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Understanding Teacher Experience with Instructional Coaching to Inform Program Improvement Reflecting the Principles of Adult Learning Theory: A Mixed Method Case Study

Arcadia University Ed.D. Program in Educational Leadership

**Shay Reitz** 

A DISSERTATION IN EDUCATION

Presented to the Faculty of Arcadia University in Partial Fulfillment of the Requirements for the Degree of Doctor of Education

#### i

### Abstract

Instructional Coaching (IC) is a strand of Professional Development (PD) during which an instructional coach provides individualized support and feedback to teachers, focused on instruction, generally within the context of the teacher's classroom (Kraft et al., 2018). This mixed method case study examined teacher experience with IC in order to understand which operational and emotional components of IC had the greatest perceived impact, in order to inform program improvement. Adult learning theory served as the conceptual framework for this study; the process of teaching adults is known as andragogy. Andragogy indicates that teaching adults in a reflective and responsive manner may enable them to become self-directed and independent learners (Knowles, 1980). Therefore, this study was conducted based upon IC reflecting adult learning theory. I assessed teacher experience through both quantitative and qualitative methods, drawing from the population of teachers who had participated in IC at an urban high school in the Mid-Atlantic. Survey methodology was used to ascertain teacher experience broadly, and interviews were conducted with a nested sample of participants to understand teacher perceptions in greater depth. Dialectical pluralism served as the paradigm for this mixed method study, with the goal of encouraging a diversity of perspectives, connection between the researcher and participant, and understanding varying perceptions of reality (Creamer, 2018). Quantitative and qualitative results were analyzed together in order to create meta-inferences about teacher experience with IC.

Keywords: instructional coaching, adult learning theory, andragogy, mixed methods, teacher experience.

# **Signature Page**

Approved and recommended for acceptance as a dissertation in partial fulfillment of the requirements of Doctor of Education.

December 9, 2020

Shay Ro	itz		
Dr. Peg	y Hickman, Chai	ir	
Dr. Tai	ya Santangelo, Co	ommittee Member	

### **Dedication**

This dissertation is dedicated to my husband, Luke, and to my grandfather Webster "Perk" Perkins.

Luke, your love and light has guided me since the moment we met. You have always encouraged my dreams. Meeting my excitement, energy, and decisiveness with reason, calm, and discourse, you have been a constant advocate and support system. I can always count on you to read a sentence (or thousand...) and provide honest feedback, bring me dinner when I forget to take a break, understand when I respond to your kind questions with non-sequiturs, and hold me close when I need your strength. You have given so much of yourself in this process; this degree will have been earned as much by you as it has by me. Thank you for not just understanding me, but for being my greatest champion and best friend.

Grampy, you raised me to believe I can do hard things. I have accomplished some hard things since you've been gone because I have carried your generosity of spirit and empathy with me. Growing up, you answered all of my endless questions, and took my quirky interests seriously. And, no matter how much I struggled with math, you always found a way to explain things to me with clarity and patience, leading me to believe that teaching could be driven by love. From exploring tidepools together, to building inventions out of coconuts and gadgets, to designing topographic maps for scavenger hunts, you understood my constant quest for answers, wonder, and knowledge. Thank you for instilling in me a love of learning, and pursuit of joy in all that I do.

## Acknowledgments

To my chair, Dr. Peggy Hickman, thank you for your constant empathy, kindness, and encouragement! You have helped me accomplish my goals on my terms, while also serving as an excellent and honest source of feedback, guidance, and positivity. You immediately matched my energy and enthusiasm, and made me feel like I could do anything. Your mentorship is so special, and I feel lucky to have spent this time working with and learning from you.

To my committee member, Dr. Tanya Santangelo, I have learned more from you than any educator in my entire life. You taught me how to write. You showed me how to discern and understand the hallmarks of high quality studies. You empowered me to understand concepts I doubted I could ever grasp. Thank you for sharing so much of your incredible craft with me. I am a better scholar, more empowered woman, and stronger teacher because of the painstaking care and generosity you offered as a professor and mentor. I am forever grateful to you for your individualized support, critical feedback, and the endless hours you dedicated working with me.

To my committee member, Dr. Bruce Campbell, thank you for always taking me seriously, and for always reminding me in your patient and kind way not to take things too seriously. From the very first course I took with you, I realized that you not only listen to students carefully, but that you hear each one of us and take our concerns and ideas to heart. You have shown me the importance of sharing the human experience, being open and honest about the process, and uplifting one another at all times.

To my cohort, I just got butterflies thinking about you all! You are the most special, quirkiest, and frankest family that I never knew I needed. My love for you abounds, and I am so honored to have shared this experience with you. On even the coldest, darkest winter nights,

after hours of coursework, I always walked out of Taylor Hall filled with warmth, inspiration, and often a wry smile and giggle because of you. And to Julie, thank you for reminding me that we are enough. More than enough.

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## Chapter I

## Background

This proposed mixed method, sequential explanatory case study was designed to understand teacher experience with instructional coaching (IC) at a public, urban high school, in order to identify which variable components of IC teachers prefer. The goal of ascertaining teacher experience with IC was to develop future IC programming that reflects the principles of adult learning theory, and encourages teacher participation for the purpose of improved instruction and student achievement.

The quantitative research question guiding this research is:

- What is teachers' perceived impact of IC at RCS?

The qualitative research question guiding this research is:

- How do teachers perceive their involvement in IC at RCS?

The mixed methods research question guiding this research is:

- What is teacher experience of IC at RCS?

Instructional coaching (IC) is a specific strand of professional development (PD) that is an ongoing process during which an instructional coach provides observations and one-on-one feedback to teachers, focused on instruction, within the context of their classrooms (Kraft et al., 2018). Instructional coaches are individuals who work with teachers in order to share knowledge and support instructional improvement by modeling best practices and providing targeted feedback, and who may also participate in group PD by guiding professional learning communities (PLCs) and leading traditional PD (Desimone & Pak, 2017; Kraft et al., 2018). The goal of IC is to improve instruction and thus student achievement (Kraft et al., 2018). For the

purposes of this dissertation, instruction is defined as the pedagogical practices of teachers, including the delivery of lessons and the interpersonal interactions between teachers and students in the classroom and school community (Kraft et al., 2018). Achievement will be defined as the academic progress of students, based on their performance on a range of assessments and academic work in the learning environment (Kraft et al., 2018; U.S. Department of Education, n.d.).

IC was originally conceived by two researchers, Joyce and Showers (1982), as a means to translate knowledge and skills into instruction. Since its early conceptualization, IC has been adopted by many schools due to the potentially positive impact it may have on both instruction and achievement (Kraft et al., 2018; Matsumura et al., 2010). The most current and rigorous synthesis about the causal effects of IC indicates that IC is a meaningful intervention for both instruction and achievement, especially when certain potentially influential factors are taken into account, such as the size of the IC program, and pairing IC with supplemental PD (Kraft et al. 2018). These potentially influential variables will be elaborated on in Chapter 2.

IC is different from traditional PD, which has historically been job-embedded, one-time educational programming focused on educating teachers about instruction, often in group training settings (Kraft et al., 2018). IC is cyclical and individualized (Kraft et al., 2018). IC is structured into cycles that involve co-planning, classroom observations, and lesson analysis in the form of feedback meetings (NTC, 2019b). Preeminent researchers about IC, Kraft, Blazar, and Hogan (2018), define IC broadly as:

all in-service PD programs where coaches or peers observe teachers' instruction and provide feedback to help them improve. While coaching fits under the broader umbrella

of PD and teacher learning, we see it as distinct from most program offerings, which still consist of short-term and generalized workshops (p. 3).

Importantly, IC is a reciprocal process between the instructional coach and teacher; It should allow teachers to reflect on their practice and grow in non-evaluative, low-pressure environments where they can feel safe to try new things and make strides in their practice (Kretlow & Bartholomew, 2010). IC should be highly engaging for teachers, based upon their individual needs, and only occur in individual or small-group settings (Kretlow & Bartholomew, 2010). Frequent observations, feedback, and modeling are crucial components across successful IC interventions (Kretlow & Bartholomew, 2010).

A key component of IC is that it reflects the tenets of andragogy rather than pedagogy (Knowles, 1980). Andragogy is the process of teaching adults in a reflective and responsive way so that they may become self-directed and independent learners (Knowles, 1980). This matters for IC because teachers who participate are adult professionals, and not children, and therefore learn differently. Adult learners (a) are self-directed and have independent thought processes; (b) possess a wealth of prior knowledge from which to draw upon; (c) have needs that correlate to their personal and changing social roles; (d) wish to practically apply what they learn; and (e) are intrinsically, not extrinsically, motivated to learn (Merriam, 2001). Thus, for IC to be a meaningful and responsive intervention for teachers, it should align with andragogy, or, adult learning theory (Knowles, 1980; REL West, 2019).

In order to design IC that reflects the principles of andragogy, teachers' perceptions and preferences about IC must be taken into account. This matters for two reasons. The first is to collect data for program improvement derived directly from the stakeholders themselves. The

second is to demonstrate to teachers that their feedback is important and actionable, so that they may feel motivated to continue to participate in IC that reflects their evolving needs and values.

Thus, an investigation into teacher experience was warranted.

A literature review about IC, submitted by the Regional Educational Laboratory at WestEd (REL West, 2019), suggests that additional factors worth considering are effective practices of instructional coaches themselves, and structural support for IC programs in schools. REL West (2019) has indicated that there are several research-based and practitioner-focused practices (PFPs) to consider for the successful implementation of IC. PFPs refer to the autonomous professional and interpersonal actions that instructional coaches can take to implement IC effectively. The three main PFPs noted by REL West (2019) include: differentiating IC for individual teacher preferences, tracking teachers' progress in the process of change, and building positive relationships with teachers. These will be elaborated on further in Chapter 2.

Although research on the effectiveness of IC for instruction is abundant and reliable (Blazar & Kraft, 2015; Kraft & Papay, 2014; Kraft et al., 2018; Kretlow & Bartholomew, 2010; Slavin, 2013), there are few rigorous studies that focus on teacher experience. Teacher experience includes teacher perceptions and teacher preferences, considered together to provide a richer understanding of teachers' involvement in IC. Teacher perceptions refer to the general feelings teachers have about IC including: topics discussed, relationships with instructional coaches, its impact on instruction, and emotions such as confidence (Hammond & Moore, 2018; Yopp & Burroughs, 2010a). Teacher preferences are the more specific "variables that teachers [may] find more acceptable or helpful" about IC (Kretlow & Bartholomew, 2010, p. 18). Two

noteworthy studies that examine teacher experience indicate that teachers generally perceive IC as a meaningful intervention, and prefer specific variables related to the instructional coach and feedback (Hammond & Moore, 2018; Kretlow & Bartholomew, 2010). Additional research into teacher experience is needed to understand teachers' perspectives on IC, in order to create IC that reflects the principles of andragogy, or adult learning theory (Knowles, 1980; REL West, 2018).

IC was a new program at Readiness Charter High School (RCS; a pseudonym) where I served as an instructional coach, and was taken on with the goal of improved instruction and achievement. IC at RCS began with a pilot IC program in the Winter of 2018, and was formalized as a school-wide initiative during the Summer of 2019. Since the beginning of the 2019-2020 school year, IC has been implemented as a core component of PD.

IC at RCS focused on teachers' goals for instruction, such as improving student assessment outcomes, enhancing classroom management techniques, refining planning and organizational skills, developing curriculum, etc. Goals were developed at the beginning of each eight-week IC cycle. Teachers set these goals individually, first, by completing a pre-survey from the professional learning association Learning Forward (2014) (see Appendix A). Then, together, the teacher and I honed these goals to align with school-wide instructional goals, observational data I have collected during the first IC observation period, and feedback they have received from their formal evaluations by school administration. After creating the instructional goals, we segued into a cycle of observations and feedback meetings with the purpose of illuminating current practices, encouraging growth, and sharing best practices via modeling and discussion. At the end of the eight-week IC cycle, teachers were asked to complete a survey that I developed, about their experience with IC. The survey consisted of 28 Likert-scale questions,

and seven open-ended response questions (See Appendix B). I used this data for my own professional growth, as the creator and practitioner of this program, and to understand how I could improve IC at RCS from one cycle to the next, and in the long-term.

IC at RCS was formatted as five, 8-week cycles to comprise the 40 week school year.

For each of the eight weeks, there was a weekly schedule of sessions between teachers and the instructional coach. The weekly schedule was broken into five days, each of which reflected the school-wide, 50-minute class period schedule. By aligning the weekly IC schedule with teachers' own schedules, I was able to observe teachers' instruction, and offer feedback meetings during their prep periods (see Appendix C for an example of the weekly schedule).

Each IC cycle was ideally limited to ten teachers in order to maintain a low teacher to instructional coach ratio, and provide as much support to those teachers as needed. However, some IC cycles may have included more teachers in order to accommodate demand.

The first eight-week cycle was reserved for the teachers who entered the school year on an improvement plan, first-year teachers, and/or new hires at RCS. The rationale for this was to provide immediate and on-going support for teachers with the greatest need, and to ensure they had priority to participate in IC.

After the first eight-week cycle, all teachers were welcomed to volunteer to participate in IC. Teachers who wanted to join were asked to sign up for two 50-minute periods per week—one period for classroom observations, and one prep period for feedback meetings. Once the weekly schedule was established, I then built in one to two office hours each day, during which any staff member may request instructional support, whether they had signed up for the IC

cycle or not. I also built in time during each week for lesson plan feedback, PLCs, and grade team meetings so that I was able to provide instructional support to a broader set of teachers.

Between September and March of the 2019-2020 school year, 21 out of 36 full time teachers participated in IC for at least one eight-week cycle, and 10 of these participated in two or more IC cycles. Ten additional teachers had signed up to join in IC during the subsequent IC cycle. However, due to nationwide school closures resultant of the international COVID-19 pandemic, the fifth and final IC cycle was not able to occur in the format previously described, and IC had instead been extended to all teachers at RCS who need assistance with online learning. The focus of this study is on the IC that has occurred between September and March of the 2019-2020 school year, since this form of IC more closely resembles the research-based IC described in Chapter 2.

Since IC was a new initiative at RCS this year, and had not yet been systematically examined, the primary purpose of this study is program improvement. My aim as an educational leader and instructional coach was to understand teacher experience at RCS. Thus, the goal of this study was to ascertain teacher perceptions and teacher preferences to form a composite understanding of teacher experience, and to respect adult learners by utilizing this information to improve IC at RCS with their preferences in mind.

## **Statement of the Problem**

RCS is one of approximately 90 charter schools in the city where it is located (district website). In this large metropolis, charter schools are supervised by an oversight committee run by the state and city. Charter schools face a renewal process every five years to determine their organizational sustainability and viability. Renewal processes have stringent and clear criteria

for approval (district website). The three principal factors considered for a charter school's renewal are: academic success, organizational compliance and viability, and financial health and sustainability (district website). In order to receive a recommendation for renewal, charter schools must approach or meet the standards for all three factors (district website).

RCS passed its 2017 renewal (based upon data drawn from the 2012-2016 school years) with a Notice of Deficiency outlining two areas for improvement: equity issues related to the Code of Conduct, and access for ELs and their families (district website). The status of these remains unresolved (district website). The upcoming 2022 renewal is a source of tension for other reasons: ongoing failing standardized test scores and lacking academic growth, as evidenced by the 2017, 2018, and 2019 Annual Charter Evaluation (ACE) reports (school district website).

In order to measure a charter school's academic success and growth, the ACE uses an Average Growth Index (AGI) to quantify and standardize overall academic performance of students on state assessments, and for the lowest performing 20% (2017 and prior) or 33% (2018 and after) of students (district website). If a school's AGI is at or above -1, the school has met or exceeded the statewide growth standard (district website). A school earns full credit for renewal based upon its overall AGIs (district website). In 2017 RCS scored an AGI of -1.71, in 2018 RCS scored an AGI of -2.11, and in 2019 RCS scored an AGI of -1.31. Based upon the past three years of unsatisfactory AGIs for academic success, academics were the focus during the 2019-2020 school year. IC had been implemented as a relevant intervention to increase student achievement through instructional improvement.

