



The Growth of Instructional Coaching Partner Conversations in a PreK-3rd Grade Teacher Professional Development Experience

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Instructional coaching that supports teachers' with revising teaching practices is not understood. This study sought to understand the impact of the instructional coaching experience by recording coaching conversations/interactions with teachers. The purpose was to determine if the type of coaching conversations changed overtime during three defined time periods within a 3- year project. A quantitative design was conducted using a sample size of 5 faith-based elementary schools. Data was collected using the Instructional Coaching Scale by Woodruff. The results revealed that instructional coaching conversations/ interactions changed towards a more interactive style and teachers became more involved in the coaching experience.

Introduction

Instructional coaching is often used as a professional development strategy for increasing teacher competence. However, much of the research conducted to date on instructional coaching models has been primarily exploratory and lacking in scientific rigor. The findings of Bush, Showers, Joyce and others combined with the findings from Instructional Coaches' reports on implementation rates, suggest that coaching increases actual implementation or skill transfer (Cornett & Knight, 2008). Knight (2007) developed an instructional coaching model that was rooted in partnership and modeling. Based on the partnership approach, Knight concluded that when teachers participated in professional development that included them as partners, they were more likely to be actively engaged, have greater retention of the training content, and implement the new learned practices. Showers (1982) found that training followed up with or combined with coaching was much more effective at enabling teachers' use of new teaching practices. Baker (1983) discovered that higher rates of implementation and continued use of new teaching practices persisted for teachers who had the support of an instructional coach.

Theoretical Framework

Instructional Coaches

Instructional coaches' help teachers take all the ideas and practices they are learning and implement them in useful ways that foster student achievement. Without instructional coaching, all too often, no significant change occurs in teacher practices (Cornett & Knight, 2008). Instructional Coaches provide intensive, differentiated support to teachers so they are able to implement best practices. Effective instructional coaches have excellent communication skills and a deep respect for teachers' professionalism (Knight, 2007). They often model lessons, observe teachers, provide constructive feedback, and share their experiences and expertise. Instructional coaches are mentors and friends who instinctively understand the challenges that teachers face and are willing to partner with teachers to improve student achievement. Instructional coaches' partner with teachers to support them with understanding and implementing research based instructional practices into their teaching. Knight (2011) summed up the work of the instructional coaches' by suggesting they support implementation of the learning target. However, most important is they observe, provide constructive feedback, and actively engage teachers in supportive practices that are embedded in meaningful growth conversations.

Instructional Coaching a Relationship

The most noted characteristic about instructional coaching is the quality of the ongoing relationship between the instructional coach and the teacher. Knight (2011) espoused that an effective instructional coaching relationship is grounded in the element of partnership. Teachers often resist the idea of just being told what to do. Teachers' need and want to engage in the professional development experience as an equal partner. Knowles (1990) suggests that adult learners need to feel they are participants in their learning experiences and therefore seek to be actively engaged in the learning process. Thus, adult learners seek out control over their learning experience. However, at the same time adult learners must feel their opinions and experiences are valued, respected and used in ways that help them change and grow. Along these same lines, Knight (2011) argued that a partnership model which is more collaborative in nature is most effective in engaging teachers, rather than a top down authoritarian model where teachers are merely told what to believe and practice.

Transformative Learning and Coaching Conversations

No school reform effort or innovation is worth its effort and resources unless it transforms the understandings and practices of teachers. Simply put "transformational learning shapes people; they are different afterward, in ways both they and others can recognize" (Clark, 1993, p.47). Transformative learning is essentially a learning process that assists people with making meaning of their experiences (Merriam & Bierema, 2014). Mezirow (2003) concluded that transformative learning is a specific adult form of reasoning in which a paradigm shift occurs. During transformative learning we critically examine prior interpretations and held assumptions in order to form new meaning(s). Teachers must not only be able to implement new practices but they must be able to attach newly transformed personal meanings around those teaching practices. Teachers bring to the instructional coaching environment prior beliefs about what works and what does not. They often are entangled in their own paradigms and perceptions which make it increasingly difficult for them to learn and implement new practices. Nonetheless, "Transformative learning provides a focus on the development of knowledge, behaviors, and skills" that could be beneficial to teachers as they revise their personal meanings and teaching practices (Nelson, Low, & Nelson, 2005, p. 3).

