changes in the way it operated. The state was directing the school towards the implementation of data-informed instruction and the use of research-based instructional strategies. Some of the school-wide trainings Millbrook participated in were organized around the data team protocol, Daily 5 literacy

bock, writer's workshop, etc. While the training sessions allowed Millbrook teachers to

access a lot of content needed to refine their instructional practices, I knew it would take

a lot of effort to insure the implementation of each of these initiatives.

After I completed the 8-day training in cognitive coaching, I saw cognitive

coaching as a way to approach the school efforts towards instructional change. To me,

cognitive coaching was a tool that could help Millbrook to make its instructional changes

visible, effective, and sustainable. However, my first attempts at cognitive coaching were

not so successful. Many teachers were resistant to go through a coaching cycle. They

didn't see the benefit and were not eager to spend additional time on discussing their

instructional practice. They were overwhelmed with the school expectations. I realized I

had to educate teachers about the cognitive coaching process to insure they knew what it

was and how it was done. I addressed teachers as a group and individually. I also

developed brochures that communicated everything I could do to support their

professional growth. Gradually, the whole school learned about cognitive coaching and

knew exactly what it entailed.

Next, I had to make it clear that everyone could benefit from cognitive coaching,

not just those teachers who received unsatisfactory evaluations and needed to make

changes in their instructional practice. I approached several strong teachers and offered

to work with them. They were easy to coach. Our planning conversations always went

smoothly because they came with a plan, they knew exactly what they wanted to do and

how they were going to approach their lesson. Our reflective conversations were also

easy. Teachers were giving multiple explanations to the work they did and offered

additional considerations they were going to think about for their future lessons.

Resistant teachers, or harder to convince teachers, were quite different. They were just going through the motions and showing up. Our conversations felt forced and unnatural. I also had to intentionally control my desire to suggest a solution when a teacher was stuck. It was much harder for me to plan for these conversations. It was not enough to revisit the conversation maps and write down a couple of questions I could use; I had to think of multiple scenarios and multiple ways teachers would negatively respond to my questions. I had to come up with a way to bring the conversation back on track. Resistant teachers often asked me what I wanted them to do while I was expecting teachers to think about it and come up with their own goal and a way to achieve it. Most of the resistant teachers began shifting just a bit after they noticed that I engaged all teachers in cognitive coaching cycles. Millbrook began to represent a spectrum of willingness as it relates to cognitive coaching. Teachers were moving along this spectrum. I think they realized that cognitive coaching was not something that was used only for those who needed to make changes.

With time and practice, I was able to use cognitive coaching as a first resource in any conversation with a teacher. I started to apply cognitive coaching not only during formal coaching cycles, but also in other instructional settings (e.g. lesson plan feedback, grade level/data team meetings, informal conversations about instruction and assessment). It became a way I approached my work with the teachers. This helped create an atmosphere where thinking was encouraged. I was asking questions that did not have one correct answer. I was asking teachers to think about multiple options, consider their experience, and their knowledge.

I had to be very intentional about scheduling. Each week, I had to block time for each of my activities, including coaching cycles. At the beginning of each coaching cycle, I scheduled all three coaching components in advance. The teacher and I outlined when we were going to meet for the planning conversation, when I would come to observe the class, and when we would meet to reflect. This allowed me to add these times to my calendar and see what time slots were still available. Sometimes, I approached teachers asking them if they had something they were working on that they would like to take through a coaching cycle. These teachers were then added to the calendar. On average, I conducted three complete coaching cycles a week. However, very often the coaching cycles were split between two weeks. The planning conversation could take place during week one, but the observation and the reflective conversation were scheduled for week two. Reflective conversations were always scheduled within 24-48 hours after the observation. This way the lesson was still fresh and I found reflective conversations to be much more meaningful.

While I had dedicated coaching slots on my calendar, I often had to be flexible with other activities to be able to accommodate teachers' planning time when they were willing to meet for coaching. Lesson plan feedback was one such activity that allowed me to be flexible with my schedule. While I had a dedicated time for lesson plan feedback, it was something I could move and do one or two hours later than planned if I had a teacher who wanted to meet for a coaching conversation. Some teachers preferred to meet before school, and I was willing to work with them during the time that was convenient for them.

After about two years, teachers who were in Millbrook since the beginning of my coaching practices were much more open and willing to collaborate not only with me, but also with other teachers. However, there was another challenge. Because of the high teacher turn over, new teachers joined Millbrook every year. To get them on board, I had to go through the same process all over again. However, it was much easier, because the majority of the staff was already familiar with cognitive coaching and always came to me with any questions they had.

I think one of the key elements that promoted cognitive coaching in Millbrook was my consistency in using cognitive coaching as a default in any conversations with the teachers and the trust that I built by keeping coaching conversations confidential and non-judgmental. Having the administrator's interest in cognitive coaching and support helped a great deal. In fact, the principal attended cognitive coaching training with me. In addition, I had an agreement with the principal that outlined my work and underlined the confidentiality of all coaching conversations.

While coaching teachers, I noticed several benefits of cognitive coaching. However, recognizing the limitations of knowing the coach's side only, I saw the need to listen to the teachers who used cognitive coaching as a form of professional development and give them an opportunity to express their views, beliefs, and values regarding this experience.

It is important to note that by being an insider to the cognitive coaching process, as well as to the school district where the research took place, I had several advantages and limitations. One of them was having historical knowledge of the school district and its practices, specifically its professional development practices. Another advantage was

the researcher's experience related to teaching linguistically diverse students. In

addition, being a coach who implemented cognitive coaching techniques, I had insight

into the process of cognitive coaching. However, being an insider may have also

obscured the aspects of local practice because of the assumptions made. To address this

issue, I consulted with another cognitive coach to discuss the findings of this research

study and compare possible interpretations. A more detailed account of this process is

described when discussing the interpretations of this study later in this report.

Delimitations

This study was conducted between August, 2013, and December, 2013 in one

Mid-Western elementary school. It investigated cognitive coaching used as a form of

professional development with educators who teach in classrooms with a spectrum of

linguistic differences ranging from monolingual English speakers to monolingual

speakers of other languages and a variety of bilingual and non-standard dialect profiles

(Commins, 2008).

In addition, this study examines the perceptions of cognitively coached classroom

teachers who stay with the same group of students throughout the whole school day and

teach them all core subject areas: Communication Arts, Mathematics, Science, and Social

Studies.

Assumptions

This author identified four assumptions in the design of this study: (1) Teachers

understand the coaching cycle process, cognitive coaching in particular; (2) Teachers

actively participate in cognitive coaching activities; (3) Teachers are able to distinguish

between the influence of cognitive coaching and other forms of professional development

on their instructional practice; (4) Teachers are openly and honestly reporting their

perceptions.

Definition of Concepts

Linguistically diverse classrooms: This study takes a definition suggested by

Baugh (2009) and supported by Patton and Irving (2010) and Miramontes et al. (2011)

who suggest that classrooms in the U.S. are linguistically diverse, with linguistic

diversity manifesting through the presence of students who speak a language other than

English, students who speak dialectal varieties of English, and students who speak

Standard English.

English Language Learners (ELLs): In this study, this term refers to all students

who speak a language other than Standard English as their first language.

African American Vernacular English (AAVE): A non-standard variety of

American English prevalent among African Americans with lower socio-economic status.

Professional development: Variety of activities that provide educators with an

opportunity to learn, refine, and reflect on content knowledge and pedagogy with the goal

of improving practice.

Cognitive coaching: This study takes a definition suggested by Costa and

Garmston (2002) who state that cognitive coaching is "A non judgmental, interactive

strategy focused on developing and utilizing cognitive processes, liberating internal

resources, and accessing the five states of mind as a means of more effectively achieving

goals while enhancing self-directed learning" (pp. 401-402).

Self-directed learning: The capacity for self-managing, self-monitoring, and self-

modifying (Costa & Garmston, 2002; Knowles, Swanson, & Holton, 2011).

Sheltered Instruction Observation Protocol (SIOP): A research-based instructional model that addresses academic needs of ELLs. The SIOP model consists of eight interrelated components: lesson preparation, building background, comprehensible input, strategies, lesson delivery, and review and assessment (Echevarria, Short, & Vogt, 2010).

Chapter Summary

Chapter one situated this study within the context of current educational trends by describing the notion of "new mainstream". This concept suggested that American classrooms represent a spectrum of linguistic differences ranging from monolingual English speakers to monolingual speakers of other languages in addition to representing a variety of bilingual profiles across this linguistic spectrum (Commins, 2008). Such change in the classroom composition placed new demands on the teachers who feel unprepared to teach in linguistically diverse classrooms due to lack of professional development. Following the ideas of cognitive coaching (Costa & Garmston, 2002), this study suggested that cognitive coaching as a professional development might assist teachers in their work with linguistically diverse students. This chapter included delimitations and assumptions of the study as well as definitions of major concepts pertinent to this research.

CHAPTER 2

LITERATURE REVIEW

A review of literature was conducted in order to present theoretical and empirical foundations for this research study. This chapter discusses a shift in professional development, describes training outcomes for various professional development forms, and presents cognitive coaching as a form of professional development intended to promote metacognition and independence in addition to developing teachers into self-directed practitioners. Consequently, this chapter focuses on the skills and beliefs of a cognitive coach as well as mental maps for coaching conversations. It discusses outcomes of cognitive coaching implementation in general as well as implementation in a linguistically diverse school environment. This chapter also addresses critiques of cognitive coaching.

A Shift in Professional Development

Educational reforms as well as school improvement plans emphasize the need for professional development. Many researchers stress that professional development is a necessity rather than an option (Claxton, 1996; Van den Bergh et al., 2015; Van Veen et al., 2012). Several reasons bring professional development to the forefront of education. One of them is the constantly growing body of knowledge in all academic disciplines and rapid developments in technology and its use for educational purposes. Purchasing new technology and upgrading existing resources is not enough. These technological advancements need to be accompanied by professional development to insure teachers know how to use new technology to enhance their instructional practice. Another reason is a belief that positive changes in teachers will lead to an increase of student knowledge,

skills, and, therefore, student performance (Archibald, Coggashall, Croft, & Goe, 2011; Darling-Hammond & Richardson, 2009; Foltos, 2012; Sparks, 2007; Speck & Knipe, 2005). Thomas Guskey (2000) defines professional development as a combination of "processes and activities designed to enhance the professional knowledge, skills, and attitudes of educators so that they might, in turn, improve the learning of students. . . . Professional development is a process that is (1) intentional, (2) ongoing, and (3) systematic" (p. 16).

In spite of uniformity in research on what professional development should look like, the current reality is a lot different. In practice, teacher professional development may use a variety of ways to develop staff. Workshops and conferences, lectures, university classes, in-service trainings, coaching, and mentoring are some of the forms of professional development. It is more common for teachers to attend an in-service or a workshop than participate in PLCs, lesson study, and work with critical friends. During in-service training, an expert shares the knowledge on a new initiative which can potentially assist teachers in becoming better equipped with new skills and expand the variety of their teaching strategies. However, analyzing the current situation regarding the forms of professional development, Sparks (2002) states:

> While workshops and courses are the most familiar forms of professional
> development, they are often not the most appropriate to achieve certain
> objectives. Many types of activities that cause teachers to collaborate in serious
> and sustained ways and to reflect on their work and its effects on student learning
> are important but typically overlooked. (p. 9)

Other researchers also stress that one-day workshops do not lead to changes in teachers' instructional practice (Archibald et al., 2011; Beltman, 2009; Darling-Hammond & Richardson, 2009; Joyce, 2010). However, when asked about the format of professional development activities attended by public school teachers, 95 percent of teachers reported that they attended a workshop, conference, or other trainings, whereas only 42 percent took part in mentoring, peer-observation, or coaching (Aud et al., 2010; Kena et al., 2014; NCES, 2005).

Workshop participation, conferences, and similar trainings do not satisfy two out of three characteristics of effective professional development. Such activities may be intentional. However, they are not ongoing and systematic. It seems that commonly used professional development opportunities do not consider individual teacher's needs, experience, knowledge, and classroom demographics (Kena et al., 2014; Sparks, 2002, 2007). Such sessions are generally not related to what teachers do on a daily basis in their classrooms, and, therefore, they hinder the potential effects of professional development (Grimmett, 2014; Guskey, 2000).

Reality calls for a shift in professional development. Previous research notes that to achieve quality teaching, professional development should also be of high quality (Foord & Haar, 2012; Garmston & Zimmerman, 2013; Grimmett, 2014; Kirkpatrick, 1998; Sparks, 2007). At the same time, the concept of high quality is not very informative for the schools in their decisions as to the form of professional development for their teachers. Literature stresses that "high-quality professional development is a sustained collaborative learning process that systematically nourishes the growth of educators (individuals and teams) through adult learner-centered, job-embedded

processes" (Speck & Knipe, 2005, pp. 3-4). Guskey (2000) also describes principles of

high-quality professional development. He mentions the need for "(1) clear focus on

learning and learners, (2) an emphasis on individual and organizational change, (3) the

importance of small changes guiding the grand vision, and finally (4) on-going

procedurally embedded professional development" (p. 36). Sparks (2002) shares the

same position regarding the need to embed professional development in teacher's daily

practice. He points out that:

> Some forms of staff development are far more effective than others in affecting
>
> teaching and improving student learning. It is clear that large-group "batch
>
> processing" of teachers who are "talked at" in the name of "exposing" them to
>
> new ideas are ineffective and squander teachers' good will regarding professional
>
> development. (Sparks, 2002, p. 9)

In the 1990s, staff development researchers recognized several new models of

professional development. Among the models suggested by Loucks-Horsley and

colleagues (1998), coaching is recognized as one of the potentially effective professional

development models (as sited in Sparks, 2002). Speck and Knipe (2005) mention

coaching as a way to provide sustained job-embedded professional development.

Similarly, other researchers (i.e. Garmston & Zimmerman, 2013; Grimmett, 2014;

Sparks, 2002; Van den Bergh et al., 2015) point out that coaching is one of the

professional development models that can accomplish the goal of having sustained

professional development models based on reflective practices.

Investigating the impact of various forms of professional development on the

implementation of new knowledge, Joyce and Showers (2002) found that coaching yields

95 percent application, whereas presentation of theory, which is usually done in

workshops and in-service presentations, leads to 0 percent of application (See Table 2.1).

In addition, considering four levels of professional development evaluation (reaction,

learning, behavior, and results) proposed by Kirkpatrick (1998), it is important to

preserve the connection between the initial reaction to professional development and the

results which are achieved during the application of the content acquired.

Table 2.1.

The Impact of Training Components

Training Components	Training Outcomes		
	Knowledge of Content	**Skill Development**	**Transfer (Implementation)**
Presentation/lecture on theory	10%	5%	0%
Presentation/lecture on theory and demonstration	30%	20%	0%
Presentation/lecture on theory, demonstration, and practice	60%	60%	5%
Presentation/lecture on theory, demonstration, practice, and coaching	95%	95%	95%

Note. Adapted from *Student achievement through staff development* (p. 78), by B. Joyce
and B. Showers, Association for Supervision and Curriculum Development. Copyright
2002 by ASCD. Reprinted with permission (see Appendix A).

The term "coaching" is used in various contexts. There are several varieties of

coaching: technical coaching, collegial coaching, peer coaching, team coaching,

challenge coaching, and cognitive coaching (Joyce & Showers, 2002). However, different kinds of coaching have different goals. For example, technical coaching focuses on learning and implementing innovations, whereas cognitive coaching emphasizes improvement of existing practice. This research focuses on cognitive coaching, which examines existing practices and assists teachers in becoming self-directed and reflective practitioners.

Theoretical Framework of Cognitive Coaching

In 1984, following John Dewey's ideas on reflective actions that represent the core elements of teacher professional growth, Costa and Garmston (2002) developed a staff development technique now known as cognitive coaching. Considering various functions geared to support teacher development, namely, evaluation, collaboration, consulting, and cognitive coaching described by Costa and Garmston (2002), only the latter category has a potential to mediate "invisible, internal mental resources and intellectual functions . . . . These resources and functions include perceptions, cognitive process, values, and internal resources" (p. 13). It is important to point out that the default for a cognitive coach is to use cognitive coaching skills and techniques in all settings and transition to other support functions, as needed. Depending on the situation and on the needs of an individual teacher, a coach may need to shift to collaboration (thinking and working together) or even consultation (sharing ideas, locating information a teacher might not have). In cases when such shifts happen, a coach must signal the shift in the support functions used and possibly return to the cognitive coaching stance at a later point in time.

Cognitive Coaching as a Form of Professional Development

Cognitive coaching has a potential to develop teachers professionally "by enhancing one's ability to examine familiar patterns of practice and recognize underlying assumptions that guide and direct action" (Costa & Garmston, 2002, p. 5). When successful, this form of professional development may influence teacher's thought process, thus contributing to self-directed learning capacity. It promotes independence and metacognition which, in turn, help teachers reach their personal and professional goals, including self-management, self-monitoring, and self-modifying one's behaviors. Another goal is to strive for holonomy, one's ability to be part of a whole at the same time as being unique (Costa & Garmston, 2002; Costa, Garmston, Ellison, & Hayes, 2013). Holonomous individuals can, therefore, recognize their capacity, know and act in accordance to the norms and beliefs of a system, and feel empowered to contribute to the development of that system through continuous growth and development. In cognitive coaching, "Holonomy is both a goal and an idea: a vision towards which humans and organizations forever strive" (Costa & Garmston, 2002, p. 123). This concept is built on the fact that there are internal resources that assist individuals in their journey to wholeness. These internal resources are linked to five states of mind outlined by Costa and Garmston (2002):

    1. Efficacy, the belief that an individual has knowledge and skills needed to accomplished a given task.

    2. Flexibility, the ability to change and adapt to change.

    3. Consciousness, the ability to be aware of ones thinking, feeling, and actions.

    4. Interdependence, the ability to recognize resources within a group.

5. Craftsmanship, the ability to perform tasks flawlessly by thinking through all

the details.

Costa and Garmson (2007) identify characteristics specific to each of these states of mind

(See Table 2.2).

Table 2. 2.

Key Characteristics of States of Mind

State of Mind	Characteristics
Consciousness	Being aware of self, others, and setting; Knowing one's thinking; Being aware of one's own and others' styles and preferences; Monitoring one's own decisions and the resulting effects.
Craftsmanship	Being intentional; Striving for improvement and refinement; Assessing for excellence; Pursuing ongoing learning.
Efficacy	Having internal resourcefulness; Knowing one has choices and making choices; Being problem-solver; Taking action.
Flexibility	Seeking/generating alternatives; Being willing to consider change; Adjusting to others' styles and preferences; Tolerating ambiguity.
Interdependence	Participating with and learning from others; Developing capacity in interacting with others; Seeking collegiality and collaboration; Balancing self needs and group needs.

Note. Adapted from *Cognitive Coaching Foundation Seminar* (p. 12), by A. Costa and R. Garmston, 2007, Center for Cognitive Coaching, Copyright 2007 by the Center for Cognitive Coaching. Adapted with permission (see Appendix A).

The states of mind cannot be observed. Depending on the task at hand, individual's states of mind can change. Thus, for example, when presented with a new task, one's efficacy may be lower when compared to that of a task that requires skills an individual used in the past. Individuals, whose flexibility is high, are likely to consider various options and identify the course a lesson may take depending on students' responses.

Skills and Beliefs of a Cognitive Coach

A cognitive coach is an individual who assists teachers in their planning, reflection, and problem-resolving as they develop their cognitive processes and work on achieving their goal. Taking a non-judgmental stance is an important component of cognitive coaching. For a coach, cognitive coaching beliefs and skills become part of the coach's identity. These skills include building trust, pausing, paraphrasing, and asking reflective questions.

Trust is a prerequisite to learning. Establishing and maintaining trust is an essential part of the coach's job. Four components of trust describe cognitive coaching: coach's trust in self, trust between the coach and the teacher, trust in the environment, and trust in the coaching process (Costa & Garmston, 2002; Costa et al., 2013). Maintaining confidentiality and being consistent in one's behavior are also important components of trust building. The location in which cognitive coaching conversations take place as well as the posture, facial expressions, body language, rate of speech, language choices, volume, and even breathing patterns contribute to the development of trust between the coach and the teacher. The goal for coaching is to mirror or match as many of these descriptors as possible, thus establishing rapport.

Silence and the use of pauses in coaching are also used as tools that promote the development of cognitive processes (Costa & Garmston, 2002). By using silence, coaches not only recognize the importance of thinking and allowing time for this thinking to occur, but they also show their belief in the individual's ability to think and come up with a response.

Costa and Garmson (2007) emphasize that paraphrasing in coaching is used to acknowledge what has been said, clarify issues or feelings, summarize and organize thinking, or shift focus either to include more details or to move to a more abstract way of thinking (See Table 2.3).

Table 2.3.

Three Levels of Paraphrasing

Level of Paraphrasing	Examples
Acknowledge and Clarify	You're thinking that... So, you are wondering if... You're hoping that...
Summarize and Organize	So, there are three issues. First you're going to ___, then you will ___. One on the one hand ... and on the other hand...
Shift Level of Abstraction	So it's important to you that... A goal for you is... So an example of what you're talking about is...

Note. Adapted from *Cognitive Coaching Foundation Seminar* (p. 35), by A. Costa and R. Garmston, 2007, Center for Cognitive Coaching, Copyright 2007 by the Center for Cognitive Coaching. Adapted with permission (see Appendix A).

Coaches use questions to clarify or probe for more information. These questions define and bring to focus all the issues teachers are thinking about. Cognitive coaches use positive presuppositions when crafting questions. They serve to acknowledge the

wealth of resources teachers have as well as to recognize prior experience and the fact

that some of the skills that lead to success in the past may be adapted to the current

situation. Positive presuppositions use tentative language and plural forms to allow for a

variety of options and to avoid having one expected answer to the question. Some

examples of questions that use positive presuppositions are: (1) What might be some of

the strategies you used in the past that could be applicable to this situation? (2) As you

think about your plan, what options might you consider? and (3) Out of all the activities

you have used in the past, which ones might be effective when working with the new

student?