## **Purpose of the Study**

The purpose of this study was to understand teacher experience in order to improve IC at RCS based upon feedback from the stakeholders themselves, and demonstrate to teachers that their preferences are important and actionable, so that they may feel motivated to participate in IC that reflects andragogical principles. Teacher experience refers to teacher perceptions, broadly, and teacher preferences, specifically, considered together to provide a richer understanding of teachers' involvement in IC. Teacher perceptions will be defined as the general feelings teachers have about IC including: topics discussed, relationships with instructional coaches, its impact on instruction, and emotions such as confidence (Hammond & Moore, 2018; Yopp & Burroughs, 2010a). Teacher preferences will be defined as the specific operational and stylistic "variables that teachers [may] find more acceptable or helpful" about IC such as the nature of the instructional coach and the style and type of feedback provided during IC (Hammond & Moore, 2018; Kretlow & Bartholomew, 2010, p. 18). In addition to the PFPs referenced by REL West (2019) (i.e., differentiating IC for individual teacher preferences, tracking teachers' progress in the process of change, and building positive relationships with teachers), Hammond and Moore (2018) contended that a teacher's personal initiative to improve instruction and achievement may be a crucial facilitator for successful IC. This makes sense since one of the guiding principles of adult learning theory is that adults are intrinsically, not extrinsically motivated to learn (Merriam, 2001).

If instructional coaches and organizations take teacher experience into account when designing and implementing IC, they may inform and improve programs using this information in order to increase teachers' intrinsic motivation to participate (Hammond & Moore, 2018).

This warrants a more thorough investigation of teacher experience. This study invited the perspectives of participants to best understand teacher experience, the outcomes of which may be considered for program enhancement.

## Significance of the Study

When implemented under the right conditions, and with fidelity, IC can be an effective intervention for improving instruction and achievement (Kraft et al., 2018; REL West, 2019). The two potentially influential factors that Kraft et al. (2018) found had a positive impact on the outcomes of IC were the size of the IC program (fewer than 100 participants), and IC implemented in conjunction with supplemental PD (group trainings). The three PFPs recommended by REL West (2019) were differentiating IC for individual teacher preferences, tracking teachers' progress in the process of change, and building positive relationships with teachers. At RCS, all five of these factors are considered.

It is worth investigating IC as an intervention at RCS, since it may be an impactful intervention for instruction and achievement (Kraft et al., 2018). The purpose of this study, however, was not to investigate the effects of IC on instruction and achievement. Rather, the purpose was to investigate teacher experience, with the goal of understanding teacher preferences and developing future IC programming with these factors in mind. Since teachers are the proximal participants in IC, this study served as an opportunity to learn about their experience during its first year of enactment at RCS. This study may provide significant insight and outcomes for the participants, instructional coach (me), and school setting because it highlights aspects of the nascent IC program worth changing or replicating to increase teacher motivation to participate and to purposefully reflect the principles of adult learning theory.

## **Conceptual Framework**

Adult learning theory, or andragogy, served as the conceptual framework for this investigation into teacher experience at RCS. In the early 20th century, adult learning began to be studied systematically (Merriam, 2001). Initially, there was a belief that young people learned more and better than older learners, and that older adults could not learn with acuity (Merriam, 2001). This supposition was unfounded, and inquiry into how adults learn was investigated (Merriam, 2001).

In 1968, Malcolm Knowles proposed differentiating adult learning from traditional K-12 education. He labeled adult learning "andragogy," and pursued the art and science of differentiating educating adults from children (Knowles, 1980; Merriam, 2001). Andragogy is different from pedagogy because it examines the ways adults learn, rather than the way that children learn (Knowles, 1980). Knowles (1980) found that, when taught using traditional pedagogical models of learning, the adult dropout rate from educational programming was high. Similarly, when taught using traditional PD models that replicate pedagogical practices, teachers are less likely to take risks or implement new practices (Kretlow & Bartholomew, 2010). Knowles also recognized that andragogy is defined more by the learning situation than the age of the learner (Merriam, 2001). This is one of the reasons that IC is so effective. Because IC is context-specific, reciprocal, and occurs within a teacher's own classroom, the learning situation of the adult is honored.

In the 1970s and 1980s there was much debate about whether andragogy could be considered a theory, or if it was more so a framework of best practices for teaching adults how to learn (Merriam, 2001). Knowles concluded that andragogy is "a model of assumptions about

learning or a conceptual framework that serves as a basis for an emergent theory" rather than a theory itself, despite its common reference as adult learning theory (Knowles, 1989, p. 112; Merriam, 2001). Adult learners (a) are self-directed and have independent thought processes; (b) possess a wealth of prior knowledge from which to draw upon; (c) have needs that correlate to their personal and changing social roles; (d) wish to practically apply what they learn; and (e) are intrinsically, not extrinsically, motivated to learn (Merriam, 2001). Given these five assumptions, IC should be responsive to the priorities of adults, so that they are supported in ways that align with adult learning theory (Knowles, 1980, p. 47).

Because adult learning is an ongoing process in which adults are both autonomous and collaborative, it is important to make space for reflection on their teaching practice (Kretlow & Bartholomew, 2010; Merriam, 2001). Fundamentally, instructional coaches should build relationships with teachers so that the practice of IC is reciprocal and open, promoting the greatest opportunities for growth: "Coaches not only give precise explanations, but also ask teachers how they can adapt practices to best fit their teaching style and meet their students' needs" (Knight, 2011, p. 4). Instructional coaching, by nature, is a process of reflection, inquiry, and praxis that propels adult learning (Knight, 2011). The five assumptions about adult learners will be elaborated on in Chapter 2.

## **Summary of Methods**

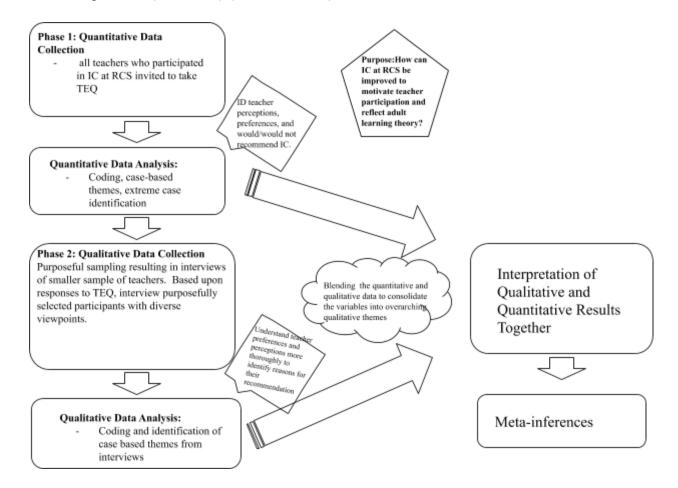
Given the goals of this study, a mixed methods, sequential explanatory case study best aligns with the research questions to investigate teacher experience at RCS (Terrell, 2012). I applied both quantitative and qualitative methods in order to glean a complete understanding of teacher experience. In the quantitative phase, survey methodology was implemented in order to

address the research questions to produce an understanding of teacher experience from all teachers who participated in IC at RCS. Then, I used purposive sampling and identified a subset of participants to invite to an interview in the qualitative phase (Creamer, 2018). This form of sampling was chosen in order to identify teachers who would recommend IC to others, and to learn what factors contributed to this outcome, in order to identify areas for improvement.

In the qualitative phase, I invited four individuals to participate in one semi-structured interview each, in order to address my research questions more fully and understand the diversity of teacher experience in greater depth (Marshall & Rossman, 2011). Providing the opportunity for teachers to elaborate on their experience reflects the principles of adult learning theory because it enables voice and choice, indicating that teachers' perspectives and preferences are valuable indicators for program improvement. The interview process took between 30-45 minutes each, including member checking.

Based upon the results of each form of data collection, I used open coding to create "conceptual categories" and sorted the data accordingly (Marshall & Rossman, 2011). Next, I implemented axial coding by grouping the initial categories based upon shared characteristics (Marshall & Rossman, 2011). Open and axial-coding were appropriate data analysis strategies given my data collection methods because they allowed me to blend the types of data, thus creating overarching categories about teacher experience (Creamer, 2018; Marshall & Rossman, 2011). Following the tradition of mixed methods research, the quantitative and qualitative data were analyzed together in relation to my research questions, *What is teachers' perceived impact of IC at RCS? How do teachers perceive their involvement in IC at RCS?* And *What is teacher experience of IC at RCS?* 

Finally, I interpreted the consolidated data in order to construct meta-inferences about teacher experience (see below) (Creamer, 2018).



#### Measures

A researcher-adapted questionnaire was used to collect the quantitative data for the first phase of this sequential, explanatory, mixed-method case study. The questionnaire was based upon a validated instrument called the Teacher Reflection and Impact Survey (TRIS) (see Appendix F for the full questionnaire) (Yopp et al., 2010).

As a part of a larger longitudinal study, and in order to assess teacher perceptions, researchers with the Examining Mathematics Coaching (EMC) project created and validated TRIS, a five-point Likert-scale type questionnaire (Yopp et al., 2010). TRIS allows teachers to

reflect on IC, including the topics discussed, the quantity, quality, and duration of IC sessions, their relationships with instructional coaches, and perceived impact on instruction (Sutton & Heidema, 2012; Yopp et al., 2010).

For the purposes of this dissertation, and with the permission of the authors, TRIS was adapted to reflect setting-appropriate wording, increased clarity in formatting, and include supplemental items that address the research questions more fully, and will be used as the quantitative data instrument, the adapted version of which is called the Teacher Experience Questionnaire (TEQ). Items 1 and 2 of TEQ are modeled after items of the same topic in TRIS, though they have been adapted, as referenced above. Items 1 asks participants to rate statements on a five-point Likert scale, with 1 meaning not at all and 5 meaning to a great extent (Yopp et al., 2010). Item 1 is an assessment of teacher perceptions related to the instructional coach-teacher relationship (Yopp et al., 2010). Item 2 is an assessment of teacher perceptions related to the topics discussed during IC (Yopp et al., 2010). Items 3-11 are researcher developed questions, related to salient literature about teacher experience, in order to further address my research questions (Hammond & Moore, 2018). These include questions pertaining to teacher perceptions of the instructional coach (Gallucci et al., 2010; Hammond & Moore, 2018; Kowal & Steiner, 2007; REL West, 2018; Sutton & Hedeima, 2012) topics discussed during IC (Hammond & Moore, 2018), the impact of IC on the emotional aspects of teaching (Hammond & Moore, 2018; Yopp et al, 2010), the usefulness of specific aspects of feedback (Hammond & Moore, 2018), characteristics of the instructional coach (Gallucci et al., 2010; Hammond & Moore, 2018; Kowal & Steiner, 2007; REL West, 2019; Sutton & Hedeima, 2012), teachers' motivation to improve instruction (Hammond & Moore, 2018), teachers' motivation to

improve achievement (Hammond & Moore, 2018), whether they would recommend IC to others, and three open-ended options about their recommendations and any additional information they wish to provide (see Appendix D).

Semi-structured, or guided, interviews were conducted to generate qualitative data for the second phase of this sequential, explanatory, mixed-method case study (Marshall & Rossman, 2011). The nested sample of participants was selected based upon responses to TEQ. Purposive sampling was employed in order to select participants who experienced IC with varying opinions based upon the open response questions of TEQ.

The interview protocol was designed to elicit teachers' perspectives about their participation in IC (*How do teachers perceive their involvement in IC at RCS?*), and enabled teachers to share about their experience in greater depth than a questionnaire could encapsulate.

### **Role of the Researcher**

According to Marshall and Rossman (2011), key aspects of a qualitative study, or phase of a study, "include reflection on one's identity and one's sense of voice and perspectives, assumptions, and sensitivities" (p. 96). Furthermore, ethical considerations had to be taken into account based upon my dual role as researcher and colleague. A researcher's biases may create "passion and excitement and insight" (p. 96) that can propel their research (Marshall & Rossman, 2011). However, the issues of status and social identity must also be explored (Marshall & Rossman, 2011). By exposing the role of the researcher, the reader has a window into the effect that status and social identity may have on the study (Marshall & Rossman, 2011). Due to my investment in this study, I feel it is important to share my role as the researcher to provide transparency and further rationale for my decision to study this topic.

I approached IC from the standpoint of a(n): urban educator, instructional coach, community member, and doctoral student. I was employed by RCS, and have an established relationship with the participants, resulting in a sample of convenience (Marshall & Rossman, 2011).

For nearly a decade I have served as an educator in the urban context where my study will take place. During this time, I have been struck by the frequent turnover of teachers—either because they were deemed unsatisfactory and were released from their contracts by administration, or because they did not feel supported in their professional growth. Since that time I have wondered what supports and systems could be in place to mitigate this trend, and invest teachers in improving their own instruction rather than face termination or leave the profession altogether. After participating in IC during my first year of teaching, I realized that this system of support and feedback had the potential to improve instruction broadly, as it set me on a path of continuous learning and growth personally.

I entered into this study with certain assumptions about urban education, charter schools, and IC. I assumed, based on my experience, that urban education is a challenging environment for new teachers (Kraft & Papay, 2014). I assumed that charter schools are prevalent in cities, do not always provide necessary support to new teachers, and most often serve students of color from low socioeconomic backgrounds (Minow, 2008). Finally, I assumed that teachers' negative experiences in the profession can be attributed to the paucity of support systems in charter schools, and the undergirding theme of undervaluing teachers as holistic professionals, particularly in urban education settings such as RCS (Johnson & Birkeland, 2003).

"Access, ethics, [and] entry" were elements worth considering within my role as the researcher (Marshall & Rossman, 2011, p. 97). My role as instructional coach and colleague at RCS increased my "participantness" in the setting (Marshall & Rossman, 2011, p. 113). Thus, as advised by Patton (2011), I provided "full and complete disclosure" (p. 342) about the nature of this proposed study to participants by introducing and referencing it during school-wide meetings, and during individual IC interactions with teachers. I also explained the purpose and proposed methods of my study before requesting formal approval from my school leaders to conduct this study at RCS (Marshall & Rossman, 2011).

This study involved intensiveness due to the amount of time I spent in the setting on a daily basis, meaning that I dedicated significant time developing strong and trusting relationships with the participants (Marshall & Rossman, 2011). Nonetheless, because I was a professional colleague at RCS, there may have existed a perceived conflict of interest. Thus, in order to address and respect "participant's likely concerns" (p. 117) I communicated that the choice to participate in this study was voluntary, and proceeded with processes of informed consent (Marshall & Rossman, 2011).

"Data management, analysis, and reporting" are additional aspects related to the role of the researcher (Marshall & Rossman, 2011, p. 97). Regardless of the type of qualitative research being conducted, the researcher must develop positive habits for data management (Marshall & Rossman, 2011). These may include: labeling audio recordings correctly and systematically, choosing a purposeful location for transcriptions, and organizing files in a coherent manner (Marshall & Rossman, 2011). Data analysis requires that "categories are defined, relationships between them are established, and they are integrated into elegant, credible interpretation"

(Marshall & Rossman, 2011, p. 209). According to Marshall and Rossman (2011), analytic procedures include seven steps: "(1) organizing the data, (2) immersion in the data, (3) generating categories and themes, (4) coding the data, (5) offering interpretations through analytic memos, (6) searching for alternative understandings, and (7) writing the report..." (p. 209).

Interpretation of the data is when the researcher makes meaning of the data collected (Marshall & Rossman, 2011). In this study, this entailed creating categories and coding the data into themes, followed by open and axial coding (i.e., sorting the data for preliminary coding and then grouping them into conceptual categories) (Marshall & Rossman, 2011). Data reporting goes hand in hand with data analysis, that is, each stage of analysis requires ascribing meaning to the data, and reporting translates that interpretation into logical conclusions for the reader (Marshall & Rossman, 2011).

There are several credibility measures I took to enhance trustworthiness and content validity in the data collection and data analysis processes.