Thus, Knight (2011) believed that through partner conversations we can encourage teachers to

challenge and analyze old held beliefs, assumptions, and practices. Partner conversations can be thought of as storytelling. Ultimately, partnership conversations transform beliefs, assumptions, and ways of behaving (Merriam & Bierema, 2014). The partner conversation approach makes it easier to communicate, relate and connect with others. Partner conversations require instructional coaches to be active listeners, ask relevant questions, remain nonjudgmental and find common ground with teachers (Knight, 2011).

Research Methodology

Context of the Study

This investigation was embedded as a subpart of a larger three-year university-school partnership that was supported by funds from a private grant foundation. The aim of the larger study sought to address improving Prek-3rd grade teacher's content knowledge and pedagogical practices in teaching mathematics through instructional coaches. The investigation included a sample population of five participating faith-based private elementary schools in an urban area. In addition, this study sought to understand to what extent newly learned teacher practices actually result in the transfer of knowledge and new practices that might improve student achievement in mathematics. A secondary aim of this study was to determine if there was a significant difference in the type of instructional coaching conversations that instructional coaches had with Prek-3rd grade teachers while providing support for the transformation of teaching practices.

Project Procedures

Teachers attended regularly planned in-service trainings. Instructional coaches supported each teacher as they implemented teaching practices supported student learning. The majority of instructional coaches' had over 20 years teaching experience with expertise in early childhood and elementary education. All seven of the instructional coaches had previous experience mentoring and coaching teachers in mathematics. Throughout the three-year project period, instructional coaches met with teachers in their actual classroom settings. Teachers received weekly 90-minute coaching visits. During these coaching visits instructional coaches modeled, observed, provided constructive feedback, co-created professional development plans, provided resources and had partner conversations with teachers. In addition, teachers received ongoing training on how to design and implement math work stations, and design and deliver math instruction. All participating teachers received training in the math content area that was appropriate to the grade level they taught. Also, teachers

were encouraged to have ongoing dialogue with each other as they shared ideas about the strategies they found to be effective for teaching mathematics.

Research Design

The purpose of this investigation was to determine if there was a significant difference in the type of coaching conversations instructional coaches engaged in overtime with mentees. A quantitative research design was employed for the purpose of data collection for this study. The type of the coaching partner conversation at the beginning of the coaching experience through the end of the instructional coaching relationship was of primary interest. Therefore, the following research question guided the study.

Research Question: Is there a significant difference in the type of coaching conversations engaged in over a three-year period with Prek-3 grade teacher mentees?

Population and Sample Participants

Principals at local faith-based private elementary schools in an urban community were notified of the purpose of the project; grant proposal application process and the expectation that if chosen schools were making a 3-year commitment to participate in all project activities. The principal of each school, if interested, was asked to submit a formal grant application. Each submitted grant application under went a peer review process in which four evaluators rated each application based on specific criteria (school size, identified need, percentage of students receiving free or reduced lunch). Of the eight schools that applied, only five schools met the selection criteria and were selected to participate. Once a school was selected to be a participant in the project, Pre-k - 3rd grade teachers and school administrators were provided a formal orientation of the project goals, aims and expectations. Based on the number of teachers in each school, three of the five schools were assigned one instructional coach while the remaining schools were assigned two instructional coaches. Table 1 provides details of the number of participating teachers and assigned instructional coaches to each school.