In addition to the skills that cognitive coaches use, there are several skills and

actions that cognitive coaches set aside. Unproductive patterns of listening, responding

as well as inquiring should be avoided.

Autobiographical listening is one of the most common unproductive listening

patterns individuals experience (Costa & Garmston, 2002; Costa et al., 2013). The main

characteristic of this listening pattern is the listener's thinking about their own

experiences, which prevents the coach from focusing on the present situation. *Inquisitive*

listening is another unproductive listening pattern. Through extensive curiosity, which

might not be relevant to the issue at hand, this type of listening behavior may turn the

coaching conversation into a question and answer session not focused on the thinking

about the issue at hand. Finally, *solution listening* may also prevent a coaching

conversation from being productive. Costa and Garmston (2002) point out that "thinking

of solution approaches as your colleague speaks interferes with understanding the

situation from the colleague's perspective" (p. 66). In addition, focusing on solutions

may prevent from mediating teacher's thinking, thus hindering the process of teacher development.

Mental Maps for Coaching Conservations

Even though cognitive coaching is a stance that can be used in a variety of settings, both formally and informally, there is a more formal structure to this process, known as a formal coaching cycle, which consists of a planning conversation, observation, and a reflective conversation. Sometimes, the observation part of this process may be absent. Cognitive coaching may happen prior to or following the instruction.

According to Costa, Garmston, Ellison, and Hayes (2010), three mental maps guide cognitive coaching: planning, reflecting, and problem-solving conversation. The planning conversation sets the goal to refine the planning process. It assists teachers in setting the goals, identifying success indicators, describing strategies that may be used, establishing a personal learning goal, and reflecting on the coaching process (See Figure 2.1).

Figure 2.1. The planning conversation map.
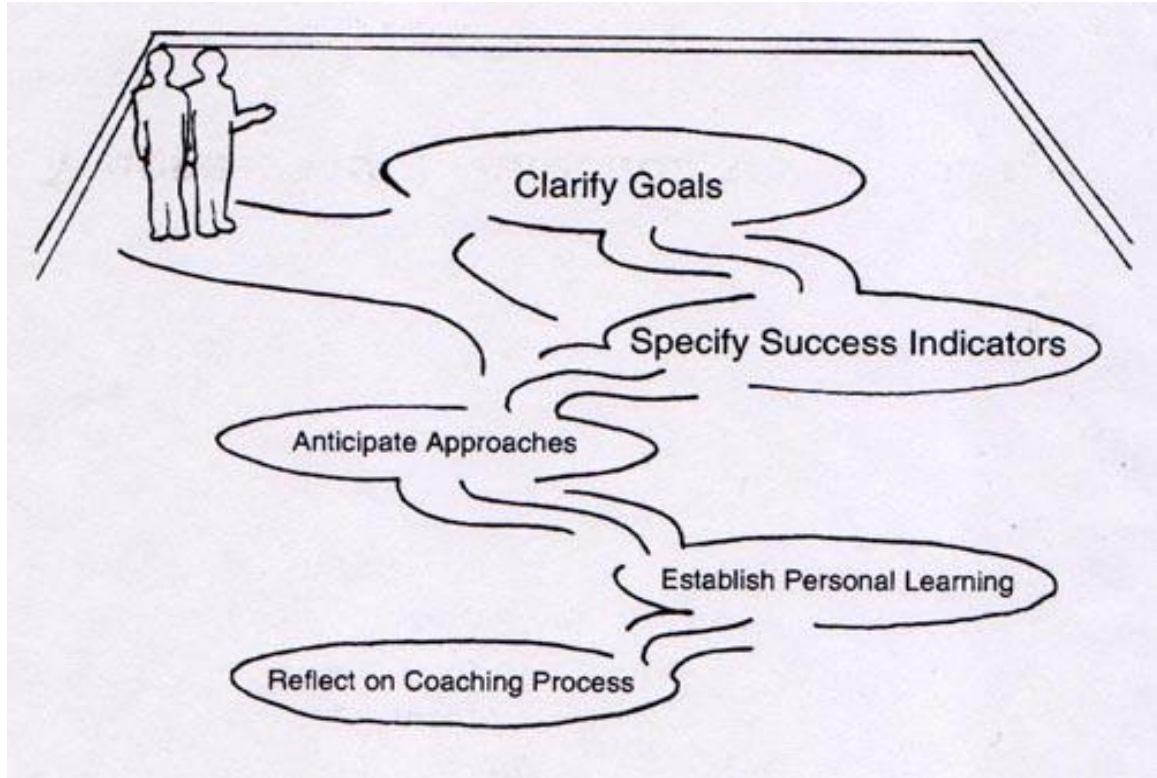
Note. Reprinted from *Cognitive Coaching Foundation Seminar* (p. 27), by A. Costa and R. Garmston, 2007, Center for Cognitive Coaching, Copyright 2007 by the Center for Cognitive Coaching. Reprinted with permission (see Appendix A).

Even though, this map outlines the steps to take, their order is influenced by the situation. When necessary, the coach or the teacher may choose to revisit one of the areas outlined on the map in order to clarify their thinking. This may happen when individuals experience the shift in thinking. Planning conversation is also the time when the teacher identifies what kind of data the coach will collect during the observation.

The reflective conversation map assists individuals as they construct meaning from their experience. This map consists of recalling and summarizing, analyzing causal factors, constructing new learning, committing to application, and reflecting on the coaching process. (See Figure 2.2).

Figure 2.2. The reflective conversation map.
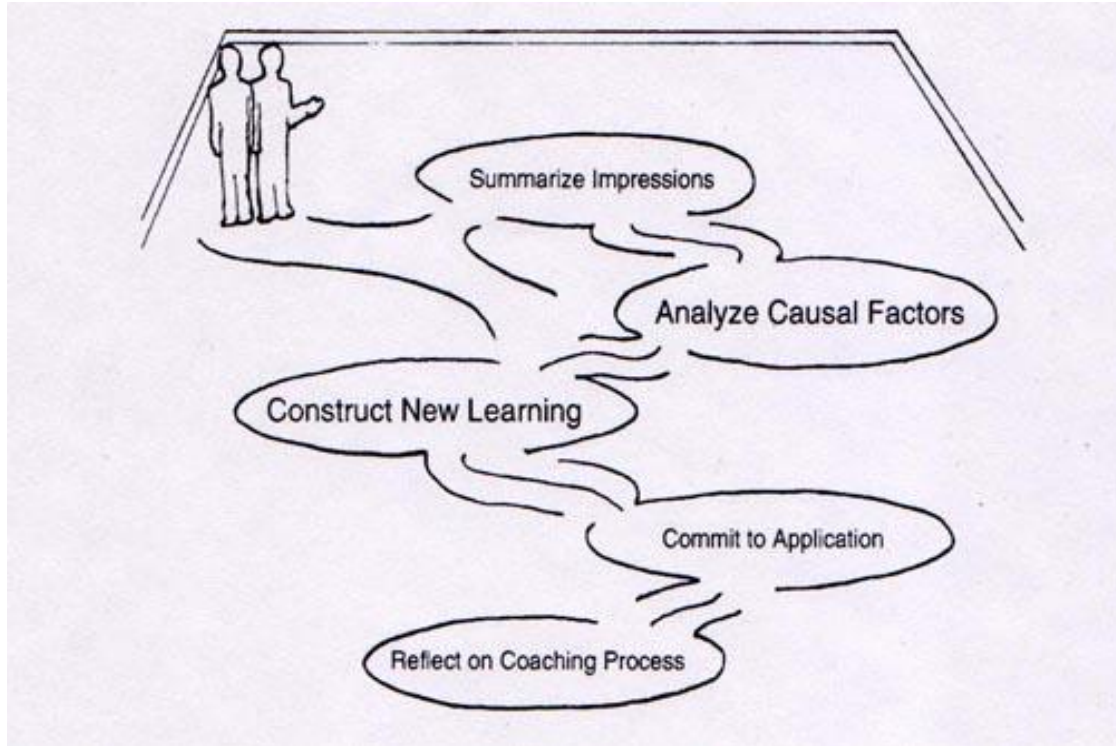
This map gives an opportunity to compare the planning to what actually happened and discuss the factors that contributed to the change in actions. During reflective conversations, the coach may shift from using the reflective map to using a planning map. Thus, when opportunity exists, the coach can navigate among the maps.

The problem-resolving map (see Figure 2.3) focuses on locating the goal an individual has within an existing problem. At the same time, it also emphasizes internal resources of an individual. A problem-resolving conversation helps to shift from the current state of mind to the intended outcome (Costa & Garmston, 2002; Costa et al, 2010).

*Figure 2.3.* The problem-resolving conversation map.
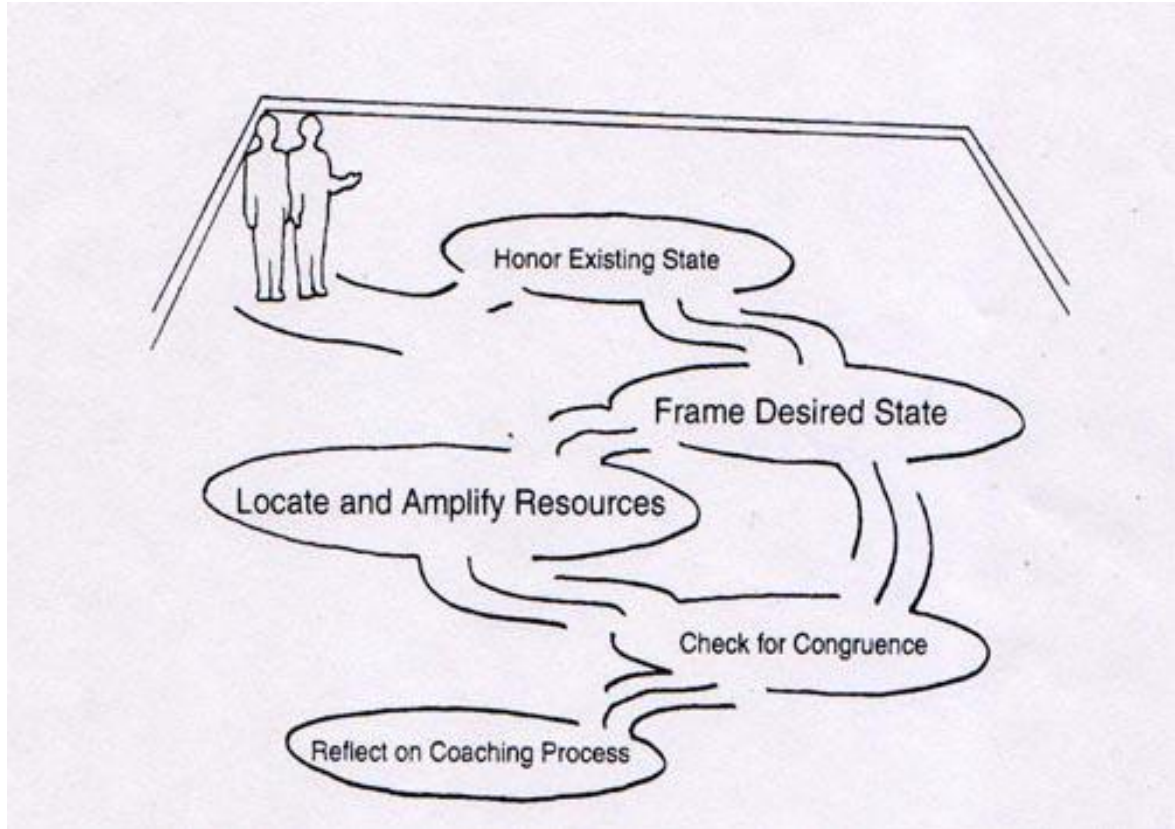
Note. Reprinted from *Cognitive Coaching Foundation Seminar* (p. 87), by A. Costa and R. Garmston, 2007, Center for Cognitive Coaching, Copyright 2007 by the Center for Cognitive Coaching. Reprinted with permission (see Appendix A).

This map is used when the teacher is stuck and is struggling to find appropriate internal resources to address the issue. Word choice becomes important when crafting a goal statement. The coach uses various questions to probe for the states of mind to identify which of them are well-developed as it relates to the given situation and which might need to be developed.

Cognitive coaching provides participating teachers and their coach with a set of strategies and linguistic frames that can facilitate their reflective practice. The key idea of cognitive coaching is to work with individual teachers to assist them in becoming self-directed learners and reflective practitioners. Such educators are able to set goals, choose

appropriate strategies to achieve the desired goals, monitor and adjust their instruction

based on a given situation, think about previous actions and design a plan for future

actions which incorporates learning from their experience.

Impact of Cognitive Coaching

Investigating the impact of cognitive coaching, Edwards synthesizes research

done in KG-12 settings as well as in higher education on the impact of cognitive

coaching on students, individual teachers/instructors, and teams of teachers as well as

staff as a whole. Specifically, she identifies the impact of cognitive coaching on

teachers' personal and professional lives. In terms of teachers' professional lives,

cognitive coaching is viewed as a catalyst for developing satisfaction with the teaching

position and choice of career as a whole, as well as improving teachers' cognitive abilities

to analyze and evaluate their practice. The latest publication (12th edition) of cognitive

coaching synthesis of research came out in 2015. Edwards (2015) identifies nine

outcomes of implementing cognitive coaching:

> (1) Cognitive coaching is linked to benefits to students, increase in students'
>
> scores in particular, (2) Teachers who experience cognitive coaching grow in
>
> teaching efficacy, (3) Cognitive coaching impacts teachers' thinking, (4) Teachers
>
> who experience cognitive coaching are more satisfied with being a teacher, (5)
>
> Cognitive coaching contributes to the school culture becoming more professional,
>
> (6) Teachers who experience cognitive coaching are open to collaboration, (7)
>
> Cognitive coaching benefits teachers professionally, (8) Cognitive coaching
>
> benefits teachers personally, and (9) Cognitive coaching benefits people in fields
>
> other than teaching. (p. 1)

The work of Evans (2005) informs the framework of this research. Evans has a dual role in his study. He is a coach and a researcher, similar to the context of this study where I am simultaneously a coach and a researcher. In his study, Evans (2005) explores cognitive coaching with two middle school teachers. The focus of their coaching sessions is on the implementation of research-based strategies. As a result, Evans (2005) notes that he experiences a shift from wanting to tell teachers what to do to allowing teachers to think and craft their plan of action:

> I can report to a teacher what I have seen during a three-minute visit; however, I have learned from this study that reporting on what I have observed will not lead to improved instruction. The teachers want to engage in professional conversations that will help their performance. (Evans, 2005, p. 122)

While his statement can be true for various types of mentor relationships, in Evans' (2005) study, as teachers participate in more coaching cycles, they are able to identify the focus for each cycle on their own, thus moving from coach identified strategies to teacher identified strategies. A similar idea is expressed in Reed's (2007) study of cognitive coaching. Reed (2007) points out that "when teachers engage in coaching conversations they have opportunities to create new mental models and attempt new strategies and techniques they might not have otherwise attempted without support" (p. 230).

Some of the changes in teachers' thinking may be captured through their reflection on their instructional planning and delivery. Moche (2006) investigates the differences in teachers' reflective thinking by comparing three groups of teachers: teachers participating in cognitive coaching, teachers participating in informal discussions about their practice, and teachers who experience traditional evaluation. The

study suggests that while all teachers grow in their reflective thinking by scoring higher

on the reflective thinking instrument measures, teachers participating in cognitive

coaching grow significantly more than other two groups. Chang, Lee, and Wang (2014)

also examine teachers' reflective practices. Comparing 117 elementary and secondary

teachers who participate in cognitive coaching training to 117 teachers in the control

group, this group of authors find that teachers who are trained in cognitive coaching and

practice cognitive coaching strategies significantly improve their reflective practice as

compared to the control group. Robinson (2011) emphasizes similar findings and states

that teachers "more often analyzed why they teach, what they teach, and what the benefits

on student learning might have been" (p. 36). Furthermore, Lin (2012) studies

instructional conversations of 28 mathematics teachers and finds significant relationships

between the number of coaching cycles and an increase in teachers' instructional

conversations. Additionally, Krpan's (1997) and Smith's (1997) studies suggest that

cognitive coaching assists teachers in increasing their awareness of their practice as well

as gives opportunities to modify their practice. Other studies point out similar

improvements relating to the increase in teacher reflective practices as well as to content

changes in teacher reflections (Bjerken, 2013; Diaz, 2013; Henry, 2012). More

specifically, teachers report their increased ability to apply new learning (Bjerke, 2013),

their understanding about how to meet specific needs of their students (Diaz, 2013), and

their willingness to learn more from their experience (Henry, 2012). McLymont and da

Costa (as cited in Edwards, 2012) have similar findings in their research study. They

state that following their coaching experience, teachers reflect on their practice in a

deeper way.

Eger (2006) and Robinson (2011) influenced the design method decisions of this research project. Both of these researchers focus on teachers participating in cognitive coaching cycles. While veteran teachers in Eger's study report that "reflective practice resulted in higher levels of thinking and more critical analysis of goals, lesson plans, and teaching behaviors, as well as evaluation of their own teaching and student performance" (Eger, 2006, p. 67), teachers participating in the National Board Certification process (Robinson, 2011) also state that they become more likely to analyze all aspects of their practice: content, strategies, student outcomes due to their participating in cognitive coaching.

In the study of cognitive coaching used with first grade teachers, Slinger (2004) reports that cognitive coaching leads to teachers' ability to think on deeper levels, reflect on their practice, feel challenged and supported at the same time. Teachers participating in Slinger's study report that cognitive coaching has a positive influence on their reading instruction because "(a) instruction became more focused, (b) more thoughtful planning occurred, (c) teachers increased their craftsmanship in particular areas of instruction, and (d) the status quo was questioned" (Slinger, 2004, p. 153).

Edwards and Green (as cited in Edwards, 2012) stress that implementing cognitive coaching over three years increases the length of coaching conversations as well as changes their quality. While initial conversations are more general and focused on the class as a whole, later conversations are geared towards specific students and specific actions that could lead to student learning.

Teachers participating in this research study had at least one full academic year of working with a coach trained in cognitive coaching. Therefore, I expect our coaching

conversations to include specific details and have more teacher talk than coach talk. Shifting the focus of conversations from the coach to the teacher may also contribute to the increase of the cognitive complexity of teacher talk.

While several studies report teachers' satisfaction levels with cognitive coaching and the implementation of cognitive coaching skills obtained during training (Beltman, 2009; Brooks, 2000; Dougherty, 2000; Loeschen, 2012; Rilandi, 2013; Robinson, 2011), this research will look at how teachers not trained in cognitive coaching experience this professional development form while working with a coach who was trained in using cognitive coaching strategies.

Cognitive Coaching and Linguistically Diverse Students

The research pertaining to the effects of cognitive coaching on teachers working with linguistically diverse students is limited. While Myrick (2010) points out the importance of professional development for mainstream teachers working with ELLs, only Li and Chan (2007) and Sherris (2010) look at coaching in relation to professional development of teachers working with linguistically diverse students. As for cognitive coaching used with teachers of linguistically diverse students, only Batt (2010) examines the value of cognitive coaching used as a follow up form of professional development that leads to teacher-reported changes in their instructional practices.

Batt (2010) looks at 15 teachers who were trained in Sheltered Instruction Observation Protocol (SIOP) and received cognitive coaching training while implementing SIOP in their classrooms. Her study reports that 53 percent of teachers implemented SIOP ideas prior to their participation in cognitive coaching, while 100 percent of teachers are using SIOP features in their instructional practice following their

participation in cognitive coaching (Batt, 2010). The data Batt (2010) obtains from teachers' reports of their SIOP implementation before and after their participation in cognitive coaching corroborates with observation data obtained using the SIOP observation instrument. Teachers participating in Batt's (2010) study "attributed a shift in their perception of English learners' potential to cognitive coaching" (p. 1005). In addition, this study reports that teachers are more likely to raise the expectations for linguistically diverse students. "Cognitive coaching served as a gentle nudge needed for teachers to turn their understanding of SIOP into application in their classrooms" (Batt, 2010, p. 1005). In her work, Batt (2010) views classrooms as linguistically diverse only due to the presence of ELLs. She did not consider previous studies (Baugh, 2009; Enright, 2011; O'Neal and Ringer, 2010), which recognize a broader definition of linguistic diversity. Current study embraces the concept of linguistic diversity suggested by Baugh (2009), Enright (2011), and O'Neal and Ringer (2010) and aims to investigate teachers' perceptions of cognitive coaching in a school where student population is considered linguistically diverse due to a spectrum of linguistic differences ranging from monolingual English speakers to monolingual speakers of other languages including students who speak non-standard English (Commins, 2008).

Challenges of Cognitive Coaching

While research stresses the importance and the benefits of job-embedded professional development opportunities like coaching, this professional development initiative requires high level of commitment from the school administrator as well as the district (Darling-Hammond, 2009; Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009; Neufeld & Roper, 2003).

Wei, Andree, and Darling-Hammond (2009) emphasize that "nations seeking to improve their education systems are investing in teacher learning as a major engine for academic success" (p. 28). However, tracking districts' expenditures on professional development is difficult because of lack of consistency. Some districts consider professional development cost as part of their curriculum and instruction budget and do not separate such expenditures to be able to track the amount used specifically for professional development. There are also districts that differ in their approach to dealing with coaches' salaries. While coaches' salaries are not included in professional development expenditures in some districts, all cost elements, including coaches' salaries, are included in professional development expenditures of other districts (Knight, 2012; Odden, Archibald, Fermanich, & Gallagher, 2002; Odden & Picus, 2011). On average, districts' spending levels on professional development range from 1 percent of operating budgets to more than 8 percent (Miles, Odden, Fermanich, & Archibald, 2004).