First, I achieved trustworthiness by triangulating my data sources, in this case, questionnaire responses and interview responses (Marshall & Rossman, 2011). Member checks and peer-review were utilized as aspects of the triangulation process, in order to increase confidence in my results (Stake, 2010). Second, I was forthright with readers and participants about my role, in order to highlight potential conflict and engage in reflexivity (Marshall & Rossman, 2011). Third, I utilized member checking for all interviews so that participants were able to read and confirm the accuracy of transcripts (Marshall & Rossman, 2011). Member checks helped me to reduce errors and "[protect] human subjects from being hurt" (Stake, 2010,

p. 127). Fourth, I sustained prolonged engagement in the field (Marshall & Rossman, 2011). I spent nearly nine months conducting an IC pilot, and ten months conducting formalized IC at RCS. Fifth, I employed rich, thick descriptions by describing the problem, setting, and participants in clear and descriptive detail in order to provide "experiential understanding," or, "verstehen" (Stake, 2010, p. 48). Finally, I collaborated via peer-debriefing and peer-review by discussing "emergent findings with critical friends to ensure that analysis is grounded in the data" (Marshall & Rossman, 2011, p. 40).

### **Definitions**

community (Kraft et al., 2018).

For the purposes of this dissertation, the following definitions were adopted:

\*Achievement\* Academic progress of students, based on their performance on a range of assessments and academic work in the learning environment (Kraft et al., 2018; U.S. Department of Education, n.d.).

**Andragogy** Process of teaching adults in a reflective and responsive way so that they may become self-directed and independent learners (Knowles, 1980).

Explanatory Qualitative data is used to explain the quantitative results (Creswell, 2013).

Instruction Pedagogical teaching practices of teachers, including the delivery of lessons, as well as the interpersonal interactions between teachers and students in the classroom and school

*Instructional Coach* Instructional expert who works one-on-one with teachers in order to share knowledge and improve instruction by modeling best practices within the context of their classroom (Kraft et al., 2018).

Instructional Coaching (IC) Specific strand of professional development (PD) that is an ongoing process whereby an instructional coach provides observations and one-on-one feedback to teachers, focused on instruction, within the context of their classroom, and who may also participate in group PD by guiding professional learning communities (PLCs) and leading traditional PD (Desimone & Pak, 2017; Kraft et al., 2018).

Mixed Methods Research approach that integrates quantitative and qualitative methods in a single study to gain a more complete understanding of the research questions (Creamer, 2018).

Nested sample Use of a set of analytical procedures in the first phase of data collection to identify a set of indicators to select participants for the second phase of data collection (Creamer, 2018).

Non-Evaluative Observations and feedback given by an instructional coach that do not contribute to a teacher's performance evaluation, nor have a bearing on their employment status.

Perceived Impact For the purposes of this proposed study, perceived impact, as noted in the quantitative research question, will be defined as the influence of various components of IC on

teachers' instructional, interpersonal, and emotional work, interactions, and mindset.

**Practitioner-Focused Practice (PFP)** Recommended action for instructional coaches for the effective implementation of IC. Derived from research conducted by The Regional Educational Laboratory at WestEd (REL West, 2019).

*Professional Development* Umbrella term for the practice of educating teachers on instruction via job-embedded practice (Kraft et al., 2018).

*Sequential* Results of one data collection phase leads to the next data collection phase (Creamer, 2018).

**Teacher Experience** Teacher perceptions, broadly, and teacher preferences, specifically, considered together to provide a richer understanding of teachers' involvement in IC.

**Teacher Perceptions** General feelings teachers have about IC including: topics discussed, relationships with instructional coaches, its impact on instruction, and emotions such as confidence (Hammond & Moore, 2018; Yopp & Burroughs, 2010a).

**Teacher Preferences** Specific operational and stylistic "variables that teachers [may] find more acceptable or helpful" about IC (Kretlow & Bartholomew, 2010, p. 18).

*Traditional PD* Job-embedded, one-time educational programming focused on educating teachers about instruction, often in group training settings (Kraft et al., 2018).

This mixed method, sequential explanatory case study examined teacher experience with IC, in order to inform future IC programming, and reflect the principles of adult learning theory. IC was an intervention worth studying because of its potentially positive effect on instruction and achievement (Kraft et al., 2018). In Chapter 2, I will provide a more robust description of IC based upon relevant literature, expand upon the goals of IC in K-12 schools, and elaborate on the history of IC. Then, I will further establish IC as a process that reflects adult learning theory, the theoretical framework for this study. Next, I will detail the primary meta-analysis about the causal effects of IC on instruction and achievement—Kraft et al. (2018)—in order to underscore the rationale for its implementation, and highlight potentially influential variables worth considering. Subsequently, I will feature a review of literature—REL West (2019)—that outlines PFPs and structural supports for the implementation of IC. Finally, I will relate IC to teacher experience in order to introduce the methods of my study, found in Chapter 3.

## **Chapter II- Review of Literature**

In this literature review, I will explore IC as an intervention for teacher growth in the areas of instruction and achievement. This review is organized into three main sections. In the first section, I will provide an overview of IC based upon extant literature, elaborate on the goals of IC in K-12 settings, and present a brief history of the conceptualization and expansion of IC from the late 20th century until now. Then, I will situate IC within the theoretical framework of adult learning theory (Knowles, 1980). In the second section, I will report on and discuss the effects of IC on instruction and achievement as measured in a seminal meta-analysis by Kraft et al. (2018). In the third section, I will describe practitioner-focused practices for IC, as outlined in a systematic review of literature by REL West (2019), and supplemented by additional relevant research. In the fourth section, I will make the case for this study which examined teacher perceptions and preferences as a complementary strand of research to the empirical investigation of the effects of IC, and detail why teacher experience matters, especially in relation to adult learning theory.

## **Section 1: Introduction to IC**

In this section I will first define IC, elaborate on its goals, and describe the types of IC programs. Next, I will differentiate IC from traditional PD, and describe the benefits of combining the two. Following this, I will examine adult learning as a theoretical framework for IC, and situate the process of IC within the theories of andragogy, self-directed learning (SDL) and transformation learning (Knowles, 1980; Merriam, 2001). Finally, I will present a brief history of IC from its conception to its current widespread implementation as a result of federal reform and evolving teaching standards, in order to contextualize its current use in schools.

### Overview

IC is a strand of PD in which an instructional coach provides one-on-one observations and feedback to teachers, focused on instruction, within the context of their classrooms (Kraft et al., 2018). Instructional coaches are experts in pedagogy who impart knowledge about and aim to help teachers improve instruction by modeling best practices (Kraft et al., 2018). Broadly, IC involves a process of educating teachers via observation, feedback, and inquiry (Desimone, 2009; Kraft et al., 2018). IC is designed to support all teachers, especially new teachers as they begin their careers (Kraft et al., 2018; Kretlow & Bartholomew, 2010).

The goal of IC is to assist or "coach" teachers to improve instruction and achievement through a coaching-type relationship, creating opportunities for teachers to engage in job-embedded, practice-based learning (Kraft et al., 2018). IC may also motivate teachers to implement new practices, and to prevent the isolation that can occur when implementing these practices in their classroom (Kretlow & Bartholomew, 2010). IC should allow teachers to reflect on instruction and grow in non-evaluative, low-pressure environments where they can feel safe to try new things (Kretlow & Bartholomew, 2010).

There are two recommended types of IC cycles, both built of three components (Knight et al., 2015; New Teacher Center (NTC), 2019b). NTC (2019b) suggests an IC cycle that involves: lesson planning, observations, and analysis. On the other hand, Knight et al. (2015) suggest an IC cycle in which instructional coaches and teachers: identify, learn, and improve. Each of these activities are considered "high-leverage," or, critical for instructional improvement (REL West, p. 2, 2019).

Lesson planning is the first component proposed by the NTC (2019b). This involves co-planning between the instructional coach and the teacher in order to design research-based instruction that aligns with overarching curriculum and state or national standards (REL West, 2019). Knight et al. (2007) suggest that structured co-planning is crucial for connecting the concepts of IC to instruction. Observation is the second component, and involves the instructional coach watching and taking notes on instruction within the teacher's classroom, with a focus on equity for all students (REL West, 2019). The instructional coach then develops feedback based upon the observation to share with the teacher during the third component: analysis (REL West, 2019). During analysis, the instructional coach discusses their feedback with the teacher, and together they analyze and make meaning of the data collected during instruction, in order to plan and adjust future instruction (REL West, 2019).

Identify is the first component of Knight et al.'s (2015) proposed IC cycle, and involves collaboration between the instructional coach and the teacher. Together, they identify an instructional goal and set a strategy to meet it. Knight et al. (2015) specify that the ideal goal is "powerful, easy, emotionally compelling, reachable, and student-focused" (p. 11). Learn is the second component, during which the instructional coach models and explains the selected strategy so that the teacher may implement it during instruction. Knight et al. (2015) explain that the instructional coach should be clear in their explanation of the strategy, and recommend using checklists to monitor teacher progress. Modeling can be in-person, or via video libraries.

Improve is the third component of Knight et al.'s (2015) suggested IC cycle, in which the instructional coach monitors the teacher's application of the selected strategy. The instructional coach evaluates their implementation, and determines if the desired goal was met based upon

changed student behavior or improved achievement. Depending on the instructional coach's evaluation, the teacher and instructional coach adjust their strategy, and progress through the cycle until the goal is met (Knight, 2015).

Both NTC's (2019a) and Knight et al.'s (2015) IC cycles emphasize collaboration, observations and monitoring, followed by data analysis and feedback meetings in order to adjust instruction (REL West, n.d.) Both cycles are linear, and ongoing (REL West, n.d.).

IC programs are defined by the following characteristics, as described by Kraft et al. (2018). They are:

- Individualized. The instructional coach works one-on-one with the teacher who is receiving IC.
- Intensive. The instructional coach and teacher meet often, at least once every two weeks.
- Sustained. The instructional coach and teacher engage in IC for a lengthy period of time, often for an entire school year.
- Context-specific. IC occurs within the teachers' own classrooms.
- Focused. Instructional coaches and teachers engage in the practice of specific teaching and management skills.

As will be detailed in greater specificity in a subsequent section, the characteristics of IC reflect the process of adult learning, and contrast with traditional PD models, providing insight as to why the implementation of IC may be considered an important lever for teacher improvement.

The extant literature indicates that IC can be effective for improving instruction and may also improve achievement (Darling-Hammond et al., 2009; Kraft et al., 2018; Matsumura et al.,

2010). Research also suggests that schools that incorporate IC and encourage teacher collaboration, provide ongoing feedback about instruction, and recognize teachers for their continuous improvement are likely to see faster rates of teacher growth than those that do not (Kraft & Papay, 2014). The rationale for devoting funding and time for IC is based on this assumption.

### Traditional PD

Traditional PD is job-embedded, one-time educational programming focused on educating teachers about instruction, often in group training settings (Kraft et al., 2018).

Traditional PD is a strand of PD, the umbrella term for the practice of educating teachers on instruction via job-embedded practice (Kraft et al., 2018). Traditional PD is the most common form of teacher development, but research suggests that it does not generally lead to systematic gains in instruction, nor in achievement (Kraft et al., 2018). This finding is particularly concerning because U.S. school systems spend more than ten billion dollars annually on PD (Kraft et al., 2018).

PD involving group training sessions is considered to be beneficial—to a point—for teachers (Kraft et al., 2018). But, these types of traditional PD workshops rarely include follow-up with teachers, and do not address teachers' individual classroom practices (Kraft et al., 2018). In a study conducted by Kretlow and Bartholomew (2010), teachers reported difficulty implementing new practices taught in traditional PD. They described a lack of in-depth understanding of the strategies presented, forgot how to use them, and found them too complex to enact without follow up assistance (Kretlow & Bartholomew, 2010).

Whereas PD programming is often short-term and provides general workshops, effective IC is content-specific, individualized, sustained for a school year, and focused on specific teacher skills (Kraft et al., 2018). PD involving group training sessions is considered to be beneficial- to a point- for teachers (Kraft et al., 2018). But, PD workshops do not generally include follow-up with teachers, and do not address teachers' individual classroom practices (Kraft et al., 2018). Because traditional PD is not individualized, it may not maximize the fidelity of new practices, and teachers can end up regressing to their previous practices (Kretlow & Bartholomew, 2010). Knowles (1980) indicates that "adults... tend to have a perspective of immediacy of application toward most of their learning" (p. 53), which supports the idea that there is likely to be strong buy-in to IC that involves praxis within the classroom environment.

When implemented with fidelity, instructional coaching can provide strong learning opportunities for teachers (Kraft et al., 2017). Contrasting with traditional PD models, IC is sustained in structure, and guides teachers through an ongoing process of inquiry and growth, reflective of responsive adult instruction (Merriam, 2001). IC encourages follow-up with teachers and addresses contextual classroom practices, that general PD cannot target (Kraft et al., 2018). Coaching serves as a supplement to PD, that moves it past the theoretical, and into a practical application that adult learners can find useful (Kretlow & Bartholomew, 2010). When implemented with fidelity, IC is an authentic use of teachers' time, and capitalizes on real life experiences to involve teachers in ongoing praxis and reflection that honors their learning needs (Kretlow & Bartholomew, 2010).

#### **Conceptualization and Expansion**

Whereas IC has been adopted by most urban school districts in the United States (Matsuura et al., 2010), it has not always been a clearly defined, nor widespread, intervention (Joyce & Showers, 1982; Matsumura et al., 2010). In the 1990s and early 2000s, IC became more formalized and funded due to the implementation of federal programming such as the Reading Excellence Act in 1999, No Child Left Behind in 2002, and the reauthorization of the Individuals with Disabilities Education Act in 2004, all of which focused on improving the quality of literacy instruction (Kraft et al., 2018). Since then, IC has been widely endorsed by policymakers at the state and federal levels due to its positive effects on achievement (Matsumura et al., 2010).

Two of the original researchers of IC, Bruce Joyce and Beverly Showers, wrote "The Coaching of Teaching" in 1982, and identified a need to teach teachers how to translate knowledge and skills into classroom practice. The primary focus of their research was on the theoretical basis of teaching, a precursor to the more defined IC models today (Joyce & Showers, 1982). Joyce and Showers (1982) viewed IC as a partnership whereby teachers and coaches work collaboratively to figure out how to best teach students (p. 5).

Joyce and Showers (1982) were some of the first researchers to suggest that traditional PD alone was not enough to prepare teachers to use new skills in the classroom. Rather, they suggested that transferring the knowledge of skills into "active repertoire" required adapting skills for individual teacher needs, within the context of specific classrooms (Joyce & Showers, 1982, p. 5).

The need for stronger PD has evolved in the past 20 years, as schools are now evaluated on teachers' use of rigorous instruction, student's social-emotional learning, and higher order thinking in the classroom (Kraft et al., 2018). Standards-based school reform has led to wider implementation of IC, and more defined standards for instruction (Kraft et al., 2018).

### **Adult Learning Theory**

In this section I will discuss adult learning theory, and relate it to IC. First, I will provide a brief history of the evolution in understanding of how adults learn best, from the conceptualization of andragogy, to the current awareness of SDL and transformational learning (Knowles, 1980; Merriam, 2001). Then, I will discuss why IC, which honors adult learning, is a more effective lever for teacher improvement than traditional PD.

In the early 20th century, adult learning began to be studied systematically (Merriam, 2001). Initially, there was a belief that young people learned more effectively than adults (Merriam, 2001). In 1968, Malcolm Knowles proposed differentiating adult learning, which he called "andragogy" from traditional K-12 education (Knowles, 1980). Andragogy is the process of teaching adults in a manner that is reflective of and responsive to their needs, so that they may become self-directed and independent learners (Knowles, 1980).

Andragogy differs from pedagogy because it examines the educational needs of adults, rather than of children (Knowles, 1980). There are five assumptions about adult learners that define andragogy (Merriam, 2001). Adult learners (a) are self-directed and have independent thought processes; (b) possess a wealth of prior knowledge from which to draw upon; (c) have needs that correlate to their personal and changing social roles; (d) wish to practically apply what they learn; and (e) are intrinsically, not extrinsically, motivated to learn (Merriam, 2001). Given

these five assumptions, IC should be responsive to the priorities of adults, so that they "feel accepted, respected, and supported" (Knowles, 1980, p. 47).