Table 1
Number of Participating Teachers and Assigned Instructional Coaches Per School

School Name	# of Teachers	Instructional Coaches
School 1	4	1
School 2	4	1
School 3	4	1
School 4	7	2
School 5	7	2
Total (5 Schools)	Total (26 teachers)	Total (7 Instructional Coaches)

Instrument and Procedures

A quantitative descriptive research study design was used. Gall, Gall & Borg, (2015) posited that quantitative research inquiry is grounded in the assumption that features of the social environment constitute objective reality that is constant across time and settings; thus quantitative inquiry involves collecting numerical data about samples and subjecting these data to statistical analysis. The Instructional Coaching Scale was used to determine the type of coaching interactions over the duration of the project. Woodruff (2007) designed the Instructional Coaching Scale instrument to help professional developers measure the impact of their coaching on the teachers with whom they interact. The scale is not intended to understand teacher implementation of practices but to better understand the effects that an instructional coach has working in a 1:1 coaching relationship with a teacher. The scale range is from 0 to 10 with the following specific descriptors for each scale score:

- 0 – Did not see – Teacher may have been absent or an unforeseen event may have occurred (such as a tornado drill, school cancellation, assembly, etc.)
- 1 – Enrollment Conversation. A one is recorded when the teacher has not yet implemented a coachable practice
- 2 – Change Conversation. A two is a coaching conversation prior to getting into the classroom as well, but it is more focused
- 3 – Implementation Conversation. In this situation, there is evidence that the teacher is using the new practice, routine, technique, or specific content.
- 4 – Planning Conference. A conference with the teachers which is focused on planning either a classroom visit or co-planning a specific routine, technique, practice, or content related lesson

5 – Model Lesson. At this point in the coaching relationship, it is critical that things go well. Many teachers gain enormously from model lessons, and for many it will be a jump start to their own implementation

6 – “Co-Taught” Lesson. At this stage, the coach and the collaborating teacher share equal roles. Co-teaching is often a nice way to ease a reluctant or nervous teacher into use of the innovation or practice

7 – Implementation Conversation/Observation. The coach and teacher have a conversation after the teacher is comfortable with the coach/teacher relationship. The coach has seen the new practices implemented and the teacher has student artifacts and evidence to look at together. The conversation may include examination of data, further planning, and/or partnership feedback

8 – Observation and Feedback Conversation. At this point, the teacher is ready to conduct the lesson with the coachable practice

9 – Strategic Integration of Lesson – When teachers begin to exhibit fluent use of past and newer practices and/or techniques infused with relevant curriculum, the teacher is truly becoming strategic

10 – Refocusing/Adaptation – When teachers have reached this point, they will feel very comfortable with the new innovation. It has become integrated into their repertoire of teaching behaviors

Since some of the ratings may be more subjective than others, Instructional Coaches were trained on each rating description. Instructional Coaches were given scenarios and situations to rate independently. After each scenario, the instructional coach, with the support of the trainers, discussed their rating. The discussion was invaluable to increase the reliability that instructional coaches would accurately rate the coaching conversations. Additionally it was critical to define a coaching conversation.

Coaching conversations referred to various types of interactions that can happen between a coach and mentee such as a face to face verbal exchange, written email, and through other social media outlets were discussed.

Since there was a possibility that using the Instructional Coaching Scale could impact the coaching relationship between instructional coaches and teachers, it was important that the intent of the instrument, including specific expectations, was clearly communicated to all teachers involved in the project. Instructional Coaches collected data during three coaching periods.

- Period 1: summer/ fall 2011, the initial coaching experience.
- Period 2: January-May 2012, ongoing coaching interactions, and
- Period 3: June 2012 through December 2012, ongoing coaching interactions.

Data Analysis and Results

The posed research question was, is there a significant difference in the type of coaching conversations engaged in over a 3 -year period with Prek-3rd grade teacher mentees? Since the study focused on coaching conversations the data was collapsed and analyzed by period. A one-way Analysis of Variance was conducted to determine if there was a significant difference in the types of interaction by data collection period. The independent variable was the type of coaching conversation documented by Instructional coaches. The dependent variable is the period in which the data was collected. The following null hypothesis guided this investigation:

H_0 There is no statistical significant difference in instructional coaches conversations with Prek-3rd grade teachers when comparing various data collection periods.