Investigating districts' spending on professional development, Odden et al. (2002) developed a six-element framework for capturing professional development costs: (1) student-free teacher time, (2) training and coaching, (3) administration, (4) materials, (5) equipment and facilities, and (6) travel and transportation. Knight (2012) further focuses on investigating the cost of coaching as professional development. He considers the following cost components associated with coaching: (1) teacher time devoted to coaching, (2) coaches' time, (3) professional development for the coaches, (4) principals' time devoted to coaching, and (5) materials and equipment. Applying this framework to three different schools with coaching programs, Knight (2012) shares that the average cost of coaching per teacher ranged from approximately $3,260 to $ 5,220 per year. This

is a costly initiative for many school districts with tight budgets. While Knight's (2012)

work focuses on instructional coaching, which is different from cognitive coaching, the

cost associated with having a coach who employs cognitive coaching techniques will be

similar.

Neufeld and Roper (2003) underline that coaching may be one element that can

lead to teacher growth, but it is not the only answer. There are also several

considerations school districts need to evaluate as they are making decisions about using

coaching as their professional development, cognitive coaching in particular. Examining

the challenges coaching may present, Darling-Hammond, Wei, Andree, Richardson, and

Orphanos (2009) underline four potential challenges: (1) allocating coaches, (2) finding

time to coach, (3) changing teachers' practice, especially resistant teachers, and (4)

measuring the quality and impact of coaches' work. Reed's (2007) research on cognitive

coaching suggests that administrative support, administrative awareness of cognitive

coaching, and a clearly defined role of a coach are elements that need to be considered to

insure successful coaching experience. In addition, several studies indicate that the

longer the timeframe for teachers to receive cognitive coaching, the better the results

(Alseike, 1997; Bjerken, 2013; Reed, 2007). However, longer periods of implementation

are harder to achieve considering the high cost of the coaching initiative.

Finding time is, perhaps, the most difficult element of coaching (Beltman, 2009;

Reed, 2007; Townsend, 1995). Teachers are overwhelmed with existing district and

school requirements. Recognizing this challenge, Killion (2013) develops a set of actions

that can lead to establishing time for professional development. She suggests to start

with forming a time study group and examining assumptions about time. The next step is

to study time options and develop recommendations about time usage implementation

and evaluation. Finally, the last element is reviewing time use. This approach for

establishing time for professional development can be applied to coaching. Adden and

Picus (2011) have several other recommendations for school districts looking to

maximize the impact of coaching. They suggest that districts provide school-based

coaching at the rate of one coach for every 200 students and insure that teachers have at

least ten student-free days in addition to their scheduled instructional days. These two

recommendations resonate with allocation of coaches and strategic use of time outlined

by Darling-Hammond et al. (2009). I wonder what critique of cognitive coaching will be

mentioned by study participants of this research project and how this critique may

influence their experience of cognitive coaching.

Need for the Study

Considering existing research that establishes the link between cognitive coaching

and teachers' professional growth, experts continue to call for more studies in this field

stating that there are questions about cognitive coaching that remain unanswered: "(1)

"What changes could occur in the ways that teachers viewed themselves professionally?

(2) In what ways might Cognitive Coaching impact teacher's desire to learn and try new

skills?" (Costa & Garmston, 2002, pp. 343-344).

Moreover, reviewing the synthesis of research on cognitive coaching compiled by

Jenny Edwards, I noticed a preponderance of quantitative research rather than fine-

grained qualitative studies. A qualitative research paradigm best fits this inquiry because

it investigates questions about teachers' perceptions of cognitive coaching. Furthermore,

documenting teachers' voices on the impact of cognitive coaching in a linguistically

diverse setting is an important added component needed to fully understand the effects of cognitive coaching.

In reference to this research study, Jenny Edwards commented: "I wanted to suggest some studies like yours. None has been done that are exactly like yours. The closest ones would be Brooks (2001, 2000b) and Dougherty (2000)" (personal communication, July 6, 2012). Electronic communication with Jenny Edwards is included in Appendix B. Both studies mentioned in this communication focus on evaluating cognitive coaching training for master and veteran teachers. They do not address mainstream classroom teachers working with linguistically diverse students, thus affirming the potential contribution this study can make to the existing body of research on cognitive coaching.

Considering limited research on the use of cognitive coaching as a form of professional development in linguistically diverse classrooms and the need to capture the voices of individuals directly affected by the implementation of cognitive coaching, this study investigated how teachers in a linguistically diverse school view cognitive coaching as a form of professional development.

<div align="center">**Chapter Summary**</div>

This chapter discussed a change in how professional development is approached based on the demands of the current educational landscape. It outlined training outcomes for various professional development forms stressing cognitive coaching as a form of professional development that leads to self-directed reflective professional growth. Furthermore, this chapter focused on the skills and beliefs of a cognitive coach and presented mental maps for coaching conversations. It highlighted cognitive coaching

used as a form of professional development in a linguistically diverse school environment. In addition, this chapter presented some critiques of cognitive coaching that should be taken into account by school districts considering implementing cognitive coaching.

CHAPTER 3

METHODOLOGY

This chapter begins with the presentation of theoretical underpinnings of the methodology for this study. It explains the type of research design selected for this research project and describes the researcher's role in this investigation. In addition, it presents the process used to select study participants and outlines data sources used in this research. It further elaborates on the way data was collected and managed. Moreover, this chapter describes the process of data analysis using a grounded theory approach (Charmaz, 2006; Glaser & Strauss, 1999).

Research Purpose and Research Questions

The purpose of this study is to understand how elementary teachers in a linguistically diverse school perceive cognitive coaching in relation to their professional growth. Teachers' beliefs about cognitive coaching and their reports of its value and challenges are the core elements I set out to discover. Furthermore, I wonder how cognitive coaching as a form of professional development is viewed as it relates to teaching a linguistically diverse student population.

The following research questions guide the design of this study and the choice of methods used for data collection and data analysis: (1) In what ways do teachers perceive cognitive coaching as professional development? (2) How do observed teacher behaviors reflect cognitive coaching? and (3) What changes in their practice of educating linguistically diverse students do teachers report as a result of cognitive coaching?

These questions provide a schema for understanding teachers' interpretation of cognitive coaching and its contribution to their professional growth. In addition, they may provide ideas for improving teachers' cognitive coaching experience.

Research Design

Epistemological paradigms about the nature of knowledge contribute to differences in perspectives on empirical studies (Merriam, 2009). One perspective involves quantitative methods and uses experimental designs to generate and test research hypotheses. Such studies use deductive methods. Another epistemological paradigm relies on more qualitative methods which aims at inductive and holistic approach to human phenomena. This is achieved by understanding how individuals construct meaning (Patton, 2002). Qualitative inquiry aims at understanding and illuminating various perspectives on the given phenomenon; in this case, the phenomenon is cognitive coaching used as a form of professional development.

Symbolic interactionism is one of the theoretical bases of qualitative inquiry. The theory suggests that humans create meaning through the process of interaction, while the meaning that humans assign to objects and actions is embedded in the context in which these objects and actions take place (Berg, 2007). In other words, the context in which a certain phenomenon happens influences the way individuals interpret it.

Patton (2002) stresses that the choice of methods in a research study depends on the context and points out that "There is no recipe or formula in making methods decisions" (Patton, 2002, p. 12). Creswell (2012) refers to three criteria when choosing the appropriate methodology for the study: (1) consider research questions, (2) know the audience, and (3) relate research to personal experience and training.

In making the methods decision, I considered the following: the purpose of the study and the research questions that direct the study, the audience, the kind of data that can provide answers to the research questions of this study, availability of resources, and the criteria for evaluating the quality of this project. The research questions of this particular study can be best answered using the qualitative research paradigm because (1) understanding the process calls for a detailed description; (2) participants' experience of the process will vary, and capturing their experience from their perspective is key to understanding; (3) processes are dynamic and are challenging to examine through scaled ratings at only one point in time; and (4) participants' perceptions are the focus of interest (Patton, 2002). Thus, this study uses qualitative methods of data collection and data analysis. It employs a basic qualitative design. By studying how classroom teachers perceive cognitive coaching, I aim to get general understanding about teachers' interpretation of cognitive coaching experience as a whole, including its benefits and challenges.

Qualitative research is naturalistic, because it takes place in real world situations without any manipulation from the researcher's part (Patton, 2002). According to Creswell (2012), qualitative research provides an opportunity to explore the phenomenon from the perspective of those who participate in it. In addition, qualitative work allowed me to look at the issue in depth and pay attention to details. This detailed look assisted me in understanding teachers' perception of cognitive coaching as a form of professional development.

Another characteristic feature of the qualitative research is its subjectivity. This element is often mentioned as one of the faults of qualitative research design. However,

as Stake (1995) underlines, subjectivity is not a fault that should be corrected; it is "an essential element of understanding" (p. 45). A detailed examination of ones' views and ideas contributes to the knowledgebase of factual information.

Within qualitative work, it is possible to look at various experiences of a small group of people or one experience of one person. This study concentrated on investigating a group of three teachers and one coach who used cognitive coaching techniques in a linguistically diverse school. The focus was on understanding teachers' perceptions of cognitive coaching used as a form of professional development. Such micro analysis is not possible on a large scale.

Robert Stake, in his book *The Art of Case Study Research* (1995), emphasizes the interpretive component of research in general and qualitative research in particular. As Stake (2010) points out, "interpretation is an act of composition" (p. 55). Such analysis is done through participants' interpretation of their experience, through the researcher's explanation of what was captured during data collection, and through the reader's construction of meaning based on the findings presented in this research report (Stake, 2010). In this study, participants shared their interpretation of cognitive coaching used as a form of professional development while I provide the reader with the explanation derived from the data reported by the participants. The readers of this report have an opportunity to use background knowledge and prior experience as well as all the reported data to understand the case of cognitive coaching used as a form of professional development in a linguistically diverse school.

Selection of Participants

Creswell (2012) points out that it is typical of qualitative research to study a few individuals, because the purpose is to develop an in-depth understanding of the phenomenon and because "the overall ability of a researcher to provide an in-depth picture diminishes with the addition of each new individual or site" (p. 209). For this study, I used a purposeful sampling technique. "The logic and power of purposeful sampling lies in selecting *information-rich cases* for study in depth" (Patton, 2002, p. 230). The assumption is that studying information-rich cases will illuminate the problem under study and help me answer targeted questions.

Context of the Study

To understand elementary teachers' perceptions of cognitive coaching as a form of professional development in a linguistically diverse school, this study was conducted in Millbrook Elementary, an urban elementary school located in Mid-West. Millbrook was comprised of about 280 PreK to 6 grade students. It had over 96 percent of students who qualify for free and reduced lunch; 90 percent of students were African Americans; and 14 percent were ELL, who represented over 15 countries and spoke over 17 languages and dialects. The majority of the ELL population in Millbrook came from Somalia, Kenya, and Mexico. The mobility rate of students was about 65 percent, meaning students came and left the school at high rates.

In 2010, Millbrook was identified as one of the lowest achieving schools in the state and became a School Improvement Grant (SIG) school. As a SIG school, it had to demonstrate a strong commitment to use the grant funding to raise the achievement. For the next three years, Millbrook had increased accountability to the state which included

monthly meetings with the school administration, numerous reports about the school

efforts to collect data and use it to drive instruction, regular school visits and classroom

observation, etc. The SIG grant required the school to implement one of the intervention

models. The turnaround model was selected for Millbrook Elementary. This

transformation model implied that the principal and at least 50 percent of the staff were

replaced. In fact, Millbrook replaced over 75 percent of the teaching staff at the

beginning of the SIG grant. During the next two years, Millbrook continued to

experience high percentage of staff turn over because of the increased demands placed on

teachers by the district and by the state.

It is important to mention that there were several ways Millbrook teachers could

become involved in coaching activities. Teachers could initiate coaching cycles by either

e-mailing me or approaching me in person. Coaching activities could also be a strategy

that the principal identifies as part of the teacher's performance improvement plan.

Regardless of the way Millbrook teachers became involved in coaching activities, all

coaching conversations and coaching activities were confidential and remained between

the participating teacher and me.

Millbrook was selected for this study because it satisfied the following criteria:

(1) 90 or more percent of students are African Americans who speak non-standard

English, (2) over 10 percent of students are ELLs, and (3) as a coach in Millbrook, I

completed formal training in cognitive coaching and used cognitive coaching to conduct

coaching sessions with the teachers. The participant pool included ten mainstream

classroom teachers in grades K to 6, two PreK teachers, and two special education

teachers working at this school. For this study, the following participant selection criteria

were applied: (1) mainstream classroom teachers, (2) teachers who have at least 10

percent of ELLs in their classroom, (3) teachers who participated in at least one cognitive

coaching cycle prior to participating in this research study, that is teachers who

experienced cognitive coaching before engaging in this research, and (4) teachers who

volunteered to participate in this research study. Using these criteria, three teachers were

selected to participate in the study: Erin, Sam, and Haven. As stated earlier, I was a

coach and a researcher. Jen is my pseudo name used later in this research report to

illustrate my coaching conversations with Erin, Sam, Haven.

Erin

Erin is a Caucasian female. She has more than ten years of teaching experience

working with various grade levels at the elementary level. She worked in several

elementary schools in the district. Erin joined Millbrook eight years ago as a Pre-K

teacher. Two years ago, Erin looped with her class and transitioned to teaching

Kindergarten. As an educator, Erin is always interested in professional development

conducted by the school district and offered through outside agencies. She completed

district SIOP training offered by a district trainer employed by the ESOL program. This

SIOP training consisted of eight days of professional development and eight coaching

cycles in between the sessions. These SIOP training opportunities took place during two

years. Four professional development sessions and four coaching cycles took place each

year.

Erin consistently participates in coaching in Millbrook, both through formal

coaching cycles and through informal coaching conversations during data teams. She

often stops by before school to talk about something she read or something she thought

about to see how it could be used in her class. Erin is always willing to try new ideas to see how the new approach can help her reach more of her students. Because Millbrook is one of the ESOL centers, Erin had ELLs in her class almost every year. During the timeframe of this study, four out of 23 students in Erin's class were ELLs and all of her students qualified for free and reduced lunch.

Sam

Sam is an African American female. She has been teaching for four years. Similar to Erin, she has experience of working with various grade levels, but currently teachers Kindergarten. Teaching is her second career. In terms of professional development, Sam is very interested in various opportunities for professional growth. She is taking courses at a local university to advance her educational career. She participates in district professional development not only during scheduled professional development days, but also during optional afterschool sessions. She completed district SIOP and iPad trainings and used SIOP ideas in her classroom while enhancing her instruction through the use of technology.

Sam is always interested in working with me. She often participates in formal coaching cycles. In addition, Sam loves to stop by and have an instructional conversation about her students and their progress. She is always interested to hear the feedback. After each classroom observation, she prefers to stop by and discuss her lesson rather than respond to a series of questions generated by the classroom observation software. Beginning with student teaching, Sam has always had ELLs in her class. During the timeframe of this study, her class had two ELLs.

Haven

Haven is an African American female. She has three years of teaching experience and is currently teaching first grade. Similar to Sam, Haven also transitioned to teaching after having a different career. Haven first came to Millbrook as a sub assigned to cover the class for one day. After her first day at Millbrook, she came back and remained with the class the rest of the year as a continuous sub. It was a tough year for Haven. Classroom management can be difficult to get a handle on during the first year of teaching. Establishing classroom routines in the middle of the school year made this even more challenging. Moreover, having high accountability and frequent visits from the school district and the state was demanding because of the many requirements and the expectation of immediate results. However, Haven was determined to build a culture that focused on academics and worked closely with her grade level team and me to organize her class and her instructional routines. The following year, Haven accepted a full-time teaching position in Millbrook. She took the time to establish classroom routines and teach them to her students which resulted in a much easier classroom management and allowed her to focus more on instruction.

Haven is interested in learning more about teaching. She is utilizing web-based professional development videos to get additional ideas for her class. She also participates in school and district professional development opportunities. Haven completed district SIOP training and started working on her Master's degree in TESOL. During the timeframe of this study, Haven had five ELLs in her class.

While illuminating Erin, Sam, and Haven as it relates to their experience of cognitive coaching represents a sample size that may seem small, it is only small in

comparison to quantitative research, which requires the representativeness of the

population for generalization. However, since qualitative work is not aimed at

generalizing (Patton, 2002), the focus is not in the size of the sample, but in the selection

of information-rich participants. Considering their participation in cognitive coaching in

Millbrook, Erin, Sam, and Haven are representative of the information-rich participants

whose experience can help gain insight on the process of cognitive coaching used as a

form of professional development.

<div align="center">**Researcher's Role**</div>

In qualitative work, following Shank (2006), the researcher is an inseparable part

of the research process. What that means is that the researcher takes an active part in the

research process making personal decisions and interpretations as part of the project.

Stake (2010) also stresses that the researcher is the instrument of analysis in qualitative

work.

Stake (1995) identifies several roles a qualitative researcher may have: teacher,

advocate, evaluator, biographer, and interpreter. The roles can be combined. Following

these ideas, I combined the role of a teacher who wanted to educate the audience on the

phenomenon of cognitive coaching and the role of an interpreter who attempted to

understand teachers' interpretations of their cognitive coaching experience.

In qualitative research, emic and etic approaches refer to insider and outsider

perspectives. The challenge is to manage both approaches depending on the purpose.

The insider's view and the emic perspective allowed me to see and understand what it

was like to be part of the process. Having first-hand work experience in Millbrook, I am

an insider similar to Evans (2005) who was a coach and a researcher in his study of two

middle school teachers working with a coach on selected research-based instructional strategies. In addition, Erin, Sam, Haven, and I had shared knowledge regarding the experience of working with linguistically diverse students, professional development practices used in the district, and specifically the process of cognitive coaching as it was used in Millbrook. At the same time, I purposefully attempted to assume the position of the outsider during the data collection process to elicit teachers' perceptions of the cognitive coaching process giving them an opportunity to describe cognitive coaching as they know and understand it and bracketing my own interpretive voice during processing the data.

Data Sources and Data Collection

In preparation for this research, I completed the Rights of Human Subjects training (see Appendix C).   In addition, I received the Institutional Review Board (IRB) approval from the affiliated university (see Appendix D). Moreover, I received permission to conduct research in the school district where study participants teach (see Appendix E).

Participants' rights during this research were honored through the use of informed consent (see Appendix F). The informed consent was reviewed and signed in August 2013. Participants were informed of the purpose of the study and the required commitment that the study participation entailed prior to their participation. Moreover, participants had an option to withdraw from the study at any time. All questions participants raised were answered at that time.

Qualitative data describe. As a researcher, I used the data to tell a story. Creswell (2012) identifies four general ways to collect data in qualitative research: observations, interviews/questionnaires, documents, and audiovisual materials.

Interviews were the main source of data collection in this study. Berg (2007) defines interviews as a "conversation with a purpose" (p. 89). At the same time, Stake (1995) refers to interviews as "the main road to multiple realities" (p. 64). Qualitative interviews include open-ended questions to allow study participants to voice their ideas (Creswell, 2012). Interviews allow participants to share detailed information. In addition, according to Creswell (2012), interviews can be conducted one-on-one, with a focus group, on the phone, or through e-mail. This research used semi-structured one-on-one interviews. According to Merriam (2009), such a format "allows the researcher to respond to the situation at hand" (p. 90). The interview questions assist the researcher in keeping the interview on the topic. At the same time, the flexibility of the semi-structured interview permits the researcher to utilize various probes and allow interviewees to influence the direction of the interview.

Stake (2010) suggests using about eight interpretive questions during an hour interview. The interview protocol for this study had seven main questions with additional probes that could be potentially used depending on the participants' responses to the questions (see Appendix G). The interviews in this study included positive presupposition questions (e.g. Of the many new strategies you are considering, which one will you implement first?). This question design suggests that the teacher knows many new strategies and is making a selection based on this knowledge. Questions with positive presuppositions increase the richness of responses using structures that are

designed to create rapport by assuming shared knowledge. Since probes and follow-up

questions can deepen the response and clarify meanings, I shared the interview questions

with another coach who used cognitive coaching and had experience in working with

linguistically diverse student populations prior to interviewing. Such a procedure assisted

me in refining the questions and creating additional probes.

One formal interview was conducted with each of the three participating teachers.

Interviews required additional time commitment from all study participants outlined in

the informed consent. They varied in length. Erin's interview lasted 16 minutes 50

seconds, Sam's interview lasted 23 minutes 17 seconds, and have's interview lasted 10

minutes 20 seconds. With the participants' permission, all interviews were recorded

using IPod and MacBook. As Merriam (2009) points out, such recording "ensures that

everything said is preserved for analysis" (p. 109). Table 3.1 presents information about

each interview.

Table 3.1.

Interview Information

Participants	# of Interviews	Date	Duration
Erin	1	October 24, 2013	16 minutes 50 seconds
Sam	1	October 24, 2013	23 minutes 17 seconds
Haven	1	December 12, 2013	10 minutes 20 seconds

While Erin, Sam, and Haven participated in cognitive coaching throughout the

year, during the timeframe of this research study (October 2013 to December 2013), each

of them participated in two coaching cycles. Each coaching cycle consisted of a planning

conversation, a classroom observation, and a reflective conversation. All planning and

reflective conversations were audio recorded. Two classroom observations were

conducted with each participating classroom teacher for a total of six observations. I took

field notes during each observation. I used a 2-column observation tool, which allowed

me to record my noticings on the left side and my wonderings on the right side. My

noticings represented factual information. For example, I could note how many students

were in the class, what books they read, what strategy they used, etc. . My wonderings

reflected questions I had during the observation. For example, when I noticed that two

students were asking each other what they were supposed to do in the writing center, I

could ask what supports could be used to insure all students knew what they were to do in

each center. Observations' length ranged from 20 minutes to 35 minutes per person for a

total of 2 hours and 11 minutes of observation time. In addition, I gathered the following

data: teacher reflection logs, coach reflection logs, and lesson plans. While I collected all

of the above mentioned data sources, for this research study, I use interviews as a main

source of data collection because interviews are a suitable data collection tool to elicit

teachers' perceptions (Stake, 2010). In addition, I use coaching cycles (planning

conversations, classroom observations, and reflective conversations) to triangulate the

data gather through teacher interviews. Table 3.2 identifies all the data sources used for

this study.

Table 3.2.