From the debate about andragogy arose SDL which focuses on the learner's potential to be self-directed (Merriam, 2001). Not only do adults learn differently than children, but they learn differently from one another, and can achieve more when self-directed (Merriam, 2001). SDL requires adult learners to accept responsibility for their own learning (Merriam, 2001). In contrast, traditional pedagogical models—which lack reflection and practice—can diminish learning outcomes for adults (Knowles, 1980).

As discussed in Section 1, IC differs from traditional PD in structural and inherent ways. Within an adult learning environment such as IC in schools, a culture of growth and joint inquiry between coach and adult learner should be cultivated. IC is collaborative, context-specific, praxis-oriented, uses teachers' prior knowledge to propel growth, and is guided by the idea that teachers intrinsically want to improve (Joyce & Showers, 1996; Kraft et al., 2018; Kretlow & Bartholomew, 2010).

IC reflects andragogy, and traditional PD more closely resembles pedagogy (Merriam, 2001). I propose that IC serves as an opportunity for inquiry-driven adult learning, and incorporates the principles of andragogy, SDL, and transformational learning theory when implemented thoughtfully. In order to implement IC thoughtfully, it is important to honor adult learning theory. If IC is to be collaborative and nurture teachers' intrinsic motivation to improve, examining the ways that teachers perceive IC may provide insight into their preferences, as this proposed study intends to do. In this way, IC serves as a logical means for educating teachers, situated in the context of adult learning theory.

## **Section 2: Empirical Outcomes**

In this section, I will describe the most comprehensive and methodologically rigorous synthesis of IC research currently available: Kraft et al. (2018). First, I will provide the goals of this investigation and the inclusion criteria. Next, I will summarize the study's primary methods and briefly detail the sample. Finally, I will present the study's key findings, including the overall effect and potentially influential factors. Kraft et al.'s review is highly relevant and important vis-a-vis my proposed dissertation because the findings empirically document the positive outcomes associated with IC; thus, they establish a cogent rationale for implementing and studying IC in local school contexts.

#### **Goals and Method**

Kraft et al. (2018) sought to answer two primary research questions: (a) What is the effect of IC on instruction?; and (b) What is the effect of IC on achievement? Secondarily, the authors explored whether a set of potentially relevant variables, including school level, program focus, program size, and other program features, moderated the effect of IC on instruction or achievement.

Kraft et al. (2018) established the following five inclusion criteria for their review:

- 1. Published in 2017 or earlier.
- 2. IC treatment condition consisted of "... instructional experts work[ing] with teachers to discuss classroom practice in a way that is individualized... intensive... sustained... context specific... and focused" (p. 553).
- 3. Sample comprised of PK-12 teachers from the United States or another developed nation.

- 4. Employed a true or quasi-experimental design that allowed for causal inferences to be drawn.
- 5. Measured the impact of IC on instruction (i.e., using a rating scale completed by an outside observer) or achievement (i.e., using a standard assessment).

Kraft et al. (2018) conducted a multi-faceted systematic search to locate studies for their review. They searched electronic databases, reviewed the reference lists of all previous syntheses that met their inclusion criteria, and drew upon the knowledge of other leading scholars in the field. The authors coded their sample of studies for study characteristics and program features, including: Publication source and date, country of origin, research design, level of randomization, school level, program size, program focus, use of supplemental PD, mode of delivery, and hours of participation (as shown in Table 1). Each study was double-coded and differences were resolved through discussion.

To determine the overall effects of IC on instruction and achievement, Kraft et al. (2018) computed mean weighted ESs—accounting for both precision (i.e., sample size) and, if relevant, clustered data. To examine potential moderator effects, the authors used both group comparisons and meta-regression.

Kraft et al.'s (2018) final sample included a total of 60 studies that were published between 2006 and 2017. Fifty-five studies were conducted in the United States. The remaining five studies were conducted in Canada and Chile. Fifty-six studies were randomized controlled trials with randomization at the teacher or district level. Fifty-one were peer-reviewed journal articles. Additional details about the included studies can be found in Table 1, and will be described in the results section below.

#### Results

In this section, I will present the findings reported by Kraft et al. (2018). First, I will describe the overall effect of IC on instruction and achievement. Then, I will summarize the moderator results for six potentially influential factors the authors examined: school level, program focus, program size, supplemental PD, mode of delivery, and hours of participation. Last, I will elaborate on the main theme that emerged from Kraft et al.'s results, and highlight two additional findings.

## Overall effect

Forty-three of the 60 studies included in Kraft et al.'s (2018) meta-analysis measured the effect of IC on instruction (see Table 1). The mean ES for these studies was 0.49, and it was statistically significant. The authors characterized this result as "large" and also noted there was substantial variability across the individual ESs in this category (p. 561). Thirty-one studies measured the effect of IC on achievement. The mean ES for these studies was 0.18, and it was also statistically significant. The authors characterized this as a "smaller" effect and, again, reported substantial variability in the individual study results (p. 577).

### Potentially Influential Factors

The first variable Kraft et al. (2018) examined as a potential moderator was school level. Specifically, the authors computed and compared the mean ESs for four categories: Pre-k, elementary, middle, and high. For instruction, the mean ESs ranged from 0.45 (for middle school) to 0.56 (for elementary school). All four school-level effects were statistically significant; however, there were not any statistically significant differences between them (see Table 1). The pattern of results for achievement was similar. The mean ESs ranged from 0.11

(for pre-k) to 0.30 (for high school), and they were all statistically significant (see Table 1). There were no statistically significant differences among these ESs.

Program focus was the second potentially influential factor Kraft et al. (2018) examined. The authors computed and compared the mean ESs for two sub-categories: content-specific programs (i.e., IC focused on raising student test scores through instruction) and general practices programs (i.e., IC focused on discipline-specific instructional techniques). For instruction, the mean ES for content-specific programs was 0.51 and the mean ES for general practice program was 0.47. Both of these results were statistically significant, but there were not any statistically significant differences between them. For achievement, the mean ES for content-specific programs was .20 and the mean ES for general practices programs was 0.07; the former was statistically significant, the latter was not. Due to the small sample size, the difference between these mean ESs did not reach statistical significance.

The third potentially influential factor Kraft et al. (2018) examined was program size. The authors computed and compared mean ESs for two categories: small programs (i.e. <100 teachers) and large programs (i.e.,  $\ge 100$  teachers). For instruction, the mean ES for small programs was 0.63, and the mean ES for large programs was 0.34. Both of these results were statistically significant, as was the difference between them. For achievement, the mean ES for small programs was 0.28, and the mean ES for large programs was 0.10. Again, both categorical results were statistically significant, as was the difference between them.

Supplemental PD was the fourth factor Kraft et al. (2018) examined as a potential moderator. Using meta-regression, the authors computed the change in mean ES when IC was paired with three different types of supplemental PD: group training, instructional resources, and

video libraries. Two results for instruction were statistically significant: Pairing IC with group training led to a 0.31 increase for instruction, whereas pairing IC with video libraries resulted in a 0.27 decrease for instruction. None of the results for achievement were statistically significant (see Table 1).

The last two potentially influential factors Kraft et al. (2018) examined were mode of delivery (i.e., in-person vs. virtual) and hours of participation (i.e., for IC and total PD). Both moderators were analyzed using meta regression and none of the results were statistically significant (see Table 1).

### Summary

When Kraft et al.'s (2018) results are considered all together, the one overarching theme that emerges is the general, and noteworthy, efficacy of IC— across outcome variables, school levels, mode of delivery, and hours of participation. Kraft et al. found the overall effect of IC was both practically and statistically significant for both instruction and achievement (see Table 1). As the authors hypothesized prior to beginning the study, the impact of IC was greater on instruction than achievement. This difference is unsurprising because instruction influences achievement. Instruction is the proximal outcome of IC, whereas achievement is distal, thus, IC must be effective for instruction in order to also improve achievement (Kraft et al., 2018).

Results related to the potentially influential moderator variables Kraft et al. (2018) examined suggest that some factors do impact the effectiveness of IC, whereas others do not. Three factors do not necessarily influence the effectiveness of IC, two factors can be considered potentially influential, and one factor serves as a tentative finding worth further research. Importantly—and as the authors emphasize—when discussing the moderator findings, the

relationships are descriptive, not causal, and should therefore be considered exploratory.

Additionally, due to the small sample sizes included in some analyses, additional interpretive caution is warranted.

Kraft et al.'s (2018) results suggest three of the variables the authors thought might be potentially influential (school level, mode of delivery, and hours of participation) were not. First, for both instruction and achievement, the effects of each school level were similar to the overall effects, and there were no statistically significant differences between them (Kraft et al., 2018). Thus, it appears that IC is equally effective for teachers and students across all grade levels.

Second, Kraft et al. (2018) did not find mode of delivery—virtual or in-person—to have a statistically significant influence on the effectiveness of IC for instruction or achievement (Kraft et al., 2018). However, Kraft et al. (2018) do note that their standard errors were too large to rule out small to moderate differences between the two modes of delivery.

Third, Kraft et al. (2018) did not find the total number of hours of participation in IC to have a statistically significant impact on effectiveness of IC, and highlight the lack of evidence to support that total hours of IC matters to overall outcomes. The authors suggest that quality and the focus of IC may be more impactful than total hours of participation.

The two factors that do stand out as potentially influential are size of IC program and pairing IC with supplemental PD.

The first factor, size of IC program, was found to have a statistically significant influence on the effectiveness of IC for instruction and achievement. Differences between the mean ESs for small programs compared with large ones for both instruction and achievement were found to

be statistically significant, indicating that smaller programs are more effective (see Table 1) (Kraft et al., 2018). This finding is consistent with the results reported by Slavin and Smith (2009), who examined the relationship between sample size and ES using data from two systematic reviews of math programs. They found a negative correlation between sample size and ES, which mirrors the findings of Kraft et al. (2018). Slavin and Smith (2009) also noted that small studies are important to establish an ideal foundation for newer programming, but that the findings of large studies should be emphasized when attempting to scale-up interventions.

The second factor, pairing IC with supplemental PD, resulted in statistically significant differences across the categories (see Table 1) (Kraft et al., 2018). Specifically, based on statistically significant findings, group training positively influenced the outcome for instruction, and video libraries negatively influenced the outcome for instruction (see Table 1).

A tentative finding by Kraft et al. (2018) is program focus. The authors found greater, statistically significant effects on instruction for content-specific IC than for general IC (see Table 1). The authors also found greater effects on achievement for content-specific IC than for general IC, though the latter was not statistically significant and the sample size was too small to draw meaningful conclusions. Kraft et al. (2018) hypothesize that content-specific IC results in greater student achievement because the focus is on improving students' test scores, rather than on the teachers' ability to support students' personal development. This finding might be worth exploring further.

Kraft et al.'s (2018) findings support the impact of IC as a lever to improve instruction and achievement, particularly when implemented with awareness of the potentially influential factors outlined previously. They suggest that further research focus on national and

implemented, specific instructional practices affected by IC and what impact this has on student achievement, and how IC can be scaled up with fidelity. The authors also caution that the cost of IC must be considered relative to the outcomes. In their conclusion, Kraft et al. (2018) encourage further innovation of PD in order to improve instruction, and state that, "Teacher coaching models can provide a flexible blueprint for these efforts, but many questions remain about whether coaching is best implemented as a smaller scale targeted program tailored to local contexts or if it can be taken to scale in a high-quality and cost-effective way" (p. 577). This proposed study will examine a smaller scale program within a purposeful and local context, with the intention of understanding which aspects of the IC program may contribute to positive teacher experience. The gap in the literature, to this point, is the incorporation of teacher feedback on their experience with IC. Whereas several potentially influential factors have been studied systematically, teacher experience has not.

#### **Section 3: Facilitators for Successful IC**

In this section, I will describe the facilitators for successful IC as presented in a review of literature by REL West (2019). First, I will provide the background and goals of this review.

Next, I will outline two categories of facilitators: PFPs, and structural support for the implementation of IC (REL West, 2019). Two additional types of research will be included.

The first, primary studies from which REL West (2019) drew conclusions, provide greater detail and depth than was originally presented in REL West (2019). The second, additional studies that were not included in REL West's (2019) review, supplement our understanding of the themes and recommendations presented by REL West (2019).

## **Background and Goals**

The focal synthesis about facilitators for successful IC (REL West, 2019) was produced by researchers at REL West, a large federally funded organization that partners with school districts and state departments of education, in order to improve achievement through the dissemination of research and data driven practices (Institute of Education Sciences (IES), n.d.). Importantly, REL West is recognized for demonstrating high methodological rigor in the research it conducts. The impetus for this specific synthesis is a partnership with the Expository Reading and Writing Curriculum (ERWC) Steering Committee. ERWC is a High School literacy curriculum that was originally created in 2004, by California State University, to better prepare high school students for college level work (IES, n.d.). REL West has partnered with the ERWC Steering Committee to update the curriculum, with the goal of increasing college preparedness for high school students (IES, n.d.).

One objective of the update is improving IC for the implementation of ERWC (IES, n.d.). A team of researchers at REL West reviewed and summarized findings about IC in a synthesis that provides PFPs for instructional coaches and suggests structural supports for schools to easily understand and implement (REL West, 2019). The REL West (2019) review adds to our understanding of IC beyond Kraft et al. (2018) because of the attention it gives to practical, actionable measures.

#### Methods

The REL West team conducted a systematic, though not exhaustive, search to locate resources for their review (REL West, 2019). The primary resources for locating studies were

three online databases and the reference lists of applicable studies. General guidelines for the prioritisation and inclusion of studies were:

- Trustworthiness of the source (i.e., peer reviewed articles and those reviewed by IES or other federally funded organizations)
- 2. Methodological rigor (i.e., [quasi]experimental design)
- 3. Relevance of the sample and content area (i.e., high school literacy) for the specific goals of the review.

Seventeen studies were included (REL West, 2019).

#### Results

REL West's (2019) review is organized into four themes: goals of IC, defining IC cycles, PFPs, and structural supports for the implementation of IC (REL West, 2019). The first two themes reflect the intention to provide the Steering Committee with an understanding of the effect of IC. However, the two latter themes provide information relevant to my study, past the findings of Kraft et al. (2018), and are therefore the focus of the following sections.

# PFPs and Structural Support for the Implementation of IC

In the subsequent sections, I will report the facilitators of successful IC, as recommended by REL West (2019). In the first section, I will describe and elaborate on adult learning theory and the related PFPs. In the second section, I will describe and elaborate on the two recommended structural supports for IC.

**PFPs.** PFPs refer to the autonomous professional and interpersonal actions that instructional coaches can take to implement IC effectively, based upon the findings of REL West (2019). In this section, I will delineate and describe the PFPs that REL West (2019) identified in

their review, all of which will be interpreted as falling within the category of applying adult learning theory. Then, I will reflect on one fundamental way that school leaders can support instructional coaches in the application of adult learning theory.

Applying Adult Learning Theory. As introduced earlier in Chapter Two, adult learning theory has long been the framework for IC. REL West (2019) has recommended that instructional coaches utilise adult learning theory to guide their work with teachers. In addition to the general tenets of adult learning theory, three PFPs are worth noting: differentiating IC for individual teacher preferences, tracking teachers' progress in the process of change, and building positive relationships with teachers (REL West, 2019; NTC, 2019b).

The first PFP is differentiating IC for individual teacher preferences. REL West (2019) has identified three stances for instructional coaches to differentiate their approach with teachers: consulting (i.e., providing resources and offering solutions), collaborating (i.e., partnering to develop ideas and solutions), and coaching (i.e., guiding teachers to analyze their own instruction by asking targeted questions and clarifying concerns). Instructional coaches are able to select the appropriate approach by asking teachers reflective questions to elicit their needs (REL West, 2019). Developing a shared understanding of priorities and roles, grounded in adult learning theory, is a "powerful tool" that instructional coaches can use to implement constructive IC (REL West, 2019, p. 4).