Table 2 indicates in Period 1 the average coaching interaction measure obtained was a rating of 3.22. This rating suggests that interactions were centered more on Implementation-meaning teacher use of new practices, routines, techniques or specific content. In Period 2 the average rating was 5.22. This rating indicates that Instructional coaching interactions with teachers were focused on modeling lessons for teachers. In Period 3 the average rating was 6.52. This rating suggests that instructional coaching interactions centered on elements of co-teaching and implementation conversation/observation. In essence, the data indicated that over the 3-year project time period instructional coach’s conversations and interactions on average changed toward a more interactive direction with the teacher becoming increasingly involved in the professional development experience as measured during the 3 documented time periods.

Table 2
Descriptive Statistics instructional coaches: Average Coaching Interaction by Period

	N	Mean	Std. D	Std. E
Period 1	205	3.22	1.82	.12
Period 2	223	5.46	2.32	.15
Period 3	188	6.52	2.60	.19
Total	616	5.04	2.63	.10

Note. N = number of observation; Std.D = standard deviation; Std.E = standard error; Min= Minimum; Max= Maximum

A conducted ANOVA test depicted in Table 3 indicated statistically significant differences in the Instructional coaches conversations ($p=.000$) when comparing mean scores within the three data collection periods. Additionally, A Tukey post hoc analysis (Table 4) revealed significant differences in Instructional coaches conversations in all possible comparison of periods (data collection periods). Thus the Null Hypothesis was rejected. Specifically Instructional coaches conversations were dependent on the period in which the data was collected.

It was also essential to understand the magnitude of the difference. Thus, Cohen (d) effect size statistic was calculated. Table 4 revealed a moderate to large effect in all possible comparisons. Additionally the largest effect is evident when compared the coaching conversations in Period 1 and Period 3.

Table 3
One-Way ANOVA of Instructional coaches interactions by period

Category	SS	Df	MS	F	p
Between	1128.6	2	564.3	109.9	.00
Within	3145.5	61	5.131	7	0
Total	4274.1	61			
	4	5			

Note. SS = sum of squares; df = degree of freedom; MS = mean square.

Table 4
Tukey post hoc analysis comparing the various data collection periods

DV	MD	SE	95% LB	
Period 1	Period 2	-2.24*	.21	-2.76
Period 1	Period 3	-3.2*	.22	-3.83
Period 3	Period 2	1.0*	.22	.53

Note. DV=dependent variable, MD=mean difference, SE= standard error,

*mean difference is significant at the .05 level

Conclusion

The guiding research question posed in this study was, is there a significant difference in the type of coaching conversations engaged in over a 3 year period with Prek-3 grade teacher mentees? Knight (2007) asserted that instructional coaches provide specific support to teachers. Instructional coaches are skilled communicators and act in ways that exemplify their professionalism. They often share common experiences, model lessons, observe mentees, and provide constructive feedback. Based on the data results gathered in this study there was a statically significant difference in coaching conversations overtime. Specifically coaching conversations evolved from conversations focused on implementation that were noted during Period 1. During Period 1 teachers' discuss their change in teaching practice, without the coach actually observing teaching practices. In Period 3 coaching conversations are more embedded in co-teaching and/or implementation conversations in which teacher's discussed their change in teaching practice after being observed by an instructional coach. Nonetheless, Mezirow (2003) concluded that transformative learning requires a paradigm shift in the way we view things. Thus, teachers must not only be able to implement new practices but must be able to attach newly transformed personal meanings around the teaching practices. It is through partner conversations we can challenge teachers to deconstruct old beliefs, confront faulty assumptions and rid themselves of ineffective teaching practices (Knight 2011).

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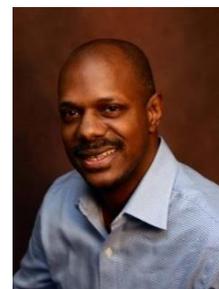


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