Data Sources Used for this Study

Sources of Data	Erin	Sam	Haven	Total
Interviews	1	1	1	3
Planning Conversation	2	2	2	6
Classroom Observations (Field Notes)	2	2	2	6
Reflective Conversations	2	2	2	6

All interviews for this study were scheduled in advance. It was common for

Millbrook teachers to use the data room for coaching conversations, collaborative lesson

planning, and data analysis due to the fact that it was located in the far corner of the

building away from the main office which allowed for privacy. While the data room

continued to be available for coaching conversations related to this study and interviews,

teachers also had an option to meet with me in their classroom or suggest an alternative

location. Having this choice, only Sam asked to meet in her classroom during one of the

planning conversations. All other conversations and interviews took place in the data

room. The participants had the choice of time for their interview. Each of them was

asked to select the time that best fit their schedule. Participants chose their regular

planning time and/or their additional planning times. I made arrangements to

accommodate teachers' choice of time. By providing flexibility in location and time, I

hoped to accommodate each teacher's interviewing preferences and busy schedules.

Data Management

Creswell (2012) points out that data organization is a vital component of the research project in qualitative inquiry since the amount of information collected from the participants is large. One way to organize the data is by type: interviews, observations, and documents. Another way to organize the data is by participant. In such a case, all data sources related to one participant are kept in one folder. I kept a paper folder and an electronic folder for each participant. I then recorded and saved all the information related to each participant's experience of cognitive coaching.

All electronic data for this project was stored on a password protected personal computer. I also had two flash drives for this project. The working flash drive was used to make changes to the research paper. In addition, the back up copy of all data sources was kept on the back up flash drive. The back up flash drive was updated weekly. When not in use, the flash drives were stored in the locked file cabinet.

Qualitative data can be analyzed by hand or using a specialized computer program. I used Dedoose, a web-based coding application (http://www.dedoose.com/), to analyze the data for this research study. One of the advantages of using Dedoose was the possibility to view quotations in context while easily navigating from the drilled down data obtained using visualizations to the original context. This application also allowed me to export data into a variety of formats: charts, graphs, and documents. It also provided an opportunity for memo writing. Moreover, it let me browse, filter, and organize the data, as well as constructing rich graphical representations and visualizations to help explore data on a deeper level. The dynamic code tree promoted easy addition of codes during the data analysis process. Furthermore, Dedoose insured that all the

research data was safely encrypted and protected. While it was originally designed to

meet the needs of a mixed methods research and collaborative research, Dedoose and its

features worked well for qualitative data analysis as well.

Data Analysis

Data analysis began with the transcription of all 15 audio files (interviews and

coaching conversations). To transcribe the data, I listened to the audio recording on the

iPad using QuickTime media player and typed the data in a Word processing format. I

paused the recording after several spoken words were heard to have adequate time for

typing. The QucikTime media player allowed me to hear the last word(s) of a previous

phrase before moving on to the next phrase in the recording. This let me keep track of

the correct location in the recording and insure that no data was lost during the initial

transcription. In addition, after typing several phrases, I went back and listened to the

recording again to insure transcription accuracy. After each recording was transcribed, I

listened to the whole recording and adjusted for minor inaccuracies. Interviews and

coaching conversations in this study yielded 3 hours 44 minutes and 14 seconds of

recorded data, which equaled to 131 pages of double-spaced transcribed text.

Once all audio data was transcribed, I uploaded all transcribed documents into

Dedoose web application and began coding using a grounded theory (GT) approach to

data analysis (Charmaz, 2006; Glaser & Strauss, 1999).

Grounded Theory Data Analysis Approach

Grounded theory is an inductive approach to data analysis, since the researcher

develops initial codes from the data collected (Corbin & Strauss, 1990, 2008). The

purpose of grounded theory data analysis is to ground the findings in the data obtained

from the participants. Grounded theory data analysis is used to develop abstractions

rather than descriptions (Glaser, 2007). As Glaser (2007) points out, "It is not truth that

transcends; it is conceptualization!" (p. 5). Such conceptualization is achieved through

the use of a constant-comparison method, which compares incidents to other incidences

in the data looking for similarities and differences (Creswell, 2012). Barney Glaser

(2007) emphasizes the importance of the statement "all is data" (p 2). This perspective

implies the use of various sources of data as part of grounded theory data analysis.

Grounded theory moves from initial coding to concept building through

organization of data into categories according to their properties and dimensions (Corbin

& Strauss, 2008). Corbin and Strauss (2008) define some characteristics typical of

grounded theory data analysis. The characteristics I used for this research are: open

coding, axial coding, and selective coding (Corbin & Strauss, 2008).

The data analysis started with coding one of the interview transcriptions using

open coding. During open coding, Charmaz (2006) suggests coding data as actions rather

than topics to "curb our tendencies to make conceptual leaps and to adopt extant theories

before we have done the necessary analytic work" (p 48). Following these ideas, I

worded initial codes as actions. For example, selecting the focus for coaching cycles,

bouncing off ideas during conversations with the coach, admitting the need for additional

planning, etc. While coding the first interview transcription, I developed the code book

of parent codes and child codes using Dedoose dynamic code tree. For example, coach's

actions was identified as one of the parent codes which served as an umbrella code for

several child codes: helping teachers organize, stimulating teacher's thinking, and giving

teachers feedback. When coding subsequent interviews and coaching conversations, I

used the same open coding method and was applying the codes from the code book

adding and modifying additional codes, as needed.   Open coding in this study yielded

119 codes and 1009 code applications which were captured in Dedoose.

I reduced open codes to main patterns and used axial coding to find the

relationships between all data sets. Axial coding, according to Corbin and Strauss (2008)

is "the process of relating categories to their subcategories ... linking categories of the

level of properties and dimensions" (p. 123). The concepts that are related to each other

are then grouped together to form categories. To achieve this, I was examining the codes

multiple times to identify similar codes and group them together. As a result, several

codes were merged (e.g. the initial code "admitting lack of processing time during

professional development" was merged with "admitting lack of differentiation during

professional development"). Multiple examinations of initial codes prompted me to

revisit the code names and merge codes that addressed similar concepts. I condensed the

number of codes from 119 to 50 (see Appendix H) and was able to identify five themes

grounded in the data collected for this study, two of which include several sub-themes.

Trustworthiness

Trustworthiness, according to Shank (2006), consists of dependability, credibility,

transferability, and conformability. The concept of dependability is related to knowing

where the data come from and how it is used. In this study, dependability was achieved

through a detailed description of the data sources and the data collection procedures. The

concept of credibility addresses the degree to which the research findings appear

believable. To establish credibility of this study for the reader, participants' words are

cited as part of data interpretation in the next chapter. To address the issue of

transferability, I provided details about the context of the study as well as its process to

assist the reader in understanding the study and its elements that might be relevant to the

reader's perspective, context, and interest. The amount of detail given to the reader for

evaluating the data collection and analysis is what conformability implies. Using a

detailed description of study procedures, I hoped to establish conformability of this study.

To enhance trustworthiness, I used triangulation. Data triangulation is when

different types of data are used and varying perspectives are sought out. Investigator

triangulation is when several researchers interpret the same set of data; and

methodological triangulation is when different methods are used to investigate the same

problem (Patton, 2002). In this study, I triangulated the data by illustrating participants'

quotes with examples from coaching conversations. In addition, I discussed the

interpretation of data with another coach who uses cognitive coaching with teachers

working in linguistically diverse settings.

Following suggestions given by Creswell (2012), I completed a member check

after each interview was transcribed. This entailed a conversation with the study

participant during which the researcher showed the interview transcript to the participant

and asked the participant to check the document for accuracy of their statements. Study

participants confirmed their reports and did not request any changes or deletions.

Chapter Summary

This chapter outlined the methodology of the study and specified the design used

for this research. It stressed that the methodology and the design selection were based on

the research questions guiding this study. Qualitative research methodology, basic

qualitative design in particular, was selected for this research project because this design

was instrumental in understanding teachers' perceptions of cognitive coaching as a form of professional development in a linguistically diverse school. Tenets of grounded theory were used for data analysis. In addition, the chapter described the research site and its participants. It also provided an overview of data collection, which was done through interviews. The data analysis in this study used grounded theory to construct categories by means of open coding and axial coding. Chapter 4 will provide interpretations, while Chapter 5 will conclude with discussion and implications for practice and future research.

CHAPTER 4

INTERPRETATIONS

This chapter presents the interpretations of teachers' reports about cognitive coaching used as a form of professional development in a linguistically diverse school. Erin, Sam, and Haven are the three teachers whose stories are highlighted in this research study.

During October - December 2013, after Erin, Sam, and Haven agreed to participate in this study; they each met with me once for the interview and each participated in two cognitive coaching cycles. Each coaching cycle consisted of a planning conversation, classroom observation, and a reflective conversation. All coaching conversations and interviews took place during teachers' planning time. Erin chose to focus on Math for both of her coaching cycles, Sam worked on reading, and Haven decided to focus on teaching writing.

This chapter outlines five themes that developed in response to the following research questions: (1) In what ways do teachers perceive cognitive coaching as professional development? (2) How do observed teacher behaviors reflect cognitive coaching? (3) What changes in their practice of educating linguistically diverse students do teachers report as a result of cognitive coaching? Analyzing teachers' reports of their perceptions of cognitive coaching, I looked at the concepts that surfaced participants' interview reports and, based on the common concepts, I formulated the following five themes: elements of reflective practice, creating new instructional applications, embracing the diversity spectrum, facilitating teacher-driven learning, and promoting shared responsibility. Cognitive coaching conversations further support these themes.

Emergent Themes

Analyzing teacher's perceptions of cognitive coaching and interpreting their reports of their experience, I documented five themes: elements of reflective practice, creating new instructional applications, embracing the diversity spectrum, facilitating teacher-driven learning, and promoting shared responsibility (see Figure 4.1). Elements of reflective practice describe teachers' ability to think about their previous lesson and analyze it as well as adjust their instruction in response to student needs. The theme of creating new instructional applications addresses teachers' ability to refine the implementation of the lesson as they plan and outline the impact on student growth. Embracing the diversity spectrum is a theme that conveys teachers' views about various degrees of differences among their students, while facilitating teacher-driven learning highlights teachers' ability to choose the direction for their professional growth. The theme of promoting shared responsibility underlines the importance of the relationship between the coach and the teacher that helps achieve a common instructional goal.

Figure 4.1. Emergent themes.
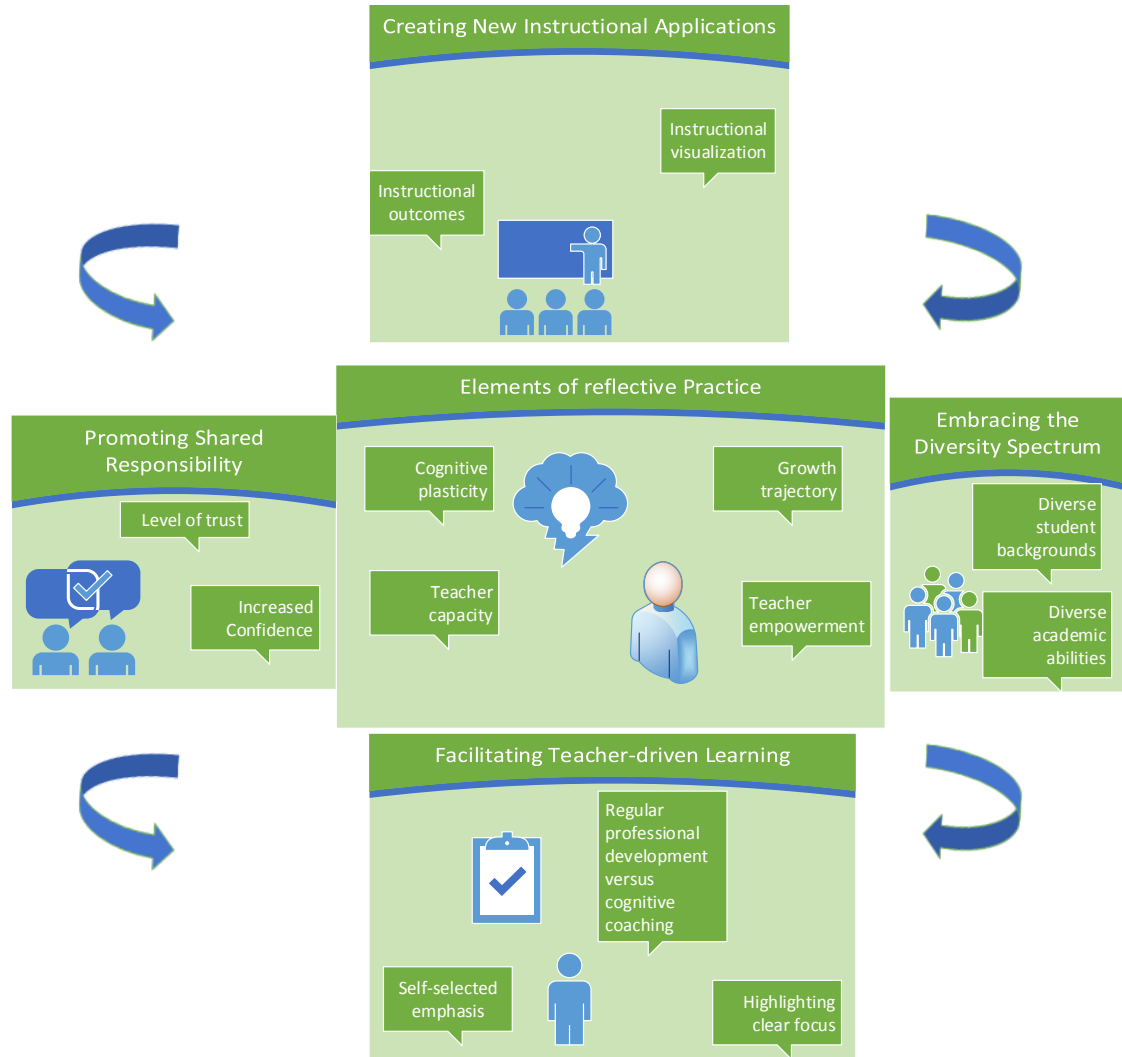
Elements of Reflective Practice

One of the most prominent themes that developed as a result of data analysis in this study addressed the importance of reflective practice. Reflective practice describes teachers' ability to think about their previous lesson and analyze it through the lens of their assumptions about learning as well as adjust their instruction in response to student needs. This overall theme encompasses four sub-themes: (1) cognitive plasticity,

(2) growth trajectory, (3) teacher capacity, and (4) teacher empowerment. Each sub-theme is discussed below.

      Cognitive plasticity. Cognitive plasticity describes teachers' ability to think about multiple options and select what fits best in a given situation considering previous experience, current content, and student needs. During their interviews, both Erin and Sam emphasized the connection between the use of cognitive coaching techniques and their ability to think about instruction. When describing the questions the coach asked during the coaching conversation, Sam commended:

> They [questions] do not have one answer (laughing). They always cause you to think about something; it's never like a direct yes or no response to anything. It's more a way of getting me to think about and reflect on the different lessons I have done and strategies I have used. Instead of telling me directly what I need to do next or giving me other steps, it's like getting me to think through the process and come up with different strategies. (Sam, Interview, October 24, 2013)

Sam stressed that cognitive coaching questions pushed her thinking by not only encouraging them to think in response to the questions, but also allowing her to approach the questions from multiple perspectives. Erin shared similar views on coaching questions when describing her understanding of cognitive coaching in response to the interview prompt about the use of cognitive coaching in Millbrook.

> I noticed they are open-ended, they are not yes or no, and they cause me to reflect on what I am doing, the why of what I am doing, and the how of what I am doing versus simply doing it. And that's what I get from the questions. (Erin, Interview, October 24, 2013)

Erin showed a detailed description of the different aspects of teaching she is considering in response to the coaching questions. She stressed the importance of thinking about the content of the lesson and the implementation procedures. In addition, Erin emphasized the importance of having the rationale for her actions.

Sam also stressed the fact that her participation in cognitive coaching contributed to the development of her thinking by encouraging her to consider multiple options, thus leading her to making informed instructional decision for her lesson. She compared her earlier experiences and expectations to her later experiences with cognitive coaching:

> When I first started, I was more interested in how to do this . . . and give me the answer. "What is cooperative learning?" But now, it's more or less me . . . going out and researching for myself, coming back with some answers, looking at the questions that you pose during your feedback, and thinking about it myself. (Sam, Interview, October 24, 2013)

Sam's emphasis on receiving one correct answer shifted to highlight the importance of the thinking process. One of the planning conversations I had with Sam further supports her reports in regards to coaching questions used as a tool to facilitate thinking.

> Jen: So, what do you want to focus on?
>
> Sam: Comprehension questions in read alouds as well as guided reading because we are not doing DRA anymore, and DRA focused on the comprehension portion,. I want to know how, even in kindergarten, I can get them questions that promote comprehension.

Jen: So, you recognize that comprehension is an important thing and you want

         to make sure you follow up on that? You mention that you want to do it

         both in the focus lesson as well as guided reading.

Sam: Right.

Jen: Which of these two would you like to focus on first?

Sam: I'd like to focus on guided reading and that is just because we don't have

         the DRA anymore as a backup.

Jen: So, how do you identify the comprehension focus for each of your guided

         reading groups?

Sam: Okay. Well, I was looking at the book to see which comprehension skill

         best lends itself to that I am thinking that I will probably want to focus on

         main idea and pulling out details.

Jen: So, the details to support the main idea?

Sam: Exactly, exactly.

Jen: So, do you have a specific group in mind as you are looking at your data

         wall? Which of these groups will focus on main idea and details?

Sam: Definitely the top two groups, so they would be the blue and the green

         groups.

Jen: So, your level C?

Sam: Yes.

Jen: Okay. So, we have a focus, we know which group you will be working

         with. What might you use as a tool to help them work through that

         comprehension skill of main idea and details?

Sam: Well, we've used the graphic organizers and, I am going to try the one

with the umbrella. We didn't get to that this week.

Jen: Okay.

Sam: So, we are going to try the one with the umbrella and the raindrops. What

I have noticed was this week I had too many details, so maybe just the

umbrella with just two raindrops.

Jen: So, how will you know if you are successful during that lesson?

Sam: I don't know. I guess if they are able to pull on detail from the story. If

they are able to identify the main idea first and then pull one detail from

the story that supports. (Sam & Jen, Planning conversation, November 11,

2013)

In this planning conversation, I used questions to help Sam refine the focus of the lesson.

From the general idea of comprehension in read alouds and during guided reading, she

moved to emphasize the comprehension skill of main idea and details in her level C

guided reading group. Through questioning, Sam was also able to describe the graphic

organizer she planned on using. In addition, while Sam was uncertain at first, she

eventually was able to articulate what indicators she planned to use to determine student

success.

During one of the coaching cycles with Erin, I was doing a classroom observation

in her class. The students were working on making one more and two more using a ten

frame. During this lesson, students were working with a partner to complete this activity.

Walking around the class, Erin was observing how students talked about their answers

and how they recorded their answers in the journals. Erin stopped the class and asked

everyone to meet her at the carpet where she went over one example by completing the

activity together as a whole class again. She commented on this instructional decision

during the reflective conversation.

> Jen: I noticed that you stopped and brought them [students] back together.
>
>   You kind of started explaining all over again sort or using a little bit more
>
>   of that metacognitive aspect, explaining your thinking as you were doing
>
>   that. So, tell me about what you did.
>
> Erin: I could tell that they were clueless as to what I expected, so I needed to
>
>   teach them the thought process. First, I need this card that tells me how
>
>   many I have to have. So, I put those down and now I know that what this
>
>   says I need one more; I put one more down. I thought by talking this out
>
>   loud then they would be able to talk to each other and get to it. (Erin &
>
>   Jen, Reflective conversation, November 13, 2013)

Erin explained her decision to clarify the concept to the whole class again was a result of

her observation. She noticed multiple students making mistakes as they were working

independently. She decided to focus on teaching the process rather than showed the

correct answer.

I noticed that Sam and Erin connect questioning tools to being intentional in their

lesson preparation. In her interview, Sam talked about the link between the questions and

her lesson planning practices:

> [The coach] might have had a question about what could I do to get more
>
>   students involved and then that could lead me to thinking that I need to try more
>
>   cooperative learning type of structures in the classroom. So these questions are

leading me to think about other things I can incorporate. . . . It also forces me to

really, really plan better, be efficient about planning and be more strategic or

deliberate in instruction. That's what it really forces me to do (Sam, Interview,

October 24, 2013).

Sam emphasized the importance of planning and being intentional in her teaching. Sam

noted that coaching questions lead her to this shift towards intentional planning. In

addition, Sam also described how she started to apply the same questioning tools as an

instructional approach in her classroom. Sam explained her views:

It's intentional questioning. It's definitely intentional. To make the other person

think to what their expectations are, what they are supposed to have and do, or

how did it go. Did I meet that [goal]? I found it helpful in the classroom even to

do what you [the coach] do to us to them [students] to make them think for

themselves because they just want you to yes or no them and let them go about

their business. You know, at some point, they have to have some accountability.

Not me saying, "well you don't have this and you don't have that". There are

quite a few that definitely can go through that checklist and find what they have

and don't. With them especially, I don't give them the answer. I let them figure

it out (Sam, Interview, October 24, 2013).

Sam reported that she began to use coaching questions to promoted students' thinking.

This, in her opinion, increased student ownership of their learning. Sam also touched on

her way of differentiating. She stressed that she used coaching questions especially with

students who had the capacity to figure out the answers on their own.

I observed a similar application of coaching tools when visiting Erin's class. During a math lesson on money, Erin chose to use questioning as a way to redirect students away from their mistake and prompt them to consider other ways to solve the problem. She asked students to compare the coins and provide a rationale for their sorting. She first asked students if the coins they placed in the same pile looked exactly the same. Then, she pointed to two coins and asked if they looked exactly the same. This second question prompted one of the students in a group to identify the difference between the coins and move one of them into another pile.