The second PFP is tracking teachers' progress in the process of change. One structure to track teachers' needs and progress in the process of change is C-BAM (REL West, 2019).

C-BAM is a tool that allows teachers to share their level of concern about an initiative, such as IC, as they participate in it (REL West, 2019). C-BAM features the The Stages of Concern

(SoC) questionnaire, a step-based tool for measuring teachers' attitudes and beliefs (American Institutes for Research, 2015). Instructional coaches can use the information teachers provide from C-BAM and the SoC to pinpoint teacher growth and choose which approach to IC will be most relevant and suitable for individuals. The limitation of a tool such as C-BAM, is that it doesn't allow for teacher feedback about their experience broadly. C-BAM examines the specific progress of teachers in the process of change, but omits an opportunity for teachers to provide a more holistic reflection on their experience with IC, which may allow for deeper insight into practices and provide a basis for program improvement.

The third PFP is building positive relationships with teachers. Instructional coaches can implement adult learning theory by developing a collegial and personal connection with teachers (REL West, 2019). REL West (2019) reported, via findings from a synthesis about effective coaching by The National Center for Systemic Improvement (NCSI, 2016), that strong and positive relationships between instructional coaches and teachers may correlate with improved instruction. Specific PFPs that instructional coaches can engage in to promote positive relationships include listening empathetically to teachers, using teachers' own words to summarize their concerns, and sharing their pedagogical expertise with teachers (REL West, 2019). Additional research pinpoints that an instructional coach's warmth, collaborative nature, and ability to develop positive relationships are important trust-building factors that teachers often perceive positively (Gallucci et al., 2010; Hammond & Moore, 2018; Kowal & Steiner, 2007; Sutton & Hedeima, 2012).

One way that school leaders can uphold adult learning theory is by structuring IC as voluntary, rather than mandatory, for teachers (NTC, 2019b). Voluntary IC aligns with adult

learning theory, whereas mandatory IC can lead to teacher resistance and negative teacher perceptions (Borman et al., 2006; Knight, 2004; NTC, 2019b). Voluntary IC may propel instructional coaches to collaborate with teachers more often, in order to develop positive teacher perceptions, and generate genuine interest in participation (NTC, 2019b).

Collectively, these suggestions reflect adult learning theory, and offer concrete PFPs worth considering for the successful implementation of IC.

Structural Support for the Implementation of IC. In this section, I will focus on two areas of structural support for the implementation of IC: organizational components and support for instructional coaches. The REL West (2019) review highlights a synthesis about high quality IC by Desimone and Pak (2017) and a theory of action by the NTC (2019a) that provide information about school-based support for the effective implementation of IC. In order to showcase structural support in more detail, I will report on research derived directly from Desimone and Pak (2017) and the NTC (2019a; 2019b), and include additional, supplemental findings from relevant literature.

*Organizational Components.* In their synthesis, Desimone and Pak (2017) recommended three organizational components to support the implementation of IC: active learning, coherence, and collective participation.

Active learning refers to the ways in which an organization allocates time and resources for teachers to engage in meaningful learning opportunities (Desimone & Pak, 2017). Examples of active learning include: peer observations, group discussions, receiving, reacting to, and discussing feedback, and examining student work in teams, such as PLCs (Desimone & Pak, 2017). Desimone and Pak (2017) specified that the more opportunities teachers have to practice

and receive feedback about what they have learned, the more impactful IC may be on their instruction. IC inherently includes active learning, but is not always implemented with this focus (Desimone & Pak, 2017). Thus, organizations should prioritize active learning by allocating teachers and instructional coaches sufficient time together without other school-assigned duties, which can serve as an obstacle to ongoing engagement in IC (Borman et al., 2006).

Coherence is the alignment between IC and a teacher's instructional goals (Desimone & Pak, 2017). Ideally, these individual goals also align with the organization's culture and mission, the school district's policies, and the state department of education's standards (Desimone & Pak, 2017). Desimone and Pak (2017) have asserted that coherence is necessary for successful IC. School leaders and instructional coaches should consider this alignment throughout the process of implementation, and attempt to understand and address dissonance between a teacher's goals and those of the school (Desimone & Pak, 2017). Additional research indicates that school leaders are responsible for creating supportive conditions for the implementation of IC (Stevenson & Woulfin, 2019).

Collective participation involves a school's instructional staff or subgroups engaging in PD together to promote continuous learning and improvement (Desimone & Pak, 2017). One form of collective participation is PLCs. PLCs occur when groups of teachers team up to discuss their learning and instructional goals, centered around the analysis of achievement data (Desimone & Pak, 2017). PLCs are particularly useful when the instructional coach is present to share their expertise (Desimone & Pak, 2017). Importantly, Desimone and Pak (2017) recommended that instructional coaches "facilitate shared learning" by sharing their pedagogical expertise and providing teachers with additional insightful solutions (p. 8).

Support for Instructional Coaches. In its theory of action, the NTC (2019a) advised that instructional coaches need support in order to best implement IC. The NTC (2019a; 2019b) provided two specific supports for instructional coaches: PD, appropriate and reasonable workloads, and structuring IC as voluntary.

The first support is PD for instructional coaches (NTC, 2019a). This could include a series of traditional PD sessions, PLCs, informal mentoring, and even on-site IC (NTC, 2019a). PD for instructional coaches can help to define their role within the school community and serve as an exemplar of professional learning for their own work with teachers (Borman et al., 2006). It can be challenging for instructional coaches to focus their work on instruction when they are unclear of their role and responsibilities (NTC, 2019a), thus, PD focused on IC can serve to increase instructional coaches' efficacy in schools (Yopp et al., 2019).

The second support is appropriate and reasonable workloads (NTC, 2019a). Instructional coaches are often overburdened by duties that minimize time spent with teachers (NTC, 2019b). Instructional coaches may be assigned to complete operational tasks, fill in for disciplinarians, teachers, and administrators, and gather resources for program development—all of which diminish time spent in IC cycles, and may inhibit effectiveness (NTC, 2019b). The NTC (2019a) has recommended that organizations prioritize an instructional focus by protecting instructional coaches' time, and enabling them to focus on IC-related activities.

Researchers with the NTC (2019a) noted significant instructional gains from year to year when instructional coaches were able to spend less time on administrative duties and more time focused on instruction. The NTC (2019a) suggested that schools collect data, through surveys and interviews, to ascertain how instructional coaches are using their time. In this way, school

leaders can determine how to provide more appropriate and reasonable workloads for instructional coaches (NTC, 2019a).

Additional research about structural support accords with the findings of the NTC (2019a; 2019b). In a review of literature by The Education Alliance at Brown University, Borman et al. (2006) specify that support for instructional coaches is "critical," especially for those who are new to the role (p. 11). Similarly, Woulfin and Rigby (2017) contend that administrative support for instructional coaches, specifically in the form of supervision and PD, is "crucial" for the advancement of IC (p. 326).

Importantly, REL West (2019) and NTC (2019a, 2019b) have offered practitioner-focused and structural strategies that schools may implement for increasing the efficacy of IC. Each of the PFPs referenced coordinate with adult learning theory: differentiating IC for individual teacher preferences, tracking teachers' progress in the process of change, and building positive relationships with teachers (REL West, 2019; NTC, 2019b). The recommended structural supports denote organizational components (i.e., prioritising active learning, coherence, and collective participation) and specific supports for instructional coaches (i.e., PD and appropriate and reasonable workloads). The notable gap in this body of research about increasing the impact of IC from a practitioner-focused lens is teachers' participation in the process of their own learning, or, using teacher feedback about their experience with IC as a lever for program improvement, as in this proposed study.

### **Section 4: Teacher Experience**

In this section I will explain the importance of teacher experience—the focus of this proposed study—which consists of teacher perceptions and teacher preferences. First, I will

relate teacher experience to adult learning theory, also known as andragogy. Then, I will draw upon salient literature to underscore the rationale for exploring both teacher perceptions and teacher preferences. Next, I will turn to two studies that examined teacher perceptions and preferences: Kretlow and Bartholomew (2010) and Hammond and Moore (2018). I will explain how IC can reflect the principles of andragogy, by reflecting teacher preferences. This can be done by asking teachers about their experience with IC. Last, I will relate teacher experience to my own study about IC.

# Teacher Perceptions, Teacher Preferences, and Adult Learning Theory

Given the importance of adult learning theory for the effective implementation of IC (Desimone & Pak, 2017; Elish-Piper et al., 2008; REL West, 2019), teacher experience is worth considering as a complementary strand of research. Accounting for teacher experience enables teachers to serve as active contributors by providing data that can inform and improve IC on their behalf. One component of teacher experience, teacher perceptions, provides a broad picture of teachers' feelings about IC, including: their emotional experience, their willingness to participate, their ability to plan for instruction, the quality of instructional coach, and its impact on student learning and their own pedagogical efficacy (Hammond & Moore, 2018; Yopp et al., 2010b). The second component, teacher preferences, specifies the aspects of IC that teachers find helpful (Kretlow & Bartholomew, 2010). This insight can be used to design responsive IC, a crucial consideration, given that negative teacher experience can limit buy-in and effectiveness (NTC, 2019a). Therefore it is worth exploring teacher experience in more depth.

## **Findings**

Despite the importance of teacher experience, there is limited high-quality research from which to draw conclusions. Due to the paucity of rigorous studies in this area, I will report on the findings of two studies that help to illuminate teacher perceptions and teacher preferences. The first, a meta-analysis by Kretlow and Bartholomew (2010), provides some insight about teacher perceptions. The second, a multi-method study by Hammond and Moore (2018) provides insight about both teacher perceptions and teacher preferences.

The primary purpose of Kretlow and Bartholomew's (2010) review was to summarize the effectiveness of IC for teachers' implementation of a specific style of instruction. The authors examined a supplemental component, teacher perceptions, which justifies the inclusion of this study as it provides information beyond the results of Kraft et al. (2018). Although Kretlow and Bartholomew's (2010) synthesis is included, its methodological rigor is opaque, and its primary focus is not teacher perceptions.

Kretlow and Bartholomew (2010) conducted a multi-faceted, comprehensive search to locate studies for their review. They searched electronic databases and academic journals in order to identify the most recent studies related to their research topic. The authors also reviewed reference lists of applicable studies in order to locate supplemental articles. Kretlow and Bartholomew (2010) established seven inclusion criteria for their review:

- 1. Published in a peer-reviewed journal.
- 2. Causal inferences could be drawn based upon the design (i.e., experimental, quasi-experimental, or single-subject).

- 3. Participants were pre-service or in-service PK-12 teachers (general education and special education).
- 4. IC was the independent variable.
- 5. A measure of instructional characteristics was a dependent variable.
- IC focus was on a practice proven to improve content-specific or general practices.
- 7. Evidence of practice effectiveness was based upon high ESs as determined via meta-analytic research.

Eight of the 457 initial studies were included in the review's section about teacher perceptions (Kretlow & Bartholomew, 2010). The majority of these used questionnaires to evaluate teacher perceptions, and two used researcher-conducted, in-depth interviews. Across all eight studies, teachers reported positive perceptions about IC.

The second study that provides insight about teacher perceptions and teacher preferences is Hammond and Moore (2018). In a qualitative portion of a larger study, Hammond and Moore (2018) examined teacher experience. The three main research questions they asked were:

- 1. How do teachers feel about participating in IC?
- 2. Do teacher perceptions evolve throughout the process of participating in IC?
- 3. What do teachers perceive as the benefits and drawbacks of IC?

The study's sample included 10 teachers of varying experience levels from an urban elementary school (Hammond & Moore, 2018). The researchers collected data by interviewing participants about their perceptions of IC before and after participation (Hammond & Moore, 2018). Before participating in IC, 70% of teachers reported a positive overall perception and

30% reported a negative perception (Hammond & Moore, 2018). After IC, 100% of teachers reported a positive perception, meaning that the 70% maintained their positive view, and the 30% who were previously skeptical changed theirs (Hammond & Moore, 2018). Interviews further identified teacher preferences.

The first teacher preference was the nature of the instructional coach (Hammond & Moore, 2018). Traits that teachers preferred included: optimism, empathy, strong listening skills, reflection, and trustworthiness (Hammond & Moore, 2018). Whereas some teachers reported feeling initially apprehensive about participating in IC, the instructional coach's positive nature and empathetic style encouraged them to remain in the program (Hammond & Moore, 2018).

The second teacher preference was the specific and positive feedback they received from their instructional coach (Hammond & Moore, 2018). Targeted feedback made teachers feel that they could manage instructional changes, and increased their efficacy (Hammond & Moore, 2018). Encouraging feedback also affirmed teachers, and diminished the self-doubt that they previously held (Hammond & Moore, 2018).

### Discussion

Kretlow and Bartholomew (2010) and Hammond and Moore (2018) found that teacher perceptions of IC were largely positive. Hammond and Moore (2018) also indicated the specific variable components of IC that teachers found most preferable. The two main teacher preferences included the nature of the instructional coach (positive) and the type of feedback they received (positive and specific) (Hammond & Moore, 2018). This information complements the PFPs related to adult learning theory, described in Section 3. In addition to the

PFPs referenced previously, Hammond and Moore (2018) hypothesized that a teacher's personal initiative to improve instruction and achievement was a crucial facilitator for successful IC.

Instructional coaches and organizations can reflect the principles of andragogy by taking teacher experience into account when designing and implementing IC. Asking teachers about their perceptions and preferences provides the opportunity to inform and improve IC with their needs in mind, and may thus increase teacher motivation to participate. This warrants a more thorough investigation of teacher experience, as this proposed study aims to do.

In Chapter 2, I have delineated several aspects of IC worth noting, each of which relate to my proposed study of IC at RCS. The first is that IC is a component of PD, but differs from traditional PD because it is individualized, ongoing, and responsive to the needs of adult learners. IC is structured into cycles that emphasize collaboration, observations and monitoring, followed by data analysis and feedback meetings in order to adjust instruction (REL West, 2019). IC at RCS follows the same structured cycles as recommended by REL West (2019), and has been designed to be responsive to teachers' needs via individualized meetings and end of cycle surveys.

The second, is that IC has long been recognized as an intervention for improving instruction and achievement (Joyce & Showers, 1982), but that it has become more formalized and widespread—particularly in urban areas—due to the demands of federal programming such as the Reading Excellence Act in 1999, No Child Left Behind in 2002, and the reauthorization of the Individuals with Disabilities Education Act in 2004, all of which focused on improving the quality of literacy instruction (Kraft et al., 2018; Matsumura et al., 2010). The setting of this

proposed study is RCS, an urban high school whose primary focus is improving student achievement using IC as an intervention.

The third, is that when implemented thoughtfully, IC aligns with and reflects the principles of adult learning theory, or andragogy (Knowles, 1980; Merriam, 2001). Andragogy emphasizes five assumptions about adult learners. Adult learners (a) are self-directed and have independent thought processes; (b) possess a wealth of prior knowledge from which to draw upon; (c) have needs that correlate to their personal and changing social roles; (d) wish to practically apply what they learn; and (e) are intrinsically, not extrinsically, motivated to learn (Merriam, 2001). These five assumptions about adult learners should be considered and acted upon when implementing IC, as REL West (2019) has suggested. Although adult learning theory is the basis for IC at RCS, the connection has yet to be made between teacher experience—their perceptions and their preferences—and program improvement. This is a gap in practice, and in the literature, that this proposed study intends to examine and address.

The fourth, is that IC is an effective means for improving instruction and achievement, particularly when certain potentially influential factors are considered (Kraft et al., 2018). Kraft et al. (2018) compiled and analyzed the effects IC in a landmark meta-analysis that situates IC as a meaningful intervention based upon the causal effects associated with its authentic and intentional implementation (i.e. size of program and pairing IC with supplemental PD). Additional research from REL West (2019) has indicated that IC may be implemented most effectively when certain PFPs (i.e., differentiating IC for individual teacher preferences, tracking teachers' progress in the process of change, and building positive relationships with teachers) and structural supports (i.e., PD for instructional coaches, appropriate and reasonable workloads

for instructional coaches, and structuring IC as voluntary) are in place. As discussed in Section 3, the gap exposed in this body of literature relates to teacher voice in the process of IC. In order to improve IC programs, it is worth eliciting teacher preferences and perceptions, since they are the primary stakeholders and participants. This proposed study will fill this gap by ascertaining teacher experience, and using this information to inform systematic improvements in the local IC program at RCS.

The fifth, is that teacher perceptions and teacher preferences are important to consider when designing IC (Hammond & Moore, 2018). If instructional coaches and organizations honor andragogy by taking teacher experience into account when designing and implementing IC, they may inform and improve it (Hammond & Moore, 2018). I intend to expand upon the limited research in the area of teacher perceptions and teacher preferences. This proposed mixed methods study will serve as the first step in considering teacher perceptions and teacher preferences at RCS, and provide a logical grounds for ongoing reflexivity between teachers and IC. Additionally, though the findings of this proposed study may not be generalizable past this bounded setting, the methods and principles may establish grounds for future research in this area.

In Chapter 3, I will detail the setting in order to establish the context and rationale for conducting a study about IC at RCS. These details provide valuable information for situating the need for IC at RCS, and for understanding the methods and goals of this proposed mixed methods study. Chapter 3 will provide a frame for the methodology of this proposed mixed methods study. Following Chapter 3, I will outline and describe the research methodology in Chapter 4.

#### **Chapter III- Context and Setting**

RCS is the urban public charter high school where I was employed as an instructional coach, and was thus a purposive setting of convenience (Marshall & Rossman, 2011). I chose this setting because the perspectives of teachers who have participated in IC at RCS are essential for meaningful program improvement. In the next section, I will describe the setting in greater detail, including: staff, student enrollment, the upcoming charter renewal and related academic initiatives, school culture, and building conditions. Following this, I will provide a history of PD at RCS from the IC pilot program I initiated in 2018, to IC in its most recent form.

## **Readiness Charter High School**

In this section, I will establish the context and rationale for implementing IC at RCS. The time frame I will discuss extends from RCS's most recent charter renewal (2017) to March 2020, since this is when the majority of school-wide changes occurred, and when IC was first piloted and implemented. First, I will describe the staff at RCS. I will elaborate on the leadership changes that have occurred in the past three years, and report on teacher retention and work. Second, I will describe enrollment at RCS and changes in student demographics over the past three years. Third, I will elaborate on the upcoming charter school renewal and chronicle the academic changes that have taken place within the 2019-2020 school year in response to persistently low standardized test scores. Fourth, I will portray the school culture and building conditions at RCS at the time of this study. Finally, I will demonstrate how the aforementioned factors justified a need for IC.

### Staff

At the time of this study, the administrative leadership team at RCS consisted of a Chief Executive Officer (CEO), Chief Financial Officer (CFO), principal, assistant principal, and data systems manager. Instructional staff at RCS was composed of 36 full time teachers, five part-time off-campus internship support teachers, two school counselors, six special education case managers, an English as a Second Language (ESL) coordinator and an instructional coach. Additional staff included a technology specialist and his assistant, a building engineer, three secretaries, and a team of five non-teaching assistants and security.

Administrative Leadership. During the past three years that I worked at RCS, there have been significant leadership changes at RCS. For example, between 2016 and 2018 school leaders have shifted roles several times, and there has been an ongoing vacancy in Human Resources.

At the beginning of the 2019 school year, the administrative leadership team was solidified, and there were no changes during 2019-2020. The previous ongoing changes are important for understanding the setting of this proposed study because they reflect turbulence at the top tier of the institutional hierarchy, which connects to the culture at RCS.

Leadership Committee. There is a second leadership committee at RCS that serves as a staff consult for the administrative leadership team, and represents the voices of teachers in the building. All teachers and I, the instructional coach, were invited to participate in this committee by the administrative leadership team. Ultimately, the administrative leadership team selected department chairs and me to serve as the leadership committee. As such, we gathered monthly to discuss school-wide changes, express concerns to administration, and share updates about staff

and students with the principal and assistant principal. These meetings were an opportunity for teachers to relay information, and present concerns in a sanctioned setting.

**Teachers.** Teachers at RCS ranged in instructional experience from zero to 22 years. At the start of the 2019 school year, there were 15 novice teachers (< 5 years of instruction), and 25 veteran teachers ( $\ge$  5 years of instruction).

Teachers at RCS delivered instruction for three to seven 50-minute classes per day—based on a rotating schedule—and taught as many as three different content areas. Class sizes ranged from 17 to 30 students, and consisted of general education classes and inclusion classes. Inclusion classes merged students from the special education program with general education students. Inclusion classes received push-in support from a special education teacher. All teachers received 25 to 225 minutes of preparation time per day, including lunch. Generally, veteran teachers received the most preparation time, and novice teachers taught the greatest number of classes. Typically, however, teachers had one to two prep periods per day, based upon the nuances of the rotating schedule.

#### Students

RCS enrolls students based upon a district-wide lottery, meaning that students live in neighborhoods across the city, rather than a specific catchment zone. As of October 2019, 629 students were enrolled at RCS (exceeding the charter's limit of 600 students). Enrollment at RCS fluctuated between 578 and 629 students over the past four academic years, (district website) (see Table 2 below).

Table 2

Student Enrollment Five Year Summary

School Year Enrollment

2016-2017	578
2017-2018	611
2018-2019	610
2019-2020	629

During the 2019-2020 school year, there was an overall increase in the percentage of Black students, and a decrease in Asian, Hispanic, and White students (district website) (see Table 3). The number of students receiving specialized services (i.e., Special Education and ESL) increased as well, as did the population of students living in poverty (i.e., free or reduced lunch recipients) (district website).

 Table 3

 RCS Student Demographic Breakdown

	% of total students	
	2018	2019
Race		
Black	60	67
Asian	12	10
Hispanic/Latino	7	5
Multiracial/Other	2	2
White	19	16
Specialized Services		
Free/Reduced Lunch	60	67
Special Education	13	15
EL	3	6

#### Charter renewal

RCS is one of 90 charter schools in the city (district website). In this large urban area, charter schools are closely monitored, and renewal processes have stringent criteria for approval (district website). The three main factors considered for a charter school's renewal are: academic success, organizational compliance and viability, and financial health and sustainability (district website). RCS has a strong record of success in the latter two categories, but has struggled to achieve academic success over the past three years (district website). Academic success is measured by four categories: (a) proficiency on state exams; (b) growth on state exams; (c) attendance percentages; and (d) post-secondary readiness (as measured by four year graduation rates) (district website).

RCS passed its most recent renewal in 2017 (district website). However, as a former member of the school community and due to my role as instructional coach, I noted that the upcoming 2022 renewal is a source of tension at RCS due to failing standardized test scores and lack of academic growth, as evidenced by the 2017, 2018, and 2019 Annual Charter Evaluation (ACE) reports (school district website). In order to measure a charter school's academic success and growth, the ACE uses an Average Growth Index (AGI) to quantify and standardize overall academic performance of students on state assessments, and academic growth. AGIs are calculated each year for the five years leading up to the renewal. Academic growth is measured by calculating the AGI for the lowest performing 20% (2017 and prior) or 33% (2018 and after) of students (district website). If a school's AGI is at or above -1, the school has met or exceeded the statewide growth standard (district website). A school earns full credit for renewal based upon its overall AGIs during the five year renewal window (district website). In 2017 RCS

scored an AGI of -1.71, in 2018 RCS scored an AGI of -2.11, and in 2019 RCS scored an AGI of -1.31. Instruction and achievement—for the purposes of increasing proficiency and demonstrating growth on state exams—were the focus this past school year.

# Academic Changes

At the start of the 2019 school year, several initiatives to address instruction and achievement were implemented concurrently. The first initiative was restructuring the master schedule. Ninety minute block classes (two to three times per week) were replaced with 50 minute period classes (four times per week). The rationale for this change was to increase instructional frequency and consistency. Several teachers at RCS—some of whom taught with a block schedule for over 20 years—reported that the scheduling shift was challenging and frustrating, since they had to adapt their instruction accordingly.

The second initiative was an ongoing curriculum audit, in which old curricula was reviewed by department chairs and school leadership, and updated or replaced to align with state standards, as necessary. Teachers were required to update their curriculum map quarterly to reflect the instructional pacing demanded by the new 50-minute class schedule. Based upon anecdotal evidence, the majority of teachers at RCS have had little experience developing curriculum. When this initiative was introduced, it created tension between school leadership and teachers, as there was no curriculum specialist or content consultant to assist teachers, and teachers felt it was an unfair expectation in terms of work and time constraints.

The third initiative was a new lesson plan format, which all teachers were required to follow (see Appendix E). The format is objective-driven and mandates direct instruction, meaning that lessons should have a segment where the teacher delivers instruction to the whole

group, before students interact with the material in smaller groups or individually. Additionally, teachers were required to outline student-specific accommodations and modifications daily, in response to special education compliance monitoring that was occurring at RCS. Prior to the 2019-2020 school year, teachers used their choice of lesson format—based upon a general lesson plan guide—and were not required to document differentiation. Teachers reported that these new expectations have caused stress, fear of inadequacy, and in some cases refusal to comply.

The fourth initiative was increased instructional oversight. Leadership began: (a) observing teachers more frequently (formally and informally); (b) using a points-based observation rubric; (c) mandating teacher documentation for any student failing a class; (d) reviewing lesson plans; (e) providing lesson plan feedback and; (f) requiring documentation of all professional meetings (i.e., PLCs and grade team meetings). Prior to this change, teachers received one formal observation on a narrative style rubric, did not have to document student failures for retention prevention efforts, never received lesson plan feedback, and were rarely required to document professional meetings. These changes were intended to positively impact instruction and achievement, but have also led to teacher frustration about their performance and extra duties.

#### School Environment

Additional considerations for instruction are the school environment and building conditions. Kraft and Papay (in press) describe "the fundamental roles of school culture and order and safety in creating an environment where teachers are willing and able to focus on instruction" (p. 6). At RCS, conditions have not always been optimal for instruction, and occasionally verged on violence. While extreme violent incidents were rare, they contribute to

an occasionally volatile school environment, and can decay teachers' emotional well-being, creating an additional challenge for instruction (Kraft & Papay, 2014).

School building. Within the school building, classrooms were separated by thin walls, ceilings tiles regularly fell through when it rains or snows, few windows let in natural light, and there was insufficient learning space, meaning that approximately 10% of the teachers at RCS lacked a designated classroom. The cafeteria also doubled as an in-school suspension room and uniform store. The library had been converted into an additional in-school suspension space and served as a shared office for two special education case managers, the technology specialist and his assistant, a building substitute, me (the instructional coach), and a transient photographer.

Altogether, the numerous staff and academic changes, strained school environment, and unhealthy building conditions added to teachers' heightened stress, potentially impacting instruction, and further increasing the importance of IC (Kraft & Papay, 2014).

#### IC Pilot

In this section I will describe the 2018 IC pilot at RCS. I created the IC pilot in order to showcase the potential benefits of IC at RCS to school leaders. First, I will provide the impetus for implementing an IC pilot at RCS, and explain why one specific teacher was identified and selected to participate. Then, I will outline the structure of the IC pilot. Next, I will highlight the areas of improvement noted during and after the teacher's participation in IC. Finally, I will link the success of the pilot IC to the creation of a formal IC intervention at RCS.

Until the 2019 school year, the only PD option at RCS was traditional PD. In the Fall of 2018, I was working as a full-time teacher at RCS when I identified a need for more PD options. I felt that the PD we received was not impacting instruction, and teachers had indicated to me a

strong desire for more individualized support and mentorship. After researching IC, I designed a pilot IC based upon several factors noted in salient literature. Notable considerations included: IC cycles, structuring IC as voluntary, and applying adult learning theory (Knight, 2004; NTC, 2019b; REL West, 2019).

My IC pilot focused on a novice science teacher (Mr. Jakobs; a pseudonym) who had been identified as low-performing on formal evaluations in the Fall of 2018, and whose main concern was classroom management. Mr. Jakobs had also indicated to me that he was considering leaving the profession entirely, perhaps before the end of the school year, because he felt unsuccessful and unsupported. I requested and received permission from my principal to use my available preparation time to serve as an instructional coach for Mr. Jakobs, who volunteered to participate in the IC pilot.

The IC pilot at RCS began in December of 2018 and continued through June of 2019. IC cycles consisted of classroom observations, modeling, and feedback sessions in which we reviewed strategies and discussed goals. Mr. Jakobs and I spent two to four hours working together each week. During these sessions, we focused on content-specific items such as lesson development and planning, assessment creation, and content delivery. We also worked on general practices, which included classroom management strategies, organization, and resource acquisition.

In order to ascertain Mr. Jakob's instructional growth and perceptions of IC, I collected qualitative data over the course of the six month IC pilot. Data collection involved classroom observations, document reviews, and semi-structured interviews. Improved instruction and achievement were noted throughout the duration of the IC pilot, as evidenced by: refined lesson

structure, increased student engagement, strengthened classroom management, decreased student failure rates, and heightened teacher confidence.

In the Spring of 2019, Mr. Jakobs received a second formal evaluation. This time, he received distinguished marks across the school-based evaluation rubric. At the end of the school year, Mr. Jakobs earned the award for most improved teacher at RCS. Notably, Mr. Jakobs' students also passed the state standardized test at higher rates than any other students who took the exam at RCS. Since participating in the IC pilot, Mr. Jakobs decided to continue teaching at RCS, and began his own graduate-level studies in order to pursue a degree in school leadership. He also served as an instructional leader within the science department. Based on Mr. Jakob's clear improvement after participating in the IC pilot, the administrative leadership team at RCS decided to create a full time instructional coach position for me, in order to implement school-wide IC during the 2019-2020 school year.

#### IC at RCS

In this section I will provide an overview of IC at RCS, including its structure, implementation, PLCs, grade band meetings, and related traditional PD. I will also describe my involvement as the instructional coach at RCS.

#### IC Structure and Implementation

At the end of the 2018-2019 school year, the administrative leadership team presented the IC initiative to the school board and received approval to implement it school-wide for the 2019-2020 school year. During the summer prior to the start of the 2019-2020 school year, I developed a structured IC schedule based upon the length of the school year (40 weeks), and then divided evenly into five eight-week cycles. Each eight-week cycle was broken into a

weekly set up that mirrored the school-wide 50-minute period schedule, so that I could observe teachers' instruction, and offer feedback meetings during their prep periods (see Appendix C for a sample of the weekly schedule). I attempted to limit the number of teachers per cycle to ten, in order to maintain a low ratio, and provide as much support to those teachers as needed. However, some cycles included more teachers in order to accommodate demand.

The first eight-week cycle was reserved for teachers who entered the school year on an improvement plan, first-year teachers, and/or new hires at RCS. This was the only cycle for which I populated the teacher list. The rationale for this was to provide immediate on-going support for teachers with the greatest need, and to ensure they had priority to receive IC. Of the ten new hires, some were veteran teachers who requested and were permitted to opt out of the first IC cycle.

For all but the first eight-week cycle, teachers volunteered to participate in IC. I emailed all teachers during the last two weeks of each cycle, to remind them about the option to participate in IC, and to invite them to have a conversation with me if they had any questions. Teachers who volunteered to participate were asked to sign up on a shared schedule for two 50-minute periods with me per week—one period for classroom observations, and one prep period for feedback meetings. Once teachers populated the weekly schedule, I then built in one to two office hours each day, during which any staff member could request support, whether they had signed up for the IC cycle or not. I also built in time during each week for lesson plan feedback, PLCs, and grade team meetings so that I could provide instructional support in those specific group settings.

Between September and March of the 2019-2020 school year, 21 teachers participated in IC for at least one eight-week cycle, and 10 of these participated in two or more IC cycles. However, due to nationwide school closures resultant of the international COVID-19 pandemic, the fifth and final IC cycle did not take place. From mid-March until the end of the school year in June, IC was extended to all teachers at RCS who needed assistance with online learning. Teachers were able to reach out without a set schedule, to ask questions and receive feedback on their online lessons and planning. The focus of this study was on the IC that occurred between September and March of the 2019-2020 school year, since this form of IC more closely resembled the research-based IC described in Chapter 2.