While Haven did not address the concept of becoming intentional in her lesson planning during the interview, I was able to see some evidence of becoming intentional during the planning conversation with Haven. We were meeting to discuss her upcoming lesson on non-fiction writing. Haven narrowed the focus down to non-fiction writing about animals, because she saw it as an opportunity to connect her reading lesson and her writing lesson. During this planning conversation, Haven identified specific ways to support her students' learning.

Jen: So, what might be some of the ways to support different groups in a different ways so that they can all ultimately write their non-fiction report about animals?

Haven: Not only the graphic organizer, but with the lowest group it will probably be a sentence stem. I might go ahead and let them select their own animal. That way, they will have their own background knowledge of it. Sometimes when I pick a cat, some of them haven't had cats before.

>   Jen: So, how might you support them by providing them with some books
>   about these animals?
>
>   Haven: Animal books? Yeah. Okay. So, I will have a certain amount of animals
>   and have books about those animals. Probably we can do a book study on
>   one. Study a certain animal and then they can write their report from there.
>   (Haven & Jen, Planning conversation, December 9, 2013)

Haven described specific supports she planned for her students. She identified a graphic organizer as one was to support her students. In addition, she outlined her plan to use sentence stems with one of her groups to further support them.

Working with Haven, I noticed that she often refers to the research-based strategies. She usually benefits from our discussions about the application of the strategy. In addition, I noticed that in this conversation Haven chose to let students select an animal they already knew about. I think Haven may be missing an opportunity to move her students further by exposing them to the animals some of her students may not have seen before. This may be a focus of future work with Haven.

The common thread among all three study participants is that they describe their experience of working with me through cognitive coaching as a way to exercise their cognitive abilities and increase their cognitive capacity.   Rather than blindly follow directives, teachers who participate in cognitive coaching have an opportunity to recall and apply their knowledge and skills. They can also decide how previously successful instructional scenarios can be applied in new situations. These concepts were highlighted in previous research.

In my coaching conversations, I rely on questioning techniques to help me elicit teacher's ideas. I see questions as a way of recognizing teachers' cognitive capability which enables them to think about different instructional possibilities. I use tentative language and positive presuppositions in my questions to invite teachers to think about a spectrum of ideas. Over the years, I noticed that teachers tend to consider more instructional options when they have an opportunity to verbalize their thinking and share it with me in a coaching conversation.

In summary, cognitive coaching techniques, questioning in particular, prompted teachers to think about their actions while considering multiple instructional opportunities. In addition, teachers began to apply questioning tools as instructional strategies in their classroom. Erin's, Sam's, and Haven's experience of cognitive coaching in Millbrook gave them an opportunity to tap into their previous successful teaching practices and explore possibilities that contributed to their professional growth as they thought about the most appropriate way to deliver the lesson to their students.

Growth trajectory. Growth trajectory outlines teachers' current state of instructional practice and allows them to set goals that will lead to their professional growth. This sub-theme is related to the way participating teachers are able to identify and recognize positive aspects of their instructional practice as well as pinpoint areas in which they would like to experience additional growth.

Goal setting is one of the important components of the planning conversation in coaching. When I first started coaching, I noticed that teachers struggled to set goals. They knew what they wanted to do during the lesson, but articulating their plan as a goal was challenging. In addition, during every planning conversation, I always asked

teachers to set goals for students and to set their personal professional learning goals. During the coaching cycle on counting money, Erin set a personal goal of staying within the voice level two during her lesson, while Haven set a personal goal of preparation during her coaching cycle on non-fiction writing. These personal goals guide teacher reflection and help teachers explore the relationships between their actions and students outcomes.

In response to the interview question about her understanding of cognitive coaching as it was used in Millbrook, Sam shared:

I might be able to see what worked well and what didn't work well. I think it's more or less me thinking about how I can be doing a better job teaching or implementing a lesson in a different way, coming up with different learning styles to meet the needs of all kids. I think it's more putting it back on me to correct or critique, or readjust my teaching or instruction. (Sam, Interview, October 24, 2013)

Sam realized that for her teaching to be effective she needed to consider her students, their differences, and their needs. Sam established a clear connection between her actions as a teacher and how her actions influenced students' learning. During my work with Sam, I noticed how she took her students' learning personally. She approached our coaching conversations with a growth mindset and seemed to be on the continuum of learning.

Haven displayed a similar attitude of continuous learning. Haven described her feeling about her participation in cognitive coaching by pinpointing "I feel like I am benefitting from cognitive coaching and improving my craft by participating" (Haven,

Interview, December 12, 2013). She later talked about cognitive coaching as an

opportunity to revisit the same instructional element several times by focusing on its

various aspects. She expressed eagerness to continuously develop her knowledge and

skills as an educator and saw her work with me as a medium that allowed her to continue

to refine her craft in a non-threatening environment:

> I am very grateful that I have coaching cycles. I think I have done quite a few and
>
> it's worth the time and it's worth the effort. Even if do the same area twice, you
>
> know just to keep it going, because it has so many components to it then that's
>
> fine with me, I would rather be working towards something than constantly hear,
>
> "that's not right . . . , that's not what you are supposed to do". (Haven, Interview,
>
> December 12, 2013)

In this response, Haven referred to the common evaluation practices. Such evaluation

stance assumed that there was one right way to teach. The way Haven referenced this

style of feedback suggested that for her personal development, such feedback was not as

effective as her work with me through cognitive coaching. When I first started coaching

Haven, she approached coaching as a way to identify the right thing to do. It took time to

move Haven towards the continuum of learning in which there was no one right thing to

do, but the whole purpose was in identifying what could work. Now Haven displays

more of this learning continuum than she did in the past. During the interview, Haven

talked about our reflective conversations and outlined the process she was going through

cognitively as she analyzed her lesson, identified what went well, and what could be

tweaked:

First, it is for me to identify what went well, what I think my successes were. And then, I hear your [coach's] noticings and wonderings and reflect back on maybe what steps I should do again or what to try differently. (Haven, Interview, December 12, 2013)

From her words, it is evident that Have now has a mental map of things to do after teaching a lesson. As her coach, I like the noticings and wonderings format as a way to capture what's going on during the lesson. Having the noticings section allows me to record factual information of what I see and hear in the classroom, while the wonderings section lets me record my thinking and comment on what I see and hear. At the same time, I can also record questions I want to ask during the reflective conversation.

Sam also elaborated on how cognitive coaching prompted her to refine instructional practices by dedicating time to intentional reflection. When talking about the differences between cognitive coaching and other forms of professional development, she pointed out that cognitive coaching was different from what she used in the past.

Just to be honest, it's just change… I get personally set in a track and then I am just trying to get everything done and scramble in. It's just the matter of stopping and doing something different and changing the way I do things, making sure that I am reflecting after every lesson, making sure I am strategically planning ahead; I am putting the time in before I come to class. I think it's the change. It's just me reprogramming myself. (Sam, Interview, October 24, 2013)

By labeling her cognitive coaching experience as change, Sam's response suggested that there was more work to be done in terms of moving her towards intentional reflection.

Sam suggested that she needed to continue to work on making reflection her consistent practice.

Interestingly, out of all three study participants, Sam is the one who always stops by to talk about her teaching. She often comes to chat about the activity she did earlier that day even when we are not doing a coaching cycle. I think verbalizing her instructional practice helps Sam identify the next steps. She always leaves with a plan of what she will do next; how she will follow up on the activity. At times, she chooses to do a follow up with a specific group of students and plans additional supports for them.

Erin, on the other hand, seems to do more thinking on her own. She always comes to me with a plan; she knows what she is going to do in her class. During the interview, she explained:

> At times, I noticed weaknesses in myself and I have gone and asked for coaching in that area. And my anticipation is that once I go through this process enough times, where I can look for my strengths and weaknesses and reflect on my practice. (Erin, Interview, October 24, 2013)

Erin's words suggest that she approached cognitive coaching cycles as a way to practice the skills of self-reflection. Erin revealed her goal of developing into a self-directed learner.

While expressing respect for me as their coach later in the interview, Erin also pointed out that cognitive coaching did not have the evaluative component that was typical of formal classroom observations conducted by school leaders. Erin stressed that cognitive coaching was "an opportunity to learn from. It's not [like] this is going in your record kind of thing, you know. It's very different; it doesn't make you nervous; it doesn't

worry me" (Erin, Interview, October 24, 2013). I think that such views portray cognitive

coaching as a teachable moment that invites educators to grow in their profession without

having any fear of a bad evaluation. This was also noted by previous research (Chang et

al., 2014; Henry, 2012; Nash, 2011).

Teachers' thinking about the lesson at times seemed to be very critical in that they

suggested the need to improve certain aspects of their instruction. This self-identified

need for change was portrayed as a powerful engine, which led teachers towards

becoming self-directed practitioners. Haven described the journey this way:

> We do a coaching cycle about the area that I have concerns in, or one area I have
>
> to improve on or want to improve on. We talk about it, get some ideas, prepare
>
> for that lesson, then you [coach] come observe it, and then we get feedback on
>
> what worked, what didn't work, what could be changed (Haven, Interview,
>
> December 12, 2013).

From her words, it is not clear how Haven identified which areas she needed to improve.

In the past, she did both: focused on something she personally wanted to work on and did

a coaching cycle on a specific aspect of her instruction which was pointed out during the

principal observation in her class. Haven gave a description of the coaching process.

She stressed the emphasis on things that went well along with the elements that called for

adjustments.

During our reflective conversation, Haven also showed her critical views of her

instruction.

> Jen: One of your personal goals was to work on preparation. So how do you
>
>   think you did on that?

> Haven: I did better. I did better because I knew where I was going with it. I knew
>
> I was just going to focus on [the] dolphins. The first time, the preparation
>
> wasn't so go because I think I released them a little too quickly to their
>
> own books and they didn't really have a good grasp of what they were
>
> supposed to be doing. (Haven & Jen, Reflective conversation, December
>
> 12, 2013)

Haven described her improvement. She pointed out that the lesson went better this time.

Haven attributed this change to her planning, which allowed her to know all the steps of

her lesson and be intentional about the timing.

> Displaying self-criticism, Erin recognized the need to continue to work on the

area she identified and addressed during multiple coaching cycles. At the same time, she

also recognized the success that came with intentional planning and question design, in

particular:

> And through the couple of coaching cycles, we worked through my questioning
>
> techniques. That still needs work. I found that if I plan the questions ahead of
>
> time, it goes better. So, cognitive coaching means to me a process of developing
>
> a better teacher. (Erin, Interview, October 24, 2013).

Erin mentioned that we focused on her questioning techniques during several coaching

cycles. While, she shared her understanding of how planning her questions lead to a

more positive experience, Erin suggested that her questioning strategies required more

work. As in previous studies (Danielson, 2008; Diaz, 2013; Nash, 2011), I think that

Erin's persistence, as well as her willingness to focus on questioning techniques as her

area of professional growth, can help link teacher actions to student outcomes.

As teachers described cognitive coaching questions as a thinking tool, they stressed intentional planning and recognized that intentional planning and reflection took time. It can also be understood as something that required more work. When describing her preparation for the coaching conversation, Erin stressed:

> I always have to have something prepared when I go into cognitive coaching. I can't just show up and take notes. I have to have done work ahead of time so that we have something to talk about. That's one of the things that is a weakness because this work takes time. It's also a strength, because I am already thinking about my lesson and doing things for it even before the planning meeting and way ahead of the actual lesson (Erin, Interview, October 24, 2013).

While initially this need to prepare and do some work prior to the coaching conversation was perceived as a weakness, Erin later acknowledged it as a strength. This may illustrate how having the opportunity to be intentional about instruction overpowered the time constraints notion that was a common challenge for many teachers.

By giving teachers an opportunity to tap into their knowledge and skills, as a cognitive coach I aim to recognize and show that I value teachers' professional identity and, at the same time, push them to the next level in their instructional practice. Such guiding approach was highlighted in previous research (Bjerken, 2013; Henry, 2012; Lin, 2012).

A common thread I noticed among all three study participants is that they describe their experience with cognitive coaching as a way to guide their personal learning. They want to be actively involved in their professional development. In

addition, Erin and Sam rely on their participation in cognitive coaching to intentionally

recognize successful teaching experiences and be able to set goals for future learning.

Teacher capacity. Teacher capacity implies teachers' ability to use their

knowledge, skills, and experience to perform at a high level.

Sam shows evidence of becoming intentionally metacognitive in their approach to

instruction. One example of this idea was related to the use of sentence stems as one

support type for ELLs. Sam described her experience:

> I am noticing that I am incorporating more things that I learned before. I am
>
> trying to be more diligent about pulling out the sentence stems. Just take the time
>
> for them to actually speak and listen to each other more, and I think that's helping
>
> with the students that are linguistically diverse which is pretty much my whole
>
> class (Sam, Interview, October 24, 2013).

Sam described how cognitive coaching assisted her in implementing ideas she learned in

the past. She stressed how she intentionally increased the number of opportunities

students have to communicate and practice their oral language development. When

observing Sam's class, I noticed that she had sentence stems posted on the chart paper.

These sentence stems were used to guide students' language development as they worked

on explaining their thoughts and attitudes towards the given statements. It was also

interesting to note that in her response Sam was stressing the focus on speaking and

listening. This concept could be used in our later coaching conversations to take a deeper

look at how all language modalities can be incorporated into a lesson and how teachers

can support the development of different levels of English proficiency within the same

class.

The concept of intentional planning as part of teacher's capacity was evident during the coaching conversations as well as during classroom observations. Sam started one of her reading lesson by revealing parts of the title and prompting students to predict the events of the story. Showing the key words within the title, Sam was able to get students to think about the story and engage them in the lesson. Intentional planning was also evident in Sam's interview as she responded to the question about changes in her instructional practice:

> I don't know if it's change. Some things I am more reminded of. Sometimes I do
> state the objective at the beginning, but sometimes I forget to do it at the
> beginning, middle and end. Sometimes when you walk in during the coaching
> cycle in the middle, sometimes you would say what was the objective because it
> was not stated at the beginning, middle, and end. So, . . . it is not changing, but to
> remind me to continue to do [so]. (Sam, Interview, October 24, 2013)

Sam stressed the fact that she knew what to do and knew how to apply the skills she had. However, it was through our cognitive coaching cycles that she was reminded of this knowledge. Sam identified this idea of being intentional as the key to success. Erin addressed the same idea as she described her questioning techniques:

> The biggest thing I've changed is that when I am planning to deliver a lesson, I am
> intentional about the questions I am asking. I try to make a point of having them
> be a DOK 2 or 3. And the students who came to me Kindergarten ready are able
> to answer those questions. I have more children in green [on level] than I had in
> green in the early part of the year. I have more students answering in complete
> sentences when I ask these higher order questions. I get two part answers that are

more of what the child is thinking. I don't always know what the answer is going

to be when I give a DOK 3 question. I might have an idea of what I want the

answer to be. But their answers are very enlightening; they teach me. That's the

greatest part of a good question is that you are learning something from that

question (Erin, Interview, October 24, 2013).

It is evident that intentional questioning Erin described led to a higher level of cognitive

involvement. Quality questions caused students to think about the answers. They

promoted multiple possibilities of such answers rather than recalling a single correct

answer that was memorized without any thought. I thought it was interesting to note how

Erin talked about her DOK 3 questions. Anticipating multiple correct ways to answer

such questions put Erin in a situation in which she needed to be prepared for various

scenarios of acknowledging thinking and further directing students.

Similarly, Sam felt that both her confidence level, as well as her skill level,

increased as a result of her participation in cognitive coaching. She recognized her

improvements by pointing out her accomplishments in regards to the time on task and to

having an outlined plan that considered each step of her guided reading lesson:

I would say I went from being an Okay teacher with guided reading to really

being effective now. Just even in the way I plan … I am ready.   I know exactly

what I am supposed to have. I know exactly what I am supposed to do (Sam,

Interview, October 24, 2013).

Sam acknowledged her success as a teacher of guided reading. She identified it as her

success. She pointed out that planning was a crucial element that contributed to this

accomplishment.

As their coach, I feel like Erin's, Sam's and Haven's ability to tap into their knowledge and skills and apply them to new instructional situations contributed to their perceptions of teacher effectiveness. Through cognitive coaching, teachers in this study reported their ability to build their professional competence in similar ways to previous studies (Batt, 2010; Diaz, 2013; Loeshcen, 2012; Robinson, 2011).

Teacher empowerment. Teacher empowerment describes the process of gaining control and becoming more confident as it relates to instructional practice and teachers' professional growth.

Participating in cognitive coaching prompted Sam to feel empowered. Coaching conversations enabled Sam to think about the issue at hand and identify a possible way to address this instructional issue. Sam shared:

> The coach might have had a question about what could I do to get more students
> involved, and then that could lead me to thinking that I need to try more
> cooperative learning type of structures in the classroom. So, the questions are
> leading me to think about other things I can incorporate. (Sam, Interview, October
> 24, 2013)

Sam described how she took on the lead. She outlined how the question prompted her to think of her actions and came up with a plan of trying more cooperative learning. Sam also recognized that cognitive coaching prompted her to think about ideas she otherwise would not have considered:

> My participation in coaching cycles, how do I feel? I like it.   It builds my
> confidence up, for one.   It forces me to move outside of my box, because I might
> stay on one track, but when I participate in cognitive coaching, it gives me the

latitude to introduce other things; things I may not usually think of at first. For

instance, when we did the cooperative learning type structures, I think we started

it off with just engagement and then I moved to the numbered heads together

which was something I could use no matter what the discipline was as something

to keep them focused; keep them engaged. (Sam, Interview, October 24, 2013)

Sam described coaching as a structure that gave her autonomy to try new things. She saw

it as a way to narrow and refine her focus. In addition, Sam stressed the opportunity to

transfer her instructional plan from one content area to another, thus increasing the

positive impact of her instruction.

Erin mentioned that she felt support that helped her recognize her success in the

classroom and redirect her thinking from the negative to the positive aspects of the

lesson, which in turn reassured her in terms of her instructional effectiveness:

During the reflective conversation, we have talked about what worked and didn't

work, what I might do next time. There has been a lot of encouragement where

sometimes I think it didn't work and [the coach] pointed out that this did work and

for this group of students it worked beautifully, and this student was able to do it.

I think it was a math thing [lesson]; this student was able to do it after you asked

this question. So that makes me feel like I am putting techniques into place that

work, and I am more likely to use them again (Erin, Interview, October 24, 2013).

Erin mentioned that sometimes she looked at her lesson with the emphasis on what didn't

work well, while I was also to point her to the direction of what worked well. This

support helped Erin notice elements of her effective instruction. It prompted her to

continue to use things that worked. Erin stressed this sense of accomplishment and

confidence when she confirmed, "It just made me more confident, more effective, a better planner and how to follow up and addressing specific skills" (Erin, Interview, October 24, 2013). Erin connected effective teaching to intentional planning and confident delivery.

Both Erin and Sam reported that their participation in cognitive coaching gave them the ability to make decisions. They felt equipped with strategies and skills needed to initiate behaviors they thought could lead to instructional growth. Erin and Sam acknowledged that they felt motivated to take the initiative and approach the tasks they might not have been willing to engage in before. Working with Erin and Sam, I noticed how they begin viewing themselves as catalysts of change. Haven, on the other hand, might need more time to develop her confidence. Having less teaching experience than Erin and Sam, Haven is still working on shaping her educator identity.

Creating New Instructional Applications

The theme of creating new instructional applications addresses teachers' ability to refine the implementation of the lesson as they plan and outline the impact on student growth. This theme consists of two sub-themes: (1) instructional visualizations and (2) instructional outcomes. Study participants stressed the importance of instructional dialogue prior to teaching. They saw our planning conversations as an opportunity to rehearse their lesson, thus giving them a change to refine their instructional plan. In addition, teachers pointed out that intentional instruction lead to better student outcomes. As outlined in previous studies (Danielson, 2008; Fullan, 2010), strategic planning helps develop purposeful activities which allow students to interact with the content in a meaningful way.

Instructional visualization. Instructional visualization encompassed teachers' ability to envision their lesson and go through the steps as part of the planning conversation within the cognitive coaching structure.

When discussing the different components of the cognitive coaching cycle, Sam stressed the value of a planning conversation:

> In particular, I like when we do a pre-observation. I think that's the part I like best, because a lot of times when I come in and talk to you [coach] to bounce my ideas off of someone else and get feedback. Most of the time, I am kind of like in a zone and not really thinking. Just get it done, get it done. You [coach] force me to sit down and think about different outcomes, think about it before teaching. I think that's the most helpful. (Sam, Interview, October 24, 2013)

Sam raised an interesting point regarding being "in the zone and not really thinking". With the increasing amount of requirements at schools today, teachers may sometimes feel like the time is being taken away from their instructional planning. They can perceive it as something that prevents them from being intentional about their instruction and having time to think over their lessons as they prepare and plan. For Sam it was important to have a dedicated time that was allocated for thinking and conversing about her practice. At the same time, Sam also noted that participating in cognitive coaching and having an opportunity to engage in the planning conversation took more time than her regular lesson planning:

> Well, actually I'll spend more time then I probably would have; it's extra time for me to come up with the different activities that I am going to use. A lot of times when I go through coaching cycles, there is other things that I want to incorporate.

> There might be other books that I need to find. I find myself spending more time going through and reading an actual book that might work well for main idea and detail in my class. So, in that regard, it takes more time. But what I am understanding is [that] I had to read more books to find that one book that works well, but then, in the meantime, I have a large background, a large list of books I can use for other things. So, it's like more time now, but I am seeing that later on or next year when I am planning this lesson, I won't have to do as much planning, it's like I am doing the leg work now. (Sam, Interview, October 24, 2013)

This statement illustrated several interesting concepts. It suggested that coaching conversations prompted Sam to do more planning by reading through the books, identifying a good match to the focus comprehension skills, and considering additional things that otherwise would not have been considered for the lesson. Sam's words also illuminated the opportunity to verbalize what the instructional plan for the lesson was. Verbally outlining the plan, Sam was able to refine her initial plan and think through the lesson in a more detailed way. This process was similar to a rehearsal. It allowed Sam to practice prior to the actual lesson. In a way, this experience invited Sam to create a mental picture of their lesson.

Erin showed another example of instructional visualization. During our planning conversation, she outlined her plan this way:

> We are going to be doing one more and two more, one less and two less. Since this has been a real struggle when we did it with numbers zero through five, I want to spend a little bit more time with hands-on things with six through ten. And I came up with this for [the lesson] opening. They do their interactive

learning and they will get a card. I have numbers zero through ten. I am taking

out zero, one, and two. With their partner, they will figure out what is one more

than the number in the middle, two more than the number in the middle, what is

one less and two less. That way I can see who got the idea before I start teaching

the lesson . . . . I will be monitoring, going from table to table to see how they are

doing with that and giving them feedback. And then at the end, I am going to let

students share. One partner from each group [will] share what they have

discovered about their numbers. (Erin, Planning conversation, November 12,

2013).

Erin came to our planning conversation with a plan. She described the details of her

lesson outlining what activities her students were going to do and how she was going to

monitor their progress. Her description of her plan created a clear picture of this part of

the lesson. In addition, Erin presented a rationale for using this activity to gauge her

students' knowledge on the topic and their ability to apply some of their previous

learning.

While having the opportunity to discuss the lesson prior to teaching prompted

teachers to create a visual of what their instruction might look like, Sam seemed to put

more value in this visualization than others. This brings me back to her willingness to

always come and talk about her instruction. I think Sam is an auditory learner who works

best when she is able to have a dialogue about her thinking.

Instructional outcomes. The concept of instructional outcomes highlights the

impact of teachers' participation in cognitive coaching on student learning.

Sam shared how instructional strategies she was focusing on during the cognitive coaching cycles were helping her improve classroom management by engaging students in the learning process:

> Well, there are moments when the class is engaged and on task, and I have to do less policing. And I noticed that those times [are] when I have used some of those cooperative learning structures or I have done some of the other things I have done with cognitive coaching. Those are the strategies that I actually got a chance to learn and kind of get familiar with while I was working through the coaching cycles. (Sam, Interview, October 24, 2013)

Sam noticed that engaged students behave better. She connected the instances of having a well-behaved class to her use of cooperative learning structures which promoted collaboration. She also stressed that she used cognitive coaching to become familiar with some of the cooperative learning structures.

During her interview, Haven noted another positive student outcome. She talked about the SIOP strategies she learned during prior professional development sessions:

> Implementing some of the SIOP ideas that I learned before through cognitive coaching is helpful to ELLs as well as other linguistically diverse kids in the room. Not only for those students who are identified on paper as ELLs, but the rest of the class, who might still be linguistically diverse for reasons other than being born someplace else or having another language background. (Haven, Interview, December 12, 2013)

In this description, it was obvious that Haven not only recognized the benefits of SIOP for her ELLs, but to other students in her class. Moreover, Haven stressed how cognitive

coaching gave her an opportunity to practice the strategies she learned previously and apply them to her instructional practice.

Erin described her cognitive coaching experience as a framework that had build-in accountability. It helped her stay accountable for her own learning and professional growth. It allowed Erin to monitor her progress towards the goal. Erin linked her participation in cognitive coaching to her students' success:

I felt that each time I've done it my students have benefitted greatly from it, and I enjoyed the process. I enjoy thinking more deeply about what I am doing and the why I am doing it and letting go of some things that I have been using for years and using some new things and just being brave enough to give it a try. (Erin, Interview, October 24, 2013)

Erin emphasized that cognitive coaching cycles served as a tool that encouraged her to try new things and take instructional risks similar to how it was described in previous studies (Batt, 2010; Bjerken, 2013; Reeves, 2005).

Erin also connected her participation in cognitive coaching to her students' language development. She acknowledged the fact that she saw gains in her students' academic language development since the start of the year when she began participating in the cognitive coaching cycle with the focus on language development. She described her experience by outlining the following:

So, it is 100% that they are all speaking now, and I only have one student who is not able to speak in academic language yet. That is from the first day of school and my first coaching cycle this year, a huge gain in their linguistic ability. I just need to keep focusing on those questions and making sure I plan them each time

so that they can talk more. The more they talk, the better they will talk. (Erin,

Interview, October 24, 2013)

Erin stressed that her focus on questioning and on her students' language development

promoted their communication skills. She also pointed out that to continue this growth,

her students needed to have more opportunities to discuss what they were learning. Erin

established a relationship between the quantity of instructional conversations and their

quality. She emphasized that the increase in the number of oral language development

opportunities could lead to better command of the language.

Expressing similar ideas, but illustrating them with example from her reading

lesson, Sam also talked about her ELLs and their progress. While she recognized that all

of her students were making gains and were doing better, she also pointed out that her

ELLs and other students who were not exposed to rich vocabulary were progressing

slower:

I would say, I see more effective comprehension in about 75 to 80% of the

children. Now, they have more of a purpose for reading, so they are thinking

more. My ELLs are improving too, just not maybe as quickly as those that don't

speak another language or those who had more exposure to a variety of words.

They are progressing, just not quickly. (Sam, Interview, October 24, 2013)

Sam pointed out that all of her students were making progress. However, she also

pinpointed that some of her students appeared to have a slower progress pace. She

attributed this difference to the variation in students' vocabulary and exposure to words.

It is evident that teachers linked student success to their own participation in

cognitive coaching. They pointed out that cognitive coaching benefited both teachers and

students. While developing teacher capacity, cognitive coaching allowed teachers to help

their students improve academically. Cognitive coaching cycles gave teachers an

opportunity to be intentional in their instruction. They created ways for teachers to

discuss their lessons, thus prompting them to be strategic in their instructional activities.

Embracing the Diversity Spectrum

The theme of embracing the diversity spectrum conveys teachers' views about

various degrees of differences among their students. The concept of diversity surfaced

during the interviews with all three study participants. Teachers addressed this issue

from two different angles: (1) diversity in terms of student backgrounds and (2) diversity

of academic abilities.

Diverse student backgrounds. When discussing their student backgrounds,

teachers talked about English-speaking students and ELLs. Haven shared her class

composition by identifying the number of ELLs and stressing the racial backgrounds of

her students: " I think I have five ESOL, two Caucasians and the rest are African

American" (Haven, Interview, December 12, 2013). Sam addressed the linguistic

diversity of her class by talking about various countries that were represented in her class:

> Linguistically, I have two English language learners in my class; the rest of them
>
> are native speakers. One English language learner is from Kenya, I believe, and
>
> the other one, he speaks Spanish. I believe he is from Mexico. (Sam, Interview,
>
> October 24, 2013)

Haven and Sam knew how many ELLs they have in their class. Interestingly,

when attempting to give more information about her ELLs, Sam seemed sure about the

country of origin of one of her students and had doubts about the country her Spanish-speaking student came from.

When talking about the linguistic diversity of their students, teachers mentioned not only the diversity that was attributed to some students being ELLs and having another language in their background, they also pointed out that linguistic diversity existed among English-speaking students. This was similar to previous research (Baugh, 2009; Bjerken, 2013; Shapiro, Sewell, & DeCette, 1995). In particular, Erin emphasized that linguistic diversity existed among English-speaking students because of the differences between formal academic English as a language of school and the informal English:

> I have four students whose parents are from other countries, and they speak Somali and another language I am not sure of… I have several African American students who speak in an urban slang and use incorrect pronouns as far as formal English. And then I have about 50% to 60% of my students who speak in formal English and the language of school. (Erin, Interview, October 24, 2013)

To me, Erin's word choice in regards to students who do not use formal English to communicate carried a negative connotation. She focused on improper language rather than acknowledging the difference between formal and informal language forms which are part of the students' identity.

While all three study participants were aware of the fact that some of their students are ELLs, I am concerned that Erin, Sam, and Haven seem to have so little knowledge about their students. They were not sure about the countries their students came from. They were also not sure about the languages their ELLs spoke. It seems that teachers' knowledge about their students is only a surface level knowledge. This is troubling.

These teacher reports raise ELL identification concerns and lead to potential instructional limitations. Knowing their students' first language and cultural background, Erin, Sam, and Haven could refine their instruction even deeper. As their coach, I feel the need to address such reports of their students' backgrounds. This can be a focus of future coaching conversations. I am also curious to explore whether other teachers in Millbrook have doubts as to their ELLs' languages and cultural backgrounds and whether this trend is also applicable to other district schools.

     Diverse academic abilities. A different way to approach diversity was also evident during teacher interviews. Sam saw diversity in terms of her students' academic abilities. She mentioned the concept of being on level. For her class, this statement referred to meeting kindergarten grade level expectations.

> This year, I have Kindergarten. And I have about 20 students consistently. It is a range, a wide variety of abilities. Some that are close to being on level and some that are really far behind, like emergent writing, where they pretty much [are] still scribbling. (Sam, Interview, October 24, 2013)

Having students on different instructional levels is not a unique scenario. However, when Sam talked about her students' wide range of abilities, she didn't mention students who were meeting kindergarten expectations. As a coach, I often see classrooms where students progress at a different rate. Considering kindergarten expectations, and because kindergarten addresses foundational concepts in all disciplines, not being on level in kindergarten will likely imply the possibility of not meeting the academic expectations of the following grade levels. In addition, because kindergarten concepts are foundational skills, prerequisite knowledge is not required in order to access kindergarten concepts.

This may imply that effective kindergarten instruction has potential to lead to academic growth of all students.

Similarly to Sam, Haven also emphasized the concept of being on level. In addition, she talked about different areas her students were working on as indicative of their academically diverse abilities:

> I have one [student] that is having problems with the alphabet, you know letter identification and sounds, and a couple of them that [are] doing the beginning sounds. I have 21 kids and out of those 21, I would say eight are on-level. The majority of them will get there; like the lowest group that I am concerned with is a group of eight kids. (Haven, Interview, December 12, 2013)

While Haven identified specific areas in which students demonstrated a range of abilities, she seemed to approach her description from the deficit perspective. She named the focus of her students' work when she stated that some of her students were working on the beginning sound identification. At the same time, Haven shared that one student had problems with the alphabet. It might have been more appropriate to state that one student was working on learning the alphabet. In addition, I am curious to explore what Haven means by knowing the alphabet, its letters and sounds, and by students' ability to identify the beginning sounds. While she named these skills separately, they may represent a very similar instructional concept. However, it may imply a different degree of contextual information and a different level of skill application. This can be a great conversation topic for future coaching.

Another academic area in which teachers reported a range of abilities was

vocabulary development. In fact, Sam mentioned that many of her students seemed to

have limited vocabulary.

> I think a lot of them don't have the vocabulary, the basic vocabulary, the
>
> background vocabulary that [is necessary when] approaching kindergarten.   A lot
>
> of them don't have a lot of support at home. There is no one who is helping them
>
> read, review their work, or just practice letters and sounds. So it's just mainly what
>
> they get here at school. (Sam, Interview, October 24, 2013)

Sam's report recognized the importance of vocabulary development from an early age.

She linked inadequate vocabulary development with lack of support at home. This

statement did not address how the school promoted vocabulary development and what

she specifically did in her classroom to insure that her students had a rich vocabulary.

Similarly, Haven also saw the challenge of vocabulary development. She

described it this way:

> I would say, especially their vocabulary is very weak. They tend to reuse the
>
> same words even when they are speaking and when they are writing. Everything
>
> is good or bad, sad or happy. They have a hard time coming up with a new word
>
> at times. I see a lot of them pausing even when they are talking to retrieve a
>
> word. They just don't have a very diverse vocabulary. (Haven, Interview,
>
> December 12, 2013)

Haven's response had evidence of her knowledge of language development. She seemed

to realize the need to use the language orally and then in writing. At the same time,

Haven attributed this vocabulary difficulty to minimal opportunities to develop this skill

at home. She further explained:

> I would also think at home probably there is not a whole lot being said, some of
>
> that is cultural, especially for the children who do speak another language. They
>
> are actually more impressive, because they have two sets of vocabulary. But they
>
> are a little behind on our side [in English]. (Haven, Interview, December 12,
>
> 2013)

Haven stressed her admiration for ELLs who worked with two sets of vocabularies.

However, she seemed to imply that ELLs didn't get exposed to language models at home.

This assumption needs to be clarified. While some ELLs came from homes where oral

language tradition was much more developed than a written one, opportunities for

communication and language exposure existed in multiple settings.

Later during the interview, Haven offered information as to what teachers could do

to advance students' vocabulary development. Haven shared how she approached

vocabulary instruction with her students through the use of visual supports:

> I try to make sure that I do it for all the kids, not just the ELL kids. We did a
>
> project on animals: farm and zoo animals. Some of them [students] couldn't
>
> recognize them [animals] because they have never been to the zoo. So, we had to
>
> put pictures and words and try to match those up with all of them, not just my ELL
>
> kids. (Haven, Interview, December 12, 2013)

Haven offered her account of a lesson during which she not only supported students'

language development, but also focused on concept development. While this could seem

an appropriate support for a linguistically diverse class, there might be other aspects

Haven should have considered for this lesson. One of such aspects could be building

background during the initial stages of the project.

In closing, during our reflective conversation, Haven also discussed her instructional

approach to diverse academic abilities of her students. She explained her actions during

the lesson:

> When I got into those groups and I saw what they were writing, then I thought
>
> about the sentence strips. I guess for the lowest writing I should have thought
>
> about it anyway, because they couldn't read their own writing . . . . I could have
>
> had those ready to go. If I had planned it a little better, I would have had different
>
> sets for them ready to roll. (Haven, Reflective conversation, December 18, 2013)

Haven explained her use of sentence strips to support one group of students who were

working on writing. Her decision to use the sentence strips was a result of her

observation. It is interesting to note that Haven thought about different sets of sentence

strips. Her idea implied differentiation based on the students' academic abilities.

In closing, when addressing student diversity within their classrooms, Erin, Sam

and Haven talked about students' differences in terms of diverse student backgrounds and

diverse academic abilities. Moreover, when talking about their students' backgrounds,

teachers in this study stressed the spectrum of differences in regards to the linguistic

diversity of their class: ELLs, English-speaking students speaking format English, and

English-speaking students speaking informal English. However, they displayed limited

knowledge about their ELLs and linked academic challenges to students' home life.

Facilitating Teacher-Driven Learning

The theme of facilitating teacher-driven learning highlights teachers' ability to choose the direction for their professional growth. This theme consists of the following sub-themes: (1) self-selected emphasis, (2) regular professional development versus cognitive coaching, and (3) highlighting clear focus.

Self-selected emphasis. Discussing cognitive coaching as a form of professional development, study participants stressed how the format of cognitive coaching invited them to tailor their professional learning to their needs rather than being a professional development structure that imposed the focus on a certain content or process. When asked to identify the individual who determined the focus of professional learning within the coaching cycle, Sam asserted, "That would be me. I can, you [coach] always give me the option to choose what I think I need" (Sam, Interview, October 24, 2013). Being able to choose the focus of our coaching conversations, Sam felt that she was able to focus on her professional development needs. This focus on self-selection was also evident in another comment Sam made during the interview:

> Well, with the coaching cycle, it's like I am in control of what it is I am going to be getting better at. So, I look and I see an area where I want to improve upon, and then I have someone that can help me navigate to getting better and working on becoming proficient in whatever area I am working on. I get to choose. I am navigating. In other professional developments, a lot of times, [there is] not so much choosing. There is a set template. I think with cognitive coaching, it affords the teacher the opportunity to really navigate and pinpoint what they really want to improve in. (Sam, Interview, October 24, 2013)

Sam clearly stated that her goal was to improve her teaching. This could be viewed from different perspectives. Very often, improvement has a negative connotation because it suggests that something is wrong and it needs to be fixed. However, improvement can also mean continuous enhancements of the existing practice. Knowing Sam and her teaching, I think she talked about the latter definition. I see Sam as an educator who is refining her teaching and constantly looking for ways to adapt her instruction in response to her students' needs.

When asked to name some of the benefits of cognitive coaching, Sam responded that "it forces me to really, really plan better, be efficient about planning, and be more strategic or deliberate in instruction" (Sam, Interview, October 24, 2013). For Sam, our cognitive coaching cycles were a way to make learning an on-going process, a part of her professional identity.

> Cognitive coaching would be more hands-on. So, it's actually in the classroom. It's like apprenticeship. I would equate it to apprenticeship. It's on the job training. I can have a concern on an area, want you [coach] to come in and check something out for me, go ahead and set a coaching cycle up; it's more or less like apprenticeship, which is great. (Sam, Interview, October 24, 2013)

Sam's reference to apprenticeship was an interesting comparison. Originally coming from trade training, for schools, apprenticeship is identified as a way to combine theoretical and practical applications of knowledge and skills that promote practice of the skills while aiming for skill perfection. Sam's word choice once again stressed her dedication to continuous development and her inclination towards the job-embedded learning.

Regular professional development versus cognitive coaching. Analyzing

participants' reports of their experience of cognitive coaching in Millbrook, it was

evident that teachers saw a great difference between cognitive coaching as a form of

professional development as compared to the regular professional development sessions.

They stressed the difference in the format. In particular, Haven talked about the

individualized approach to professional development that was part of the cognitive

coaching cycle:

> Cognitive coaching is more beneficial because it is one-on-one. The PD is a
>
> bunch of people … While you can ask questions, most [of the] time it is not a
>
> back and forth. With cognitive coaching, if I have any problems, we can slow it
>
> down, . . . go back and forth. (Haven, Interview, December 12, 2013)

By having the flexibility to go back and forth to adjust the pace based on the teacher's

needs, cognitive coaching appeared to be a better fit for Haven who otherwise would still

have unanswered questions during the regular professional development session.

Cognitive coaching gave Haven a structure that allowed her an opportunity to clarify as

much as she needed. This idea was also addressed by Sam.

> For instance, with some of the PDs that we had, even though we asked questions
>
> about it, we left that PD still having those questions that were never answered.
>
> So, as a result, we are implementing the strategies taught in the PD, but still not
>
> fully understanding them. Whereas with cognitive coaching, if I had those
>
> questions, they could be answered. (Sam, Interview, October 24, 2013)

Sam confessed that after some professional development sessions she left without a clear

understanding of what needed to be done. Nonetheless, she mentioned that she

proceeded with the implementation. However, because she didn't receive answers to her

questions, her implementation of the initiative might have been limited. At the same

time, Sam's words displayed an underlying concept of persistence. Despite the fact that

her questions remained unanswered, Sam attempted the implementation. She also

stressed that cognitive coaching provided her with the structure that welcomed questions

and insured answers.

   Another peculiarity of cognitive coaching mentioned by study participants was

the opportunity to work with me as their coach. Having another person to work with was

important to Haven. She contrasted this experience with her use of professional

development videos.

> If the teacher has an area or things that they don't understand or need help,
>
> cognitive coaching is a way to improve on those things. And it is a live person,
>
> whereas most people would say go listen to PD 360. Yes, I can listen to PD 360,
>
> but sometimes you can't find it on your particular grade… But I can come to
>
> cognitive coaching and say, "I found this, but it feels like it is over my kids' head.
>
> How can you help me bring it to first grade level?" (Haven, Interview, December
>
> 12, 2013)

In her response, Haven mentioned her use of professional development web application

PD360. Haven emphasized that PD 360 could provide examples of various instructional

elements. However, she stressed that the instructional context in these videos did not

match her grade level. As her coach, I value Haven's willingness to discuss an example

video and identify some elements that can be adapted to her instructional situation. At

the same time, I am curious about her allusion to the first grade level. I would like to

explore this with Haven further to see if she refers to the grade level expectations or

student academic abilities.

      Highlighting clear focus. To have an effective lesson, teachers need to display

mastery of a myriad of details. They need to know the content, pedagogy, be skillful in

classroom management, show enthusiasm, and keep an optimal lesson pace (Danielson,

2008; Fullan, 2010). While all of these skills and qualities need to be equally well

developed, teachers cannot focus on the development of all of them at the same time.

Cognitive coaching allowed Sam to zero in on a particular area and work on one element

at a time and experience small successes:

> I think it [cognitive coaching] makes it [teaching] a little easier, because general
>
> observations are looking at a million different things and when you [coach] are
>
> observing for a coaching cycle, we decide ahead of time specifically what
>
> strategies we will be looking for to see how this works. This makes it much
>
> easier, less nerve racking, because you know exactly what you are trying to do.
>
> (Sam, Interview, October 24, 2013)

Sam's words are illustrating how our cognitive coaching cycles allowed her the flexibility

to focus on one element of her instructional practice at a time. This statement also

showed the difference between cognitive coaching and other types of classroom

observations. Sam suggested that having a predetermined focus on one particular

instructional element relieved her stress. Sam mentioned to me on several occasions how

regular observations conducted by the school principal or by district administration made

her nervous. Coaching cycles didn't have the same effect on Sam. Sam also shared that

the feedback she received from the principal and the district level administration didn't

seem to highlight some of the instructional aspects she valued. It appeared to have

limited relevance because often it was not focused on what Sam was focusing on in terms

of her professional growth.

Sometimes, selecting the focus was not easy. It could take a few questions to

refine the focus and determine what it is the teacher and I will work on. One example of

such process is my planning conversation with Haven.

Jen: So, what's your plan?

Haven: I am just trying to decide where to go. We talked about another source

about the dolphins . . . they broke off into their groups. From there, I don't

know   if I want to . . . . I don't know. Do into writing conferences?

Jen: So, they [students] have a first draft?

Haven: Yes. They have a sloppy copy.

Jen: Okay. So, did they get a chance to revise and edit?

Haven: No, they talked in their groups . . . .

Jen: So how could you focus their revision and editing so that they have

specific things to revise and edit for when you meet with them?

Haven: I think first of all, I need to come up with their rubric. (Haven & Jen,

Planning conversation, December 18, 2013)

At the beginning of this dialogue, Haven did not have any idea of what she wanted to do.

She seemed to be unsure of what her next step should have been. However, by clarifying

where in the writing process her students were and by identifying the next step in the

writing process, Haven was able to determine the need for creating a rubric. This

conversation excerpt illustrated how Haven came to select what she needed to work on next.