At the start of each IC cycle, participating teachers were asked to complete an informal staff survey, from the professional learning association Learning Forward (2014), about their instructional needs and areas of expertise (see Appendix A). Based on teacher responses to the survey, I held conversations with participants to further understand and set goals. Using these goals as a framework for improvement, I then observed instruction while taking copious notes on teacher and student actions, culminating in take away points (TAPs) for reflection. After observing one given class period, I produced between two and three pages of notes for teachers to review, and no more than five TAPs to reflect on. Following the goal-setting meeting and observation, I would then meet with teachers to discuss their instruction, refine their goals, model strategies, and listen to their concerns during feedback meetings.

At the end of each IC cycle, participants were asked to complete an end of IC cycle survey, consisting of 28 Likert-scale questions, and seven open-ended response questions that I developed (See Appendix B). From the responses, I calculated the low, high, mean, and mode

for each category of question. I coded the open-responses into themes, and then linked these to determine areas for improvement. I used this data for my own professional growth, as the creator of this program, and to understand how I could improve IC at RCS from one cycle to the next.

#### IC and PLCs

As the instructional coach at RCS, I also participated in PLCs, which the Assistant Principal and I designed and implemented during the 2019-2020 school year to coincide with IC. PLCs at RCS met weekly, and consisted of teachers from each subject area meeting to discuss content and data in order to drive instruction and achievement. In a general sense, the role of instructional coach in PLCs at RCS was to facilitate conversations and ask targeted questions. Specifically, I assisted teachers as they differentiate instruction, highlighted and provided insight into the analysis of data, and supported the development of curriculum such as lesson and unit plans.

# IC and Grade Group Meetings

Grade group meetings met once per week, per grade. Often, grade group meetings occurred before first period classes begin, however, sometimes they were built into an extended day for teachers on Wednesdays. These meetings were designed for teachers, special education case managers, school counselors, and members of support services to come together to discuss more general concerns such as student behavior and administrative updates. I attended grade group meetings in order to provide insight into either classroom management or school-wide updates, as a pedagogical resource.

#### IC and Supplemental PD

Whereas traditional PD had been offered at RCS for many years, it now aligns with IC.

As indicated in Chapter 2, supplemental PD has the potential to positively influence instruction (Kraft et al., 2018). Part of my role as instructional coach was to design and deliver targeted traditional PD sessions in conjunction with the ongoing academic changes.

PD at RCS occurred once monthly during half days. During these half days, I was generally allotted one to three hours to share data, instructional strategies, and resources with the entire staff. Combined with the academic changes mentioned previously, the topics I covered included: how to implement a lesson structure within 50 minute periods, backwards mapping curriculum in order to create unit maps for the curriculum audit, how to write and determine if students have met 3M objectives (i.e., meaningful, manageable, and most important next steps), how to use assessment data to respond to student needs and adjust instruction, and how to maximize instructional time by using best practices for classroom management strategies.

In Chapter 3, I have described the setting of this proposed study, RCS in order to establish context. I have described the staff, and how student enrollment, the upcoming charter renewal and related academic initiatives, school culture, and building conditions all added to the rationale for implementing IC at RCS. I then provided a history of PD at RCS from the IC pilot program I initiated in 2018, to IC in its current form in order to establish the program that this proposed study will reference and aim to understand via teacher perceptions and preferences.

In Chapter 4, I will outline the methods for my study, the goal of which was to examine teacher experience in order to be responsive to teachers' preferences, reflect adult learning theory, and encourage teacher motivation to participate in IC. First, I will lay out the design of this mixed methods study. Then, I will present the instruments that I utilized in order to

ascertain teacher experience, and answer my research questions: What is teachers' perceived impact of IC at RCS? How do teachers perceive their involvement in IC at RCS? and What is teacher experience of IC at RCS?

#### **Chapter IV- Research Methodology**

In this chapter I will present the research design, setting, and methodology for this mixed methods study. As documented in Chapter 2, IC has the potential to improve instruction and achievement (Kraft et al., 2018). However, there is variability in its impact. Potentially influential factors worth noting include size of the IC program and pairing IC with supplemental PD (Kraft et al., 2018). Additional considerations for program success relate to PFPs, structural supports for IC, and teacher experience (REL West, 2019). My goal as an educational leader and instructional coach has been to understand teacher experience at RCS. Since IC was a new initiative at RCS during the 2019-2020 year, and had not yet been systematically examined, the primary purpose of this study was program improvement, so that IC at RCS reflected adult learning theory and aligned with the teacher preferences, with the goal of increasing teacher motivation to participate.

The quantitative research question guiding my study was:

- What is teachers' perceived impact of IC at RCS?

The qualitative research question guiding my study was:

- How do teachers perceive their involvement in IC at RCS?

The mixed methods research question guiding my study was:

- What is teacher experience of IC at RCS?

## Design

I conducted a mixed methods, sequential explanatory case study in order to ascertain teacher perceptions and teacher preferences at RCS (Creamer, 2018). This design mixed quantitative and qualitative methods, which offered a more thorough understanding of

perspectives than the use of a single method (Creamer, 2018; Mason, 2006). Sequential timing indicated that results of one data collection phase led to the next data collection phase (Creamer, 2018), while explanatory emphasis meant that the "primary focus is to explain quantitative results by exploring certain results in more detail or helping explain unexpected results (e.g., using follow-up interviews to better understand the results of a quantitative study)" (Terrell, 2012, p. 262).

Survey methodology (i.e., a questionnaire) was used to generate quantitative data with the intent to gain a broad understanding of teacher experience from all participant-teachers who have participated in IC at RCS. Subsequently, semi-structured interviews were conducted with individual participants, in order to adequately address the research questions qualitatively, enabling me to gain a richer understanding of teacher experience from a few purposefully selected teachers. Together, the data allowed insight into the participants' perspectives about IC at RCS, the bounded setting for this case study. This method served two purposes: to glean responses from consenting participants who participated in IC at RCS, and to then learn about teacher experience more deeply from individuals representing varying perspectives. Further details about the methodology are presented below.

#### **Participants**

Only teachers who participated in IC at RCS were invited to participate, in order to obtain the necessary information about perceptions of IC. Twenty-one teachers were invited to respond to the questionnaire. The group consisted of: four each of history and science teachers, three each of Spanish, Specials, and English teachers, and two each of Math and Special Services teachers. Teachers in this group represented a range of experience from first year to veteran,

some with more than 20 years of classroom teaching experience. Of the 21 invited participants, five had never served as full time teachers in a school other than RCS. Ten of the participants participated in IC for three or more cycles during the past school year, and eleven participated in at least one IC cycle. Due to the nature of the work I conducted with teachers, I know this information first-hand through interactions and conversations, and have chosen to include it since it lends to the verstehen, or, description of the setting and participants which will allow for experiential understanding (Stake, 2010).

#### **Ethical Considerations**

Ethical considerations for this study related to my dual role as the researcher and professional colleague of the participants. Thus, I was conscious and reflexive about my potential influence (Sanjari et al., 2014). Two areas of focus for ethical consideration were my positionality in relation to status and social identity (Marshall & Rossman, 2011). I recognize the "potential interpersonal impact of the inquiry" (p. 50) that this study may have had since I was professionally linked to both teachers and school administration (Marshall & Rossman, 2011). The goals of this study are ethical, as I sought to improve IC for teachers in the future. The methods which will subsequently be described do not single out any individual or opinion in order to identify participants. Rather, confidentiality of participants' identities is of the utmost importance to me, as the researcher, so that I may maintain trusting and professional relationships with all participants, and continue to serve as the instructional coach in this setting.

I aimed to understand teachers' experiences by eliciting their opinions, and used these as guidance to benefit teachers at RCS as educational professionals. I grounded my decisions and research in interpersonal validity, which means that participants and I shared an understanding of

trustworthiness due to the reflexivity I shared about my role, goals, and the interpersonal relationships we had cultivated (Marshall & Rossman, 2011). I accomplished this by explaining the rationale and goals of this study to participants, expressed my intent to improve IC programming, continuously explained and clarified my role as the researcher, and proceeded with informed consent. Additionally, I acknowledged and understood that participants were giving of themselves and their time by participating in this study, and for this I am both indebted and remained sensitive to this sacrifice (Marshall & Rossman, 2011).

#### **Paradigm**

The goal of this study was to illuminate teacher experience at RCS in order to create IC programming that is responsive to individual teacher experiences with IC, and honors adult learning theory. Dialectical pluralism is a paradigm, closely linked with mixed methods research, that acknowledges diversity and complexity via "the deliberate engagement with different points of view and ways of achieving knowledge" (Creamer, 2018, p. 45). According to Johnson (2015), dialectical pluralism is a mixed methods paradigm, the process of which:

is to carefully, systematically, and thoughtfully listen, understand, appreciate, and learn from multiple paradigms, disciplines, values, methodologies, standpoints, ethnicities, and perspectives; try to come together on projects that we care about (while keeping many of our differences), and practicing deliberative democracy focused on helping all stakeholders. (p. 156)

Dialectical pluralism highlights the importance of working together to understand and acknowledge differences and identify tensions in order to explore research questions. The connection between dialectical pluralism and mixed methods research speaks to the Gestalt of

mixed methods due to the "multi-paradigmatic perspective" (p. 156), meaning, engaging in differences to understand complex experiences (Creamer, 2018; Johnson, 2015). Philosophical assumptions about dialectical pluralism indicate that this paradigm encourages diversity of perspectives, involves connection between the researcher and participant, explores extreme cases, and respects varying understandings of reality (Creamer, 2018). As Creamer (2018) states, "The most important feature of this paradigmatic position is its de-emphasis on consensus and convergence" (p. 47). For this reason, I have chosen to understand teacher experience through the varying perspectives of participants, using a mixed methods approach.

The methods I selected for sampling, data collection, and analysis all reflect the principles of dialectical pluralism. Sampling involved seeking the perspectives of all willing participants who participated in IC, and then examining the divergent responses and understandings of IC via extreme case-sampling, and follow-up interviews. Data collection involved quantitative and qualitative methods in order to gain a more holistic perspective of teacher experience, and allowed participants to express their "diverse viewpoints and ways of knowing" (Creamer, 2018, p. 47). Data analysis "pursue[d] the unexpected, contradictory, or dissonant results and what is missing" (p. 47) by analyzing the quantitative and qualitative data together to seek greater understanding of teacher experience (Creamer, 2018). Dialectical pluralism allows for multiple understandings of the same phenomenon, in this case, teacher experience with IC (Creamer, 2018).

In seeking participants' diverse viewpoints to understand their experience, this proposed study created opportunities for a deeper understanding of how "context and individual differences interact[ed] to influence perceptions" (Durksen & Klassen, 2012, p. 44). Johnson

(2015) elaborates on the steps to conducting research under the umbrella of dialectical pluralism: Elicit the varying perspectives of participants, combine the divergent ideas into meta inferences, be explicit about the researchers worldview, carry out the research ethically, share the findings with local stakeholders, act on and evaluate the outcomes of the research with reflexivity. "In short, [dialectical pluralism] means listening, understanding, learning, and acting" (Johnson, 2015, p. 160). This study followed the sequence outlined by Johnson (2015), aligning with dialectical pluralism as the mixed methods paradigm.

## Rationale/Purpose

The rationale for researching teacher perceptions of, and preferences about, IC at RCS lies within the theoretical framework of adult learning theory, and was grounded in causal evidence of the effectiveness of IC as an intervention for instruction and achievement (Kraft et al., 2018). The overarching mixed methods research question guiding the study was:

• What is teacher experience of IC at RCS?

A mixed methods design has the distinct benefit of yielding a more complete understanding of perspectives than the use of one method alone (Creamer, 2018; Mason, 2006). The value-added of mixed methods is the opportunity to elicit both breadth and depth of perspectives about IC at RCS.

In this case, qualitative data was used to describe and expand upon the quantitative results with the purpose of enhancement/complementarity (Creswell, 2018). As Creamer (2018) explains, "[enhancement/complementarity] seeks to gain a more holistic picture by exploring different aspects of the same phenomenon" (p. 31). Qualitative methods expanded on the quantitative results to better understand teacher perceptions (Creamer, 2018).

## **Data Collection and Analysis**

## **Quantitative Phase**

In the first phase of data collection, I used a questionnaire to collect the quantitative data for this sequential, explanatory, mixed-method case study. The quantitative research question asked, *What is teachers' perceived impact of IC at RCS?* In this study, perceived impact was defined as the influence of various components of IC on teachers' instructional, interpersonal, and emotional work, interactions, and mindset. A questionnaire was the most appropriate approach to understanding teacher perceptions and teacher preferences broadly, as "many constructs of interest are not directly observable... Because documenting these phenomena requires measuring people's perceptions, questionnaires are often the most pragmatic approach to assessing these constructs" (Artino et al., 2014, p. 464). The questionnaire I developed was informed by a validated instrument: the Teacher Reflection and Impact Survey (TRIS) (Yopp et al., 2010).

Through a National Science Foundation (NSF) grant, researchers at Montana State University, the RMC Research Corporation in Denver, and the University of Idaho conducted a five year longitudinal study called The Examining Mathematics Coaching (EMC) Project (Montana State University, n.d.). The EMC Project explored the types of knowledge that instructional coaches should possess in order to provide the most effective IC for K-8 math teachers (Montana State University, n.d.; Sutton & Heidema, 2012). EMC researchers broke down types of knowledge into two categories: mathematics content and IC (Sutton & Heidema, 2012). The researchers also sought teacher perceptions (Sutton & Heidema, 2012). They

hypothesized that the effectiveness of IC could be measured by its impact on instruction and teacher perceptions (Montana State University, n.d.).

In order to assess teacher perceptions, the researchers created and validated a Likert-scale type questionnaire, the TRIS (Yopp et al., 2010). TRIS allows teachers to reflect on IC, including the topics discussed, the quantity, quality, and duration of IC sessions, their relationships with instructional coaches, and perceived impact on instruction (Sutton & Heidema, 2012; Yopp et al., 2010). See Appendix F for more details about TRIS questions and response options.

For the purposes of this dissertation, and with the permission of the authors, I used segments of and adapted TRIS by omitting and contextualizing certain questions for clarity and more applicability to the participants and setting of my study. Since the questionnaire was adapted by the researcher, it will now be referred to as Teacher Experience Questionnaire, or, TEQ. TEQ was administered to all consenting teachers who participated in IC at RCS.

#### Content and Format

TEQ is an eleven—item electronic instrument created and hosted through Arcadia University's account with Qualtrics<sup>TM</sup>. The approximate completion time of TEQ is 12 minutes. Items 1 and 2 were modeled after items of the same topic in TRIS. Item 1 asked participants to rate statements on a five-point Likert scale, with 1 meaning *not at all* and 5 meaning *to a great extent* (Yopp et al., 2010). Item 1 is an assessment of teacher perceptions related to the instructional coach-teacher relationship (Yopp et al., 2010). Item 2 is an assessment of teacher perceptions related to the topics discussed during IC, and allowed participants to select as many options as applied to their experience (Yopp et al., 2010). Items 3-8 are researcher developed

questions, related to salient literature about teacher experience (Gallucci et al., 2010; Hammond & Moore, 2018; Kowal & Steiner, 2007; REL West, 2018; Sutton & Hedeima, 2012), in order to further address the research questions. Item 3 examined the emotional impact of IC, and asked participants to rate this impact on a five-point Likert scale of 1 (no impact) to 5 (most impact) for six different factors. Item 4 examined the usefulness of IC feedback, and asked participants to rank seven components of IC feedback from most to least useful. Item 5 examined the characteristics of the instructional coach, and asked participants to rate these on a Likert scale of 1 (no impact) to 5 (most impact). Items 6 and 7 asked participants to rate their motivation to improve instruction and achievement on a sliding scale of 1 (not at all motivated) to 5 (highly motivated). Item 8 asked whether they would recommend IC to other teachers, and was originally going to serve as an indicator of varying perceptions of IC for extreme case sampling purposes. Item 9 asked participants if they had any suggestions for improving IC at RCS in the future, in order to offer the opportunity to contribute in an open-ended manner. Item 10 asked participants if they had any recommendations for improving group-style (traditional) PD, or PLCs, in case their suggestions did not align with one to one IC only. Finally, item 11 asked participants if there was anything else they wanted to add about their experience with IC, so that they had an opportunity to share their experiences, if any of the previous questions jogged their memories regarding their experience with IC.