In conclusion, all three study participants reported that their cognitive coaching promoted professional learning at the optimal pace and at the optimal time. It allowed teachers to work with their coach one-on-one and focus on what they thought they needed to refine, thus promoting ownership of the instructional process. In addition, teachers described cognitive coaching as a professional development structure that made it possible for them to be in charge of their learning and direct their professional growth.

Promoting Shared Responsibility

The theme of promoting shared responsibility underlines the relationship between the coach and the teacher that helps achieve a common instructional goal. This theme is represented through two sub-themes: (1) level of trust and (2) increased confidence.

During cognitive coaching, the teacher and the coach have a shared experience of planning the lesson, being part of the lesson, and reflecting on the lesson. While it is necessary to mention that as a coach my role during these conversations is different from that of a teacher, coaching conversations do promote collaborative work towards the same goal.

As a cognitive coach, I usually begin all planning conversations by clarifying what the teacher wants to focus on. Often, this time is used to narrow down the focus. The next step in a planning conversation is success indicators. I prompt the teacher to describe how success may look like. At this time, we identify what evidence I can collect while in the classroom to further inform our thinking of whether or not the set goal is achieved. After that, the conversation moves to the anticipated approaches stage. This is

one of the areas where I like to spend more time, because it allows teachers to identify the

details of their lesson. We usually talk about the content and the strategies as well as

groupings and student movement during the lesson. This is a good place to explore what

new things the teacher wants to try and what previously successful strategies she wants to

employ. Then, I ask the teacher to establish a personal learning focus. I close the

planning conversation by asking the teacher to briefly reflect on the coaching process.

Reflective conversations, on the other hand, begin with teacher's general

impression of their lesson. Then, I move the conversation to the analysis part during

which the teacher and I talk about what happened during the lesson; how it was similar

and/or different to the planned lesson. We also discuss the factors that influenced the

direction of the lesson. Next, the teacher identifies how she can take away something

from the lesson and apply it in the future instructional scenarios. The conversation ends

with teacher reflection on the coaching process.

From this description of cognitive coaching conversation steps, it is evident that I

use cognitive coaching as a structure that promotes opportunities for shared meaning

making between the coach and the teacher. This collaborative experience facilitates

teacher professional growth in the non-threatening environment.

Level of trust. During her interview, Sam talked at length about her relationship

with me as her coach. Her words illustrate the comfort level and the level of trust she

experienced during our work together:

> The coach is like my shrink. The coach more or less just facilitates, just kind of
>
> guides. If I hit a brick wall, she is throwing out questions that might start me
>
> thinking, putting my thoughts together, getting me to generate different ideas. It's

> more like a friend who is just walking with you and bouncing the idea off. If you
>
> get stuck, giving you some direction, maybe a question or something that
>
> stimulates your thinking ... So, not to be cliche, I guess more like a guide on a
>
> side, something like that. (Sam, Interview, October 24, 2013)

Sam referred to me as her shrink and equated coaching to counseling. She acknowledged

that I was there to help her consider different opportunities and spark her thinking. She

pointed out the sense of direction she received from our work together. Two years ago, I

remember that Sam was looking for answers more than anything else in a coaching

conversation. For Sam, to think about coaching as a way of providing the direction but

not the answers is a forward movement.

Increased confidence. Haven pointed out another positive element of working

with me as her coach within the structure of cognitive coaching. She mentioned the

increase in her confidence level:

> [The coach] gives me ideas when I get stuck on things, helps me organize it a
>
> little bit better, because organization is one thing I need help on. I don't want to
>
> say appropriate because it usually is, but I guess boost it up. (Haven, Interview,
>
> December 12, 2013)

This reference to the boost suggests that Haven doesn't go through a complete change in

her instructional practice while she participates in cognitive coaching. Instead, Haven

referred to the incremental changes that gradually enhanced her teaching. Another

interesting reference made in this response is the notion of organization. There is a

certain structure to the cognitive coaching process: planning conversation, classroom

observation, and reflective conversation. There is also a certain configuration for each of

the coaching conversations. For Haven, this structure creates a predictable pattern for each conversation flow and eliminates the fear of the unknown.

Similarly to Haven, Sam also addressed the increase in her confidence level by stating that her "participation in coaching cycles, builds my confidence up" (Sam, Interview, October 24, 2013). As a coach, I attribute this perception to the fact that cognitive coaching recognizes teacher's cognitive capacity, their knowledge, and their experience.

This excerpt from the planning conversation with Sam further illustrates some of the transformations Sam experienced as a result of our work together.

Jen: Okay. Sounds like you have a plan . . . and you have your personal goals. So, how did the conversation today shape your thinking?

Sam: . . . our talks leave me thinking about what is it I am doing with the kids. And then my goals, I realized I have more than one goal. A lot of times, I realize that I get caught up on the actual content objectives, but what I am beginning to see is that I need to focus on what my objectives are. I have goals for myself in order to get better, in order to be better for them. (Sam & Jen, Planning conversation, November 7, 2013)

As Sam reflected on her coaching experience during this conversation, she acknowledged the importance of setting personal goals. This was one of the results of our conversation. Moreover, she established a link between her success with her personal goals and her students' accomplishments. Sam expressed her willingness to improve professionally in order to insure effective instruction for her students.

Erin also saw the benefit of working with the coach. She stressed that she saw an immediate benefits of cognitive coaching and outlined how helpful it was to have a coach as part of the process:

Cognitive coaching is immediately useful. Workshop professional development is only as useful as I make it. With cognitive coaching, there is an accountability piece. It is two people trying to achieve the goal, whereas with professional development, I feel like it's just me and the workshops I attended. (Erin, Interview, October 24, 2013)

In her description, Erin stressed the fact that coaching involved two people: the teacher and the coach. She emphasized that coaching implied accountability. Erin's words suggested that she did not experience a sense of isolation when she participated in cognitive coaching while she felt isolated during workshops.

In conclusion, all three study participants saw the benefit of working with the coach. Such process eliminated the feeling of instructional isolation and allowed for a more productive professional development experience. By sharing the process of professional growth, the teachers and the coach were partnering in order to achieve a common goal. They were working as a team by sharing their experience and their thinking.

Chapter Summary

This chapter described the interpretation of findings of this research study. It presented five themes that developed in response to the research questions: (1) elements of reflective practice, (2) creating new instructional applications, (3) embracing the diversity spectrum, (4) facilitating teacher-driven learning, and (5) promoting shared

responsibility. Based on the interview responses, it is evident that teachers who participated in cognitive coaching believe that their participation in cognitive coaching contributed to their ability to (1) reflect on their practice more and on a deeper level, (2) intentionally plan their instruction, (3) adjust their instructional plan in response to their students' needs, and (4) value their work with the cognitive coach. In addition, cognitive coaching is linked to more responsive teaching and increased diversity awareness.

CHAPTER 5

DISCUSSION

This chapter consists of five sections. The first section discusses the findings of this study in relation to previous literature. The second session addresses limitations of this study, while the third section presents implications for practice. The fourth section suggests possible direction for future research. The last section presents final conclusions.

Connection to Previous Literature

Erin's, Sam's, and Haven's insight provides deeper understanding of their areas of learning and experience throughout the cognitive coaching process by identifying emergent themes including: elements of reflective practice, creating new instructional applications, embracing the diversity spectrum, facilitating teacher-driven learning, and promoting shared responsibility. The findings of this research study are in many consistent with the literature reviewed as part of this research study. The new finding of this study suggests that the coach is a change agent who contributes to the success of the cognitive coaching experience.

Theme 1: Elements of Reflective Practice

Study participants in this research pointed out the increase in their use of reflective practice. This theme is addressed by many previous studies (Alseike, 1997; Brooks, 2000; Guskey, 2000; Moche, 2006; Schlosser, 1998; Sparks, 2002; Townsend, 1995). Similar to this research, the reviewed literature shows that cognitive coaching tools push teachers' thinking prompting them to expand their cognitive capacity. This is especially evident as it relates to questioning. Positive presuppositions embedded in the

questions as well as question structure using during cognitive coaching promote thinking. This follows the ideas of Costa and Garmston (2002), who emphasize that the strategies that mediate thinking tap into the five states of mind (consciousness, craftsmanship, efficacy, flexibility, and interdependence) and encourage the development of teacher reflection. It also resonates with the findings by Ellison and Hayes (2013), who stress the ability of thinking ahead and thinking back as two skills that promote teacher reflection. Such reflective capacity influences teachers' ability to develop internal resourcefulness which, according to Dewey (1997), is an essential element of teacher professional development. Reflection allows educators to think back and make sense of their actions as they plan to apply this learning in their future instructional planning. Both Nash (2011) and Ghaye (2011) stress, that for educators, there is always room to improve. Teacher development is a process rather than an end result. Nash (2011) further pinpoints that effective teachers are not pleased with their current practice. They continue to strive to improve and reflect on their practice.

Furthermore, teachers in this study reported the feeling of being empowered to use skills and practices they were familiar with, analyze them, modify them, and apply them in a new way as a result of their participation in the cognitive coaching cycles. They also felt supported as they tried to use new instructional startegies. This is well-supported by previous research (Awakuni, 1996; Joyce & Showers, 2002; Sparks, 2002; Speck & Knipe, 2005) that points out that cognitive coaching promotes the application of newly acquired skills and refinement of previously known practices as a direct result of becoming reflective. Moreover, both the current study and previous research recognize the importance of continual growth (Bjerken, 2013; Costa & Garmston, 2002; Diaz,

2013; Joyce & Showers, 2002; Smith, 1997). Participants in this study describe positive

changes in their practice. Similarly, Cranton (2006) points out that "Educator's

awareness of themselves as people and practitioners is the foundation of transformative

learning about teaching" (p. 198). Moreover, according to Danielson (2008), teachers

who reflect on their teaching are able to refine and transform their instructional practice.

Theme 2: Creating New Instructional Applications

Previous research supports the findings of this study in the area of new

instructional applications. This study reported on positive outcomes using instructional

visualization, and the ability to rehearse and envision instruction prior to actually

teaching.

Talking about their instructional planning and delivery, study participants pointed

out that having the opportunity to discuss their planned activities prior to the actual lesson

delivery was helpful, because it allowed them to create a mental picture of their lesson,

see what needed to be adjusted, and what additional planning was necessary. This idea is

supported by several researchers (Eger, 2006; Fullan, 2005, 2010; Gay, 2010; Hammond,

2014; Reeves, 2006). Previous literature suggests the need for a "practical mechanism to

turn our ideas into reality" (Fullan, 2010, p. 23). This is further supported by the

importance of intentional practice, which leads to high-impact teaching and learning

(Reeves, 2010).

This study also addressed instructional outcomes that were prompted by teachers'

participation in cognitive coaching. Study participants of this research pointed out how

they started using cognitive coaching questioning with their students and noticed how this

practice caused their students to think on a deeper level. In their study, Edwards and

Newton (as cited in Diaz, 2013) stress that teachers who are trained in cognitive coaching use higher level questioning in the classroom. Study participants in this research made the same observation. They emphasized how they began using open-ended questions with positive presuppositions to cause their students to think and not to always expect an answer from the teacher. While study participants of this research were not trained in cognitive coaching, they were exposed to cognitive coaching questioning techniques during their coaching cycles.

Teachers in this study reported positive student outcomes linking these student accomplishments to teacher participation in cognitive coaching. Teachers described how their students were able to accomplish the task they planned and show evidence of their learning. Similar findings were described by Batt (2010), Eger (2006), and Reed (2007). Another way teachers in this study reported positive instructional outcomes is by describing how they supported students' language development through certain instructional strategies they identified during their coaching conversations. A number of researchers emphasized the process of shaping instructional activities as a result of coaching conversations, planning conversation in particular (Bjerken, 2013; Diaz, 2013; Lin, 2012). Furthermore, the current study reported on supporting student talk in the classroom. This is linked with the work of Teemant, Wink, and Tyra (2011) who point out the importance of student talk as students explore and justify their thinking.

Theme 3: Embracing the Diversity Spectrum

The current research study captured how participating teachers showed evidence of more responsive teaching, especially with linguistically diverse students. This evidence was in alignment with a culturally responsive teaching framework (Gay, 2010;

Ladson-Billings, 1994). In addition, it resonated with the framework for the preparation

of linguistically responsive teachers (Lucas & Villegas, 2012). In particular, this study

showed evidence of value for linguistic diversity and the need to scaffold instruction to

promote learning for ELLs. Both of these elements are part of the linguistically

responsive teacher preparation framework (Lucas & Villegas, 2012).

This research also discussed the concepts of building intellectual capacity and

learning partnerships, previously discussed by Darling-Hammond (2014). Teachers

engaged in planning differentiated instruction based on the needs of their students. In

addition, study participants addressed multiple levels of support they enacted in their

classroom. These levels of support, as well as specific strategies teachers tried, were the

center of their cognitive coaching conversations. Teachers in this study reported that

intentional planning of these strategies boosted teacher confidence.   The same

confidence boost was addressed by Kane (2009) who reported on teacher frustrations

with ELLs and explained that additional support was necessary to capture ELLs' growth.

In contrast to Kane (2009), teachers in the current study shared that their ELLs were

successful in completing the tasks they planned.

Study participants mentioned SIOP, a research-based instructional model that

impacts English language development and content achievement simultaneously

(Echevarria, Short, & Vogt, 2010). Out of the eight SIOP components, teachers in this

study stressed content and language objectives and comprehensible input.   Teachers also

emphasized their use of different ELL supports: sentence stems, visuals, and language

models. It is interesting to note how study participants of this research tied the

effectiveness of these ELL-specific strategies to positive outcomes for all of their

students (ELLs and mainstream). They shared their perceptions of linguistic diversity of

their classroom and pointed out that ELLs and English-speaking students who speak a

non-standard language variety all need to learn academic English. Using ELL-strategies

and supports, teachers oriented all of their students for success by developing their

academic English. These findings resonate with Bjerken (2013) who stressed the positive

influence cognitive coaching had on specific students and student groups and the work of

Lindsey, Martinez, and Lindsey (2007) who addressed culturally proficient coaching. In

addition, these findings also support Echevarria et al. (2008) and Batt (2010) who link

positive outcomes of SIOP implementation to cognitive coaching.

The findings of this study can be further corroborated by Baugh (2004) who

emphasized the struggles of learning academic English for the speakers of the non-

standard dialect. The views expressed in this study as to who teachers view as part of

linguistic diversity of their classroom are also aligned to Baugh (2009) who points out

three general categories of students in regards to their linguistic diversity. In addition, the

findings are also supported by Shapiro et al. (1995) who view linguistic diversity as a

difference in degree, which means that "all people are seen as falling along a continuum"

(p. 7) and Enright (2011) who coined the concept of "new mainstream".

Theme 4: Facilitating Teacher-Driven Learning

This study reports that participants saw cognitive coaching as an opportunity to

focus on their needs, rather than participate in regular professional development sessions

which as they perceive do not address their specific needs. Teachers' ownership of their

instructional practice increased because they felt they were working on the aspects

relevant to their students and their personal and professional development. They also

pointed out how cognitive coaching allowed them the opportunity to focus on a very

specific part of the initiative rather than go through a generic professional development

session. These findings resonate with research conducted by Fazel (2013), who

emphasizes that adults are relevancy oriented, meaning adults value professional

development that is related to their work and relevant to their students. This conclusion

is also supported by Knowles, Swanson, and Holton (2011) who outline core criteria that

guide adult learning. Learners' need to know, prior experience of the learner, orientation

to learning, and motivation to learn are the four principals of adult learning theory that

support the findings of this study.

     Another interesting finding of this study is related to how teachers see themselves

as active consumers of cognitive coaching as a form of professional development in

contrast to the passive consumer role they experience during regular professional

development sessions. This idea is supported by Joyce (2010) who pinpoints four

perception categories in relation to professional development; he labels them gourmet

omnivores, active consumers, passive consumers, and reticent consumers. While

teachers in this study use the term active to describe their perception of cognitive

coaching as a form of professional development, I think that Erin's, Sam's, and Haven's

experience with cognitive coaching fits best with the gourmet omnivores type because of

the initiative teachers showed as they self-selected areas for their professional growth.

According to Joyce (2010), they displayed characteristics of gourmet omnivores who

were proactive individuals looking for opportunities for professional growth.

Theme 5: Promoting Shared Responsibility

The findings of this study suggest that teachers value instructional dialogue with their coach. They see the process of cognitive coaching as something that they engage in together with the coach, thus share the responsibility for planning, delivery, and reflection on the instructional practice. These findings are supported by the literature reviewed in relation to this research. In particular, several previous studies stress that effective professional development cannot be done alone (Darling-Hammond & Richardson, 2009; Vygotsky & Cole, 1978).

In their work on teacher development, Borko and Tutnam (1995) stress that "teachers benefit greatly from support ... as they attempt to integrate their new learning into their ongoing classroom practices ... to solidify changes in their knowledge and beliefs" (p. 59). The same concept was previously addressed by Dougherty (2000). He identifies cognitive coaching as a tool that promotes the development of a learning community in which a coach and a teacher work together towards the common goal. Moreover, in his study of cognitive coaching, Bjerken (2013) stresses the value of instructional conversations between the teacher and the coach. In addition, Diaz (2013) and Evans (2005) emphasize the positive effects of collaborative efforts between the teacher and the coach through the development of positive partnerships. Both studies underline that cognitive coaching promotes rich instructional conversations and collaboration. These views expressed in previous studies resonate with the findings of current research.

In summary, the findings of this research study are supported by literature and previously conducted studies addressing the impact of cognitive coaching on teacher development, instructional practices, and student outcomes.

In addition, I discussed the outcomes of this study with another coach who used cognitive coaching. During our conversation, I realized that three out of five emergent themes of this study were also noted by another coach as elements she attributed to the success of her cognitive coaching work. She pointed out that deliberate reflection seemed to be of a high level of importance in her work with teachers.   This resonated with the findings of this study as it relates to the theme of elements of reflective practice. In addition, my colleague noted the value of intentional planning and collaborative work between the coach and the teacher. These two ideas link to this study's themes of creating new instructional applications and promoting shared responsibility.

Implications for Practice

The results of this study can be used by school districts as they continue to develop professional development approaches that will foster continuous professional growth of their teachers. The findings of this research suggest that cognitive coaching is a professional development form that promotes meaningful growth that is relevant to the teachers' professional needs as well as to the students' learning needs.

Many school districts tend to hire instructional coaches, teaching and learning facilitators, and instructional support specialists. Considering the results of this study, it can be beneficial to train these instructional leaders in cognitive coaching. In addition, similar studies can be used by school districts to examine the return on their investment considering the amount of money districts spend on hiring individuals, such as

instructional support specialists, instructional coordinators, technology experts, and other similar positions which involve the use of mentor type staff.

Giving teachers a sense of empowerment is one benefit outlined in the findings of this study as study participants' report how they felt in control of their professional growth because they got to select the focus of their coaching cycles. Providing teachers with opportunities to select the focus of their professional growth can be a powerful driver for school districts in terms of teacher development. School districts may look into incorporating such ideas into teacher professional development plans and school improvement plans. In addition, promoting cognitive coaching techniques may also shift the school culture towards being more solution-driven because using open-ended questioning and positive presuppositions, school leaders can potentially lead teachers to developing plans of action to address various school issues.

Based on the findings of this study, it is evident that having an opportunity for intentional planning is linked to a more strategic instructional practice. School districts should consider providing teachers with opportunities to collaboratively plan instruction. Developing school schedules that promote teacher collaboration is one way to address this issue. Having an opportunity to discuss their instructional plan, rehearse their planned activities, and brainstorm expected student outcomes can help schools refine their instructional practice. Similar ideas can be also applied to teacher reflection. Having an opportunity to reflect on their lesson can be a valuable experience.

Cognitive coaching techniques, such as open-ended questioning and positive presuppositions, are tools school districts should examine and consider while developing cognitive coaching as a district-wide practice. School districts may choose to invest in

cognitive coaching training for each of their instructional support facilitators to insure similar coaching experiences are happening at all schools. In addition, it can be helpful to train school leaders in cognitive coaching for them to have a better understanding of cognitive coaching protocols. With training, school leaders will be more likely to use cognitive coaching techniques when giving teachers feedback that is meant to promote their professional growth rather than doing traditional evaluations. It is also possible to train teacher leaders in cognitive coaching for them to support new instructional staff.

Furthermore, cognitive coaching techniques can be used by school leaders as they present their staff with school-wide issues and guide them to be solution-driven. Coaches need to become system leaders and change agents to infuse schools with coaching culture (Fullan & Knight, 2011). Therefore, practicing cognitive coaching techniques school-wide can help schools develop into the culture of coaching with self-directed, reflective practitioners.

Limitations

There are several limitations that should be noted in regards to the current study: sample size, willingness to participate in the study, relationships with the coach, and other professional development initiatives happening simultaneously along with the cognitive coaching experience.

This research investigates the perceptions of three teachers who participated in cognitive coaching as a form of professional development. Although these participants had participated in cognitive coaching for three years, data collection for this study occurred during October - December, 2013. Moreover, the relatively small sample size of this study may be viewed as a possible limitation of this research. However, as

Marshall (1996) stresses that "an appropriate sample size for a qualitative study is one

that adequately answers the research question" (p. 523). To address the issue of

generalizability of qualitative research, and case study in particular, Merriam (2009),

states that "much can be learned from a particular case" (p. 51). Moreover, qualitative

work does not aim at statistical generalizations as quantitative work does. However,

Merriam (2002) points out that much of what can be learned from a qualitative study can

be transferred or appropriated to another situation: "generalizability in qualitative

research becomes possible" (p. 28). The reader of the research can also determine the

extent of generalizability or ways the research findings can be used in other contexts. To

assist the reader, I provided detailed information regarding the context of the study, its

participants, and the information they reported.

Getting the in-depth perspectives of individual teachers and learning their stories

as it relates to cognitive coaching is a valuable contribution to research. Study

participants shared many positive comments regarding their experience with cognitive

coaching. However, it is necessary to point out that voluntary involvement is one of the

common characteristics of research studies. Yet, it is also controversial and may

contribute to the limitations of the study. This is because by having only voluntary

participants, it is impossible to get the complete understanding of the phenomenon, since

the research doesn't capture the views of those who did not volunteer to participate in the

study.   Therefore, the results are limited in that other teachers, who may not have had

similarly positive outcomes of cognitive coaching, were not included in the study.

In addition, the fact that I was the researcher and the coach at the same time may

have also influenced the reports captured in this study. The results may be different if

teachers were coached by another coach. At the same time, this limitation can be viewed as a positive descriptor of the study, because the success of cognitive coaching conversations largely depends on the level of trust established between the coach and the teacher. Therefore, this established relationship of trust could in fact lead to more open conversations between the researcher and the teachers.

Another potential limitation of this study is that other professional development initiatives may have influenced the outcomes or contributed to the changes in teachers' instructional practice in addition to the impact of cognitive coaching. It should be noted that both previous literature and the results of this study point out that cognitive coaching leads to the application of knowledge and skills initially learned through regular professional development sessions.

Future Research Directions

This research study investigated cognitive coaching as a form of professional development by examining teachers' perceptions as it relates to this professional growth opportunity. There can be several possible directions for future research as in regards to this topic as well as research methodology. While this study shared the thoughts of three teachers, the information can be used to replicate this study with more teacher participants. In addition, it would be interesting to conduct such a study with teachers and coaches representing various schools within the same school district to examine how consistent cognitive coaching practices are within a single school district. Such district-wide implementation of cognitive coaching may allow researchers to look at the impact of this professional development form on a larger scale. However, when such research design is employed, it is necessary to address fidelity of implementation. In addition, it is

also possible to examine cognitive coaching as a form of professional development in multiple school districts focusing on highlighting "bright spots" (Heath & Heath, 2010), that is, describing coaches and teachers whose work leads to successful examples of coaching implementation. Looking at cognitive coaching from various perspectives (school administrators, coaches, teachers, students, parents, and community) may be another interesting direction for future research.

Further research may also look at the impact of cognitive coaching on student achievement. This may prompt changes in the methodology, either shifting to a quantitative research approach or a mixed methods study to allow the researcher to capture factual achievement data on the students. In such a case, there may be a focus on one of the content areas during cognitive coaching cycles. All formative assessments, benchmark tests, and summative assessments can then be a source of triangulation. This idea can be further expended to looking at the impact of cognitive coaching as it relates to specific groups of students, i.e. English Language Learners, Special Education students, etc. .

Another potential research focus can emphasize how cognitive coaching can be a way to follow up regular professional development sessions to insure skill application. In this scenario, multiple schools with different educational initiatives can be invited to participate. Each school will then intentionally use cognitive coaching to reinforce their professional development focus.

Future research direction can focus on the longitudinal study of one or several educators in order to attempt to capture the transformation in their practice attributed to their participation in cognitive coaching. Similar thoughts on teacher transformation can

also be examined in a comparative study that investigates the impact of cognitive

coaching versus regular evaluation of professional development.

Conclusion

School improvement efforts are tied to quality teaching and teacher development.

Helping teachers to become self-directed reflective practitioners empowers educators and

gives them ownership of their instructional practice. Cognitive coaching is a form of

professional development that can help teachers develop their instructional planning,

delivery, and lesson reflection.

This study revealed teachers' perceptions of cognitive coaching. According to

teacher's views, cognitive coaching helps teachers develop their reflective practice,

prompts them to continue experiencing the need for further development, taps into

teacher capacity, and suggests teacher empowerment. Instructional practice and diversity

spectrum are also identified as components that contribute to the teachers' perceptions of

cognitive coaching. In addition, teacher-driven learning and shared responsibility are

noted as valuable elements of teachers' coaching experience.

When comparing fixed and growth mindsets, Dweck (2008) stresses that within

the growth mindset, individuals experience the "desire to learn and therefore a tendency

to embrace challenges, persist in the face of setbacks, see effort as the path to mastery,

learn from criticism, find lessons and inspirations in the success of others, all this gives

them a greater sense of free will" (p. 40). Cognitive coaching is a form of professional

development that promotes growth mindsets and leads to teacher development which not

only builds teacher capacity, but also empowers teachers to develop student capacity.

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APPENDIX A

PERMISSIONS TO REPRINT

From: Carolee Hayes [ccscarolee@aol.com]
Sent: Monday, March 02, 2015 3:08 PM
To: Gonzalez Del Castillo, Alla
Subject: Re: Request for Permission

Thank you for your explanation of using the charts in the literature review. This email will serve as permission from Thinking Collaborative to include those in your dissertation with citations. Please be sure to share your research with us when you complete the work. We are very interested in research related to Cognitive CoachingSM.

With good wishes on your work,
Carolee
Carolee Hayes
Director, Thinking Collaborative and Kaleidoscope Associates
www.thinkingcollaborative.com
225 Featherwalk Court
Highlands Ranch, CO 80126
303-683-1740
303-475-1649

Download the new mobile app, **Cognitive Coaching**, for videos, self-assessments, a coaching management system and more!

-----Original Message-----
From: Gonzalez Del Castillo, Alla <Alla.GonzalezDelCastillo@slps.org>
To: Carolee Hayes <ccscarolee@aol.com>
Sent: Mon, Mar 2, 2015 1:59 pm
Subject: RE: Request for Permission
Good afternoon Dr.Hayes,

Thank you for a prompt response.
As part of the lit. review for my dissertation on the use of cognitive coaching in one elementary school, I am describing the planning conversation, reflective conversation, and problem-resolving conversation as I cite the work of Costa and Garmston. I would like to visually support it with the conversation maps. As part of the note for each of these figures, I will cite the source. The purpose for using the tables is similar - present this info in my lit. review as I cite the work of Costa and garmston. However, for the purposes of my dissertation, I would like to have the permission to reprint the content of the table, but change the formt of the table (in stead of having 5 smaller cells each describing one state of mind, I want to have one cell that includes all of the examples).
Please let me know if you need additional details about my project.
Looking forward to hearing from you.

Alla Gonzalez Del Castillo
Director, ESOL Bilingual Migrant Program
St. Louis Public Schools
(314) 664-1066 (office)
(314) 258-5532 (cell)
alla.gonzalezdelcastillo@slps.org

From: Carolee Hayes [ccscarolee@aol.com]
Sent: Monday, March 02, 2015 2:44 PM
To: Gonzalez Del Castillo, Alla
Cc: doreen.merola@gmail.com; carolsimoneau@gmail.com
Subject: Request for Permission
I am a doc student working at the University of
Missouri - St. Louis. I refer to Costa and Garmston a lot in my work. I am
requesting permission to reprint several figures from the Cognitive Coaching
Foundations Seminar Guides (cognitive coaching maps on p. 27, p. 53, p. 88) as
well as adapt the tables on p. 12 and p. 35. Please advise on the proper
protocol for such request.
Thank you in advance.
We received your request, but need more information. How are the planning on using the maps
and the tables? Thanks for your integrity in honoring our intellectual property.

Carolee

Carolee Hayes
Director, Thinking Collaborative and Kaleidoscope Associates
www.thinkingcollaborative.com
225 Featherwalk Court
Highlands Ranch, CO 80126
303-683-1740
303-475-1649

Download the new mobile app, **Cognitive Coaching**, for videos, self-assessments, a coaching
management system and more!

From: Permissions [permissions@ascd.org]
Sent: Wednesday, March 04, 2015 3:49 PM
To: Gonzalez Del Castillo, Alla
Subject: RE: Request for Reprint Permission (Thread:1317904)
In response to your request below, please consider this permission to use the excerpt(s) from the referenced publication for your personal research purposes. Should you include excerpts or cite content in a paper or some other report form, please credit the source accordingly. If your research results in use of our content in a product or publication for commercial release, please contact me again to secure further rights to do so.
Thank you for your interest in ASCD and good luck with your dissertation.
Sincerely yours,
KATY WOGEC • Sr. Paralegal
1703 N. Beauregard Street • Alexandria, VA 22311-1714
P 703-575-5749 · F 703-575-3926 · **www.ascd.org** · **www.wholechildeducation.org**

From: Gonzalez Del Castillo, Alla [mailto:Alla.GonzalezDelCastillo@slps.org]
Sent: Tuesday, March 03, 2015 4:34 PM
To: permissions@ascd.org
Subject: Request for Reprint Permission (Thread:1317904)
Good afternoon,
I spoke with you on the phone earlier today.
As part of the lit. review for my dissertation on the use of cognitive coaching in one elementary school, I am plan to use the table from Joyce and Showers' book "Student Achievement through staff development" p. 78 indicating the impact of coaching on implementation. I am requesting a permission to reprint this table.
Please let me know if you need additional details about my project.
Looking forward to hearing from you.
Alla Gonzalez Del Castillo
Director, ESOL Bilingual Migrant Program
St. Louis Public Schools
(314) 664-1066 (office)
(314) 258-5532 (cell)
alla.gonzalezdelcastillo@slps.org

APPENDIX B

CORRESPONDENCE WITH JENNY EDWARDS

RE: Synthesis of Research on Cognitive Coaching
Friday, July 6, 2012 1:08 PM Mark as Unread

From**: "J**enny Edwards" <JEdwards@fielding.edu>
To**: "B**ilous Alla" <allabilous@yahoo.com>

Dear Alla,

That sounds wonderful! I wanted to suggest
some studies like yours. None have been done that
are exactly like yours. The closest ones would be:

•   Brooks (20001, 2000b) and Dougherty (2000) evaluated trainings based on Kirkpatrick's (1998) model. Information about the findings from their studies is below. If you would like more information about their studies, please let Jenny know. Donald Kirkpatrick has written several books since then, and they are available on Amazon. The following excerpts of the two studies are from Cognitive CoachingSM: A Synthesis of the Research.

•   Based on data from both master teachers and student teachers, the college that provided training in Cognitive CoachingSM for master teachers who were supervising student teachers had a positive return on its investment. Brooks (2000a, 2000b) used Kirkpatrick's (1998) model to evaluate the effects of the training. The master teachers enjoyed the training and what they had learned. They understood what they had learned from the training. They applied what they had learned with the student teachers with whom they worked. As evidenced by reports from the student teachers, the master teachers used what they learned with them. In addition, student teachers noticed a difference between master teachers who had been trained in Cognitive Coaching and master teachers who had not received the training.

•   Dougherty (2000) found that teachers who participated in Cognitive CoachingSM training liked the training, learned how to use Cognitive CoachingSM, changed their behavior, and obtained results from using their new communication skills, all elements of Kirkpatrick's (1998) model for evaluating the effects of training.
Brooks, G. R. (2000a). Cognitive Coaching training for master teachers and its effects on student teachers' ability to reflect on practice (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (UMI No. AAT 3054851)
Brooks, G. R. (2000b). Cognitive Coaching for master teachers and its effect on student teachers' ability to reflect on practice. The Delta Kappa Gamma Bulletin, 67(1), 46-50.
Dougherty, P. A. (2000). The effects of Cognitive Coaching training as it pertains to: Trust building and the development of a learning community for veteran teachers in a rural elementary school (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (UMI No. AAT 3054864)

Kirkpatrick, D. (1998). Evaluating training programs: The four levels. San Francisco, CA: Berrett-Koehler.
Hope that helps!

Warmly, Jenny
Jenny Edwards, PhD
Fielding Graduate University

_____

From: Bilous Alla [allabilous@yahoo.com]
Sent: Friday, July 06, 2012 12:58 PM
To: Jenny Edwards
Subject: RE: Synthesis of Research on Cognitive Coaching

Dear Dr.Edwards,
The actual research questions are focusing on teachers' reported strengths and challenges related to using Cognitive Coaching as professional development. So, it's teachers' reported perceptions (qualitative study). I am looking forward to help teachers voice their opinion regarding the use of cognitive coaching. There is another element to this study - it is designed for a linguistically diverse school.
I have been working on this research for a while now. Last fall, I completed Cognitive Coaching training with Toni Pricket. I also have a coach who gives me feedback on my cognitive coaching, questioning and paraphrasing in particular.
Again, thanks for your interest in my work and, if you have any comments and/or constructive criticism, I would greatly appreciate it.

Sincerely,
Alla

--- On Fri, 7/6/12, Jenny Edwards <JEdwards@fielding.edu> wrote:
From: Jenny Edwards <JEdwards@fielding.edu>
Subject: RE: Synthesis of Research on Cognitive Coaching
To: "Bilous Alla" <allabilous@yahoo.com>
Date: Friday, July 6, 2012, 8:59 PM

Dear Alla,
That sounds interesting! How are you going to measure the teachers' perceptions?

Warmly, Jenny
Jenny Edwards, PhD
Fielding Graduate University

APPENDIX C

NIH CERTIFICATE

Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research
certifies that **Alla Gonzalez Del Castillo** successfully completed the NIH
Web-based training course "Protecting Human Research Participants".

Date of completion: 08/23/2009

Certification Number: 269622
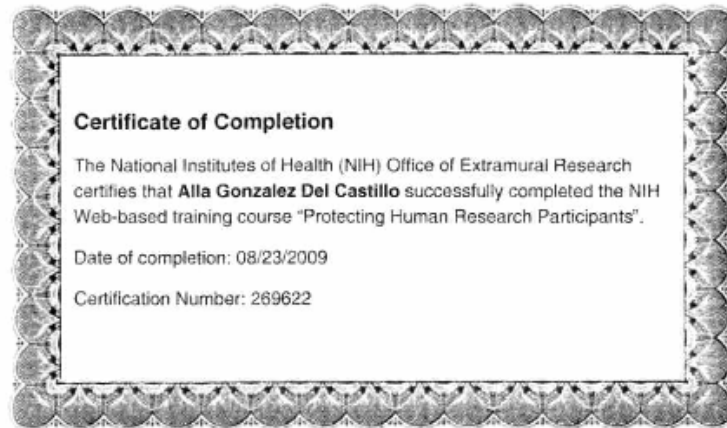
APPENDIX D

IRB APPROVAL LETTER

Office of Research Administration

University of Missouri St. Louis

One University Boulevard
St. Louis, Missouri 63121-4499
Telephone: 314-516-5899
Fax: 314-516-6759
E-mail: ora@umsl.edu

DATE:	September 25, 2013
TO:	Alla Gonzalez Del Castillo
FROM:	University of Missouri-St. Louis IRB
PROJECT TITLE:	[461302-2] Cognitive Coaching as a Form of Professional Development in a Linguistically Diverse School
REFERENCE #:	
SUBMISSION TYPE:	New Project
ACTION:	APPROVED
APPROVAL DATE:	September 25, 2013
EXPIRATION DATE:	September 25, 2014
REVIEW TYPE:	Expedited Review
REVIEW CATEGORY:	Expedited review categories # 7 (and Exempt 1)

The chairperson of the University of Missouri-St. Louis IRB has reviewed the above mentioned protocol for research involving human subjects and determined that the project qualifies for expedited review under Title 45 Code of Federal Regulations Part 46.110b. The time period for this approval expires one year from the date listed below. You must notify the University of Missouri-St. Louis IRB in advance of any proposed major changes in your approved protocol, e.g., addition of research sites or research instruments.

You must file an annual report with the committee. This report must indicate the starting date of the project and the number of subjects to date from start of project, or since last annual report, whichever is more recent.

Any consent or assent forms must be signed in duplicate and a copy provided to the subject. The principal investigator must retain the other copy of the signed consent form for at least three years following the completion of the research activity and they must be available for inspection if there is an official review of the UM-St. Louis human subjects research proceedings by the U.S. Department of Health and Human Services Office for Protection from Research Risks.

This action is officially recorded in the minutes of the committee.

If you have any questions, please contact Carl Bassi at 314-516-6029 or bassi@umsl.edu. Please include your project title and reference number in all correspondence with this committee.

Generated on IRBNet

Project Status as of: 03/01/2015

Reviewing Board	Initial Approval Date	Project Status	Expiration Date
University of Missouri-St. Louis IRB, St. Louis, MO	09/25/2013	Active	09/25/2015

Submitted To	Submission Date	Submission Type	Board Action	Effective Date	
University of Missouri-St. Louis IRB, St. Louis, MO	08/20/2014	Continuing Review/Progress Report	**Approved**	08/21/2014	| Review Details |

APPENDIX E

PERMISSION TO CONDUCT RESEARCH

Research Application Approval
Shannon, C. L.
You replied on 12/30/2013 3:31 PM.
Sent: Friday, October 11, 2013 2:07 PM
To: Gonzalez Del Castillo, Alla
Cc: Figgures, Cleopatra; Russell-West, Hollie P.

Dear Ms. Gonzalez Del Castillo,
    Your research application for the project entitled "Cognitive Coaching as a Form of
Professional Development in a Linguistically Diverse School" has been reviewed and approved.
It is understood that this research does not involve students or student records. Please check with
the building principal before starting your research. Principals have the final decision on such
activity ion their schools.

Yours,
C.L.Shannon Ph.D.
Director, Research and Evaluation
Office of Accountability, Research, Evaluation and Assessment (AREA)
-----Original Message-----

_____

From: Gonzalez Del Castillo, Alla
Sent: Monday, September 30, 2013 7:50 PM
To: Shannon, C. L.
Subject: SLPS Research Application

Dr. Shannon,
I am currently working as an Academic Instructional Coach at Sigel Elementary. I am applying
for the permission to conduct research at SLPS.
Attached is my application to conduct research at one of SLPS schools. I have also attached the
document that outlines the purpose of my research, literature that guides this study, methodology
that will be used including a copy of data collection tools, and the IRB approval letter.
If you have any questions or need additional information regarding my research, please do not
hesitate to contact me via e-mail at alla.gonzalezdelcastillo@slps.org or by phone (314)853-
2017.

Thanks.
Alla Gonzalez Del Castillo, AIC
Sigel Elementary CEFSS
2050 Allen St., St. Louis, MO 64104

APPENDIX F

INFORMED CONSENT

Department of Early Childhood, Elementary, TESOL, and Special Education

One University Blvd.
St. Louis, Missouri 63121-4499
E-mail: avbc46@mail.umsl.edu

Informed Consent for Participation in Research Activities
Cognitive Coaching as a Form of Professional Development in a
Linguistically Diverse School

Participant _____   HSC Approval Number
_____

Principal Investigator <u>Alla Gonzalez Del Castillo</u>   PI's Phone Number   <u>(314)853-2017</u>

_____

1. You are invited to participate in a research study conducted by Alla Gonzalez Del Castillo under the supervision of Dr. Kim Song, Associate Professor. The purpose of this research is to understand how elementary teachers in a linguistically diverse school perceive their participation in cognitive coaching in relation to their professional growth.

2. Your participation in this study will involve two coaching cycles, each of which will consist of a planning conversation, classroom observation, and a reflective conversation. After each classroom observation, you will be asked to make an entry in your reflection log describing how you think your lesson went and outlining any wonderings you might have. The investigator will also look at your lesson plans, which outline your instructional plan during the time you participate in this study. In addition, you will be interviewed to discuss your experience and your perceptions of cognitive coaching. The interview will be scheduled in advance. You will have a choice of interview times (your planning time, before school, after school, weekends) and locations (your classroom, data room, or alternate location you identify).

The timeline for your participation in this study is between September 2013 and December 2013. The amount of time involved in your participation will be between half an hour to an hour for the interview and between ten to twenty minutes for each teacher reflective log entry. Classroom observations, coaching conversations, and lesson plans will not require any additional time because they are part of the existing school/district expectations.

Approximately 3 to 6 participants may be involved in this research.

3. There might be minimal risks associated with the participation in this study (e.g. feelings of discomfort when discussing sensitive issues such as personal educational goals and work performance).

4. There are no direct benefits for you participating in this study. However, your participation will contribute to the knowledge about cognitive coaching used as a form of professional development and may help teachers as well as coaches in other schools.

5. Your participation is voluntary and you may choose not to participate in this research study or to withdraw your consent at any time. If you want to withdraw from the study, you can contact me at (314) 853-2017 or via e-mail at avbc46@mail.umsl.edu.You may choose not to answer any questions that you do not want to answer. You will NOT be penalized in any way should you choose not to participate or to withdraw.

6. By agreeing to participate, you understand and agree that your data may be shared with other researchers and educators in the form of presentations and/or publications. In all cases, your identity will not be revealed. Upon collection of data, all identifying information will be removed in order to mask your identity. Pseudonyms will be used. Transcripts and field notes will be stored on a password-protected computer and locked at my home. Raw data will be destroyed after the end of the study.

   In rare instances, a researcher's study might undergo an audit or program evaluation by an oversight agency (such as the Office for Human Research Protection). That agency would be required to maintain the confidentiality of your data.

7. If you have any questions or concerns regarding this study, or if any problems arise, you may call the Investigator, Alla Gonzalez Del Castillo at (314) 853-2017 or the Faculty Advisor, Dr. Kim Song at (314) 516-5924. You may also ask questions or state concerns regarding your rights as a research participant to the Office of Research Administration, at (314) 516-5897.

   I have read this consent form and have been given the opportunity to ask questions. I will also be given a copy of this consent form for my records. I consent to my participation in the research described above.

_____   _____
Participant's Signature   Date   Participant's Printed Name

_____   _____
_____   _____
Signature of Investigator or Designee   Date   Investigator/Designee Printed Name

APPENDIX G

INTERVIEW PROTOCOL

1. Talk to me about your students and their backgrounds.

    Possible Probe: In what way would you identify your class as linguistically diverse?

2. Tell me about your understanding of cognitive coaching as it is used in your school.

    Possible Probe: What are some of the things your coach does when you participate in the

    coaching cycles?

3. Who determines the focus of your coaching cycles?

4. Talk to me about the difference you see between cognitive coaching and other forms of

    professional development you participate in, including, but not limited to workshops, in-

    service trainings, book studies, etc.

5. How do you feel about cognitive coaching?

    Possible Probe: How does cognitive coaching contribute to teachers' professional

    growth?

6. What are some changes in your instructional practice you experienced as a result of going

    through a coaching cycle?

7. How do coaching cycles make you feel about working with linguistically diverse

    students?

APPENDIX H

PROJECT SCREENSHOT IN DEDOOSE