**Likert scale development.** I used a Likert scale for some of the items in the questionnaire so that a single comparable score was given for each (Stake, 2010). I also chose to use a five-point Likert scale because the "five-point format would reduce the frustration level of the respondent[s]... and would thereby increase the response rate and the quality of the

responses" (Babakun & Mangold, 1992, p. 771). Additionally, since I adopted the first two items from TRIS, which used a five-point Likert scale, continuity of response options for the remaining six items allowed for comparability of results.

Rate vs. rank. Item 4 of TEQ asked participants to rank coaching feedback types from 1 (most useful) to 7 (least useful). This question differs from the questions which ask participants to rate various components of IC on a scale of 1 (no impact) to 5 (most impact). Rating is when respondents are asked to measure their attitude about something by choosing a value to represent this attitude (Vannette, 2019). Ranking is when respondents are asked to compare items in a list, and order them based on preference (Vannette, 2019). Ranking forces respondents to choose items in an ordered fashion, whereas rating allows each item to be measured without dependence on the other options. As Vannette (2019) states, "If your respondents will face real-world choices among sets of items, it's best to allow them to rank their choices in your survey," as requested in Item 4 (para. 10).

Item design. TEQ underwent several revisions, the first version of which consisted of 66 items and response options, including a demographic section. Upon further review, several changes were made to TEQ resulting in an eleven-item questionnaire. The first change was elimination of the demographic section. This was done so that the likelihood of participant identification could be reduced. As referenced earlier in Chapter 3, RCS is a small school. By asking any identifying questions about demographics, the possibility of anonymity would be drastically reduced, thus decreasing the possibility of true and honest responses. Items were revised based upon necessity, relation to the research questions, and ease of response. The second change was in wording. Wording was purposefully selected to reflect the wording and

culture of learning used in IC at RCS, "using the vocabulary of the target population" (Artino et al., 2014, p. 466). For example, the IC cycle at RCS involved: Lesson plan feedback, classroom observations, detailed observation notes and specific observation suggestions (i.e., bullet points and TAPs), and in-person feedback meetings. This language aligns in the questionnaire (see Q4), whereas TRIS used different diction. Language was considered carefully throughout TEQ to ensure clarity and familiarity.

# Questionnaire Administration

Consent. For the purposes of this study, an electronic consent form (Appendix H) and a brief summary of this study was shared with participants via an emailed link also included the questionnaire. The consent form was the first page that participants accessed, and included information about this study. First, participants were asked if they consented to participating in the questionnaire. If they responded affirmatively, a second question popped up asking if they also consented to participating in a follow-up interview, if selected. If they responded affirmatively, a third question popped-up asking if they consented to the interview being recorded. Participants then had the opportunity to fill in their preferred email address, so that I was able to contact them for the follow-up interview. The consent form asked participants to include their email address, and not their name, in order to maintain confidentiality. An emailed consent form linked to the questionnaire was an appropriate form of dissemination since all participants had RCS emails that were readily accessible, and which I had access to as the instructional coach.

**Dissemination.** I emailed the questionnaire to all teachers who participated in IC at RCS (n=21). Participants had the opportunity to read a brief summary of the study, and confirm their

consent, with the understanding that their email addresses were linked to responses if they choose to participate in a follow-up interview. I informed participants that they were free to opt out of this study at any point, and that their participation and responses had no bearing on their professional standing.

#### Reliability and Validity

Reliability refers to the likelihood that an instrument will produce consistent results (Rudestam & Newton, 2007). TEQ was influenced by TRIS, a validated instrument, which means that the reliability and validity have been assessed and confirmed by researchers through statistical analysis (Yopp et al., 2010). I made the choice to include some of the questions from TRIS in TEQ, with deliberate changes to the wording, in some cases. Although TEQ was influenced by TRIS, the nature and number of changes I made to the instrument means that the reliability is unknown. In order to increase the validity of TEQ, I established face validity via peer evaluation (Collingridge, 2014). I asked colleagues who were informed of my topic, survey methodology, and/or quantitative methods to provide feedback about TEQ prior to its use. Based upon this feedback, I adjusted TEQ accordingly.

Items and correspondence. Item 1 of TEQ asked *How do the following describe your* experience with coaching?, which is consistent with item 6 of TRIS. The response options differ slightly; TEQ included six response options whereas TRIS included four. The two additional response items in TEQ were due to splitting one response item in TRIS so that it was not double-barrelled: *My coach respects my opinions* and *My coach understands my situation and* the challenges I face and adding: My experience with coaching was worth my time.

Item 2 of TEQ was informed by TRIS, but changed significantly to generalize the response items to all subject areas, and not just mathematics content for the Content and Concepts and Inquiry categories.

Items 3-11 of TEQ were original, and were grounded in research relevant to teacher experience (Gallucci et al., 2010; Hammond & Moore, 2018; Kowal & Steiner, 2007; REL West, 2018; Sutton & Hedeima, 2012).

Item 3 pertained to the emotional aspects of teaching. This did not align with TRIS, and was included in TEQ in order to gain a deeper understanding of teacher experience (Hammond & Moore, 2018).

Item 4 asked respondents about IC feedback, a topic chosen because of its pertinence to literature about teacher experience (Hammond & Moore, 2018). Similarly, Item 5 of TEQ was original, and asked participants about the nature of the instructional coach. This topic was chosen based upon salient literature related to teacher experience (Hammond & Moore, 2018).

Item 6 and 7 asked respondents to rate their motivation to improve their own instruction, and student achievement. These two areas were being measured, again, based upon relevant literature about teacher experience (Hammond & Moore, 2018).

Item 8 asked whether the participant would recommend IC to others. This question was going to be used to determine participants who will be invited to participate in an interview, for extreme case sampling.

Item 9 asked respondents if they had any suggestions for improving IC at RCS, in order to provide respondents with the opportunity to share their recommendations.

Item 10 asked participants if they had any recommendations for improving traditional PD or PLCs at RCS, in case this is an area of IC they wanted to comment or reflect upon.

Item 11 offered respondents the opportunity to add any additional thoughts about their experience with IC.

#### Potential Bias

Question order effects. Krosnick and Presser (2010) contend that question order and context must be accounted for in order to minimize error. The two main factors impacting question order are seriation and semantics (Krosnick & Presser, 2010).

Seriation refers to the order in which items are presented to the respondent, and may impact responses by: "affecting motivation, promoting learning, and producing fatigue" (p. 47). Krosnick and Presser (2010) consider the likelihood that items presented at the beginning of a questionnaire may be more unreliable because respondents may not have warmed up to the topic or structure. Thus, most important and most sensitive items should be ordered at the end of the questionnaire. For this reason, I placed the question which was going to determine my extreme case sampling, *Would you recommend coaching to other teachers?* near the end of my questionnaire. One drawback to placing items of importance at the end of a questionnaire is the possibility of fatigue effects (Krosnick & Presser, 2010). Fatigue occurs when respondents are weary with the survey process itself, and therefore may not make diligent decisions (Krosnick & Presser, 2010). However, due to the concise nature of TEQ, fatigue was unlikely.

Semantics refers to the flow and grouping of topics that may influence respondents' understanding (Krosnick & Presser, 2010). The flow and grouping of items in TEQ has been purposeful to facilitate cognitive ease. Context may also affect responses: "When possible,

question context should be modeled on the context to which inference will be made" (Krosnick & Presser, 2010, p. 51). The goals of TEQ are to ascertain teacher perceptions, broadly and teacher preferences, specifically. Thus, "funneling" (p. 50) was to model the context from more general tenets of IC (perceptions) to more specific components of IC (preferences) (Krosnick & Presser, 2010).

**Response effects.** Ideally, participants in a questionnaire will respond in an unbiased and diligent manner, also known as "optimizing" (Krosnick & Presser, 2010, p. 5). However, there are many reasons why participants may be motivated to complete a questionnaire (Krosnick & Presser, 2010). The three main response effects that may impact responses to the TEQ questionnaire were: social positivity, satisficing, and memory effects.

In this study, one of the main response effects was likely social positivity, or, the motivation to support the individual conducting the study (Krosnick & Presser, 2010). In this case I was the researcher, and as previously mentioned, I had professional mentoring relationships with most, if not all, participants. Social positivity can lead to respondents possibly choosing the answer that they perceive most positive or beneficial to the perception of them by the researcher, or to enhancing the findings for the benefit of the researcher (Matlin & Stang, 1978). This was a likely response effect due to the small and collegial nature of IC at RCS, and especially if respondents moved through the questionnaire at a rapid pace (Hampson & Dawson, 1985). Thus, I understood the possibility that responses may be skewed more positively.

Satisficing was the second potential response effect worth noting. Satisficing is when a respondent makes minimal effort to understand the questions or answers, and chooses a response they perceive as adequate, rather than the one most appropriate to their beliefs (Krosnick &

Presser, 2010). Satisficing also occurs when respondents select any answer at random, with no concern given to rationale (Krosnick & Presser, 2010). When a respondent selects an answer arbitrarily, this is known as strong satisficing (Krosnick & Presser, 2010). Due to the fact that this study was conducted for program improvement, with participants' needs at the forefront, the hope was that respondents exhibited minimal satisficing. However, due to time limitations, and potential disinvestment from IC at RCS after several months away from the school, satisficing was a possible response effect.

Memory error was the third response effect worth considering as I implemented this study. According to Rossi et al. (2013), "Memory plays a very large role in determining the accuracy of respondent reporting" (p. 308). Logically, the amount of time between an event and the recall of the event impacts response accuracy (Rossi et al., 2013). However, participants may try to compensate for memory error by "telescoping," or attempting to balance their responses. Memory error may have come into play with my study for a couple of reasons. One, respondents who participated in IC may have participated in an early cycle at the beginning of the 2019-2020 school year, whereas others may have participated in a later cycle at the end of the 2019-2020 school year. In this case, the former may have more distant memories of IC, and thus omit details from their responses. They may also have tried to compensate for this time-lag by telescoping, and overreporting if they forgot their original perceptions. Two, due to the national COVID-19 pandemic, all participants spent extended time out of the traditional school setting of RCS, and thus out of the mentoring component of IC as it was originally designed. This gap in time may have caused memories to be altered, and realistically, other priorities may have surfaced that altered responses. I attempted to combat memory error by using supplementary

devices, as suggested by Rossi et al. (2013). All teachers who participated in IC received comprehensive observation notes and follow-up feedback notes during its implementation at RCS. I suggested that participants review these observation and feedback notes with teachers prior to sending the questionnaire, and allowed ample time for teachers to review them if they so chose.

# Quantitative Data Analysis

The purpose of this study was to understand teacher experience with the goal of improving IC at RCS and aligning IC with the adult learning needs of participants. Thus, data analysis of TEQ centered around describing teacher perceptions and teacher preferences. Using the Likert-scale style responses to Items 1-7, I used frequencies and descriptive statistics to describe the data, and understand the spread of responses. I then drew conclusions about teacher perceptions and teacher preferences with this information. Based upon the response to Item 8, *Would you recommend coaching to others?* I was going to determine an extreme case sample to comprise a nested sample of participants who I will invite to interview, to further understand "why and under what circumstances" teachers would recommend IC to others (Creamer, 2018, p. 109).

# **Qualitative Phase**

In the second phase of data collection, I utilized a semi-structured interview protocol (see Appendix G) to collect the qualitative data about teacher experience in order to gain a more comprehensive understanding of participants' experiences, from those who would and would not recommend IC. Interviews are a crucial component to understanding teacher experience, since they allow for teachers to express their experience in a less constrained manner than a

questionnaire. In keeping with adult learning theory, interviews invite the perspective of adults, and honor their needs by seeking to provide a space for reflection and discussion. Since adult learners are self-directed and have independent thought processes, they may wish to share more of their perceptions and preferences that could not be encapsulated quantitatively (Merriam, 2001). Furthermore, incorporating the option to participate in an interview helped to "develop the learner's capacity to be self-directed" in the process of improving opportunities for further professional learning in the form of IC (Merriam, 2001, p. 9). Self-directed learning requires adults to accept responsibility for their own learning, the opportunity for which was created by offering the option to participate in an interview. Education for adults must be regarded as "a lifelong process of continuing inquiry" defined by self-directed inquiry and self-directed learning opportunities (Knowles, 1980, p. 41; Merriam, 2001). This inquiry process is embodied by the reciprocal process of interviews.

Marshall and Rossman (2011) label the interview approach I used as topical or guided. In this type of interview, the researcher "explores a few general topics to help uncover the participant's views" while allowing the participants' responses to evolve naturally (Marshall & Rossman, 2011, p. 144). I chose a semi-structured, or guided, interview process because it honors a fundamental assumption of qualitative research: the participant's process and perspective are significant (Marshall & Rossman, 2011). Marshall and Rossman posit that an important component of "the interviewer's approach is conveying the attitude that the participant's views are valuable and useful" (p. 145). Semi-structured interviews provided an opportunity to convey this message, and enabled the participant's perspective to "unfold as the participant views it" (p. 144).

## Interview Development

I created an interview protocol based upon pertinent research (Gallucci et al., 2010; Hammond & Moore, 2018; Knowles, 1980; Kretlow & Bartholomew, 2010; NTC, 2019a) in order to address the qualitative research question, *How do teachers perceive their involvement in IC at RCS?* (See Appendix G for examples of the semi-structured interview questions). Hammond and Moore (2018) and Kretlow and Bartholomew (2010) examined teacher perceptions and teacher preferences as components of larger studies about IC. Since this proposed study focuses on teacher experience, the interview protocol I developed targeted this area specifically.

Question 1 of my interview protocol was an exhibit and opinion question that asked participants *How would you describe your overall experience with the one on one instructional coaching that you have received at Readiness Charter this year?* This question aimed to address teacher perceptions broadly, similar to Kretlow and Bartholomew (2010). The follow up questions, *Have there been any aspects of instructional coaching that you found to be positive?* Are there aspects you would have liked to change, or found to be negative? Are there any moments or experiences that you recall during instructional coaching that stand out to you? If so, can you walk me through one of these moments? aimed to elicit more about the specific variable components about IC that teachers may have found more or less helpful (Kretlow & Bartholomew, 2010).

Question 2 was an information question that asked *Has instructional coaching impacted* your personal and/or professional development this school year?, and related to the perceived outcomes of participating in IC that teachers may have experienced (Hammond & Moore, 2018;

Gallucci et al., 2010). The follow up questions, *If so, can you elaborate on how it has impacted you?* and *Were there any aspects of coaching notes, or meetings that stick out to you as more or less impactful?* served to draw out the individual experiences with IC that teachers recalled, in order to understand the practical aspects of IC that may be worth replicating or reducing in future IC programming. This question was another way of ascertaining teacher preferences (Kretlow & Bartholomew, 2010; Hammond & Moore, 2018).

Question 3 was a feelings question that asked participants *How, if at all, has instructional coaching impacted your feelings about teaching, or being a member of the RCS community?*This question was included with the intention of engaging the participant in more depth about their personal experience with IC, and related to the feelings about buy-in and connectedness to the school community (NTC, 2019a).

Question 4 was an experience question that asked *Have you experienced any challenges* while participating in instructional coaching? in order to understand what barriers to successful IC may have existed at RCS, and the follow up question sought to understand whether IC was useful in resolving this issue, or contributed to the challenge, *If so, can you elaborate on these* challenges, and explain the role of instructional coaching in either helping to resolve them or in making them worse? This question was also designed to elicit the aspects of IC that teachers may not have found favorable, and to understand in greater depth the components of IC that may have needed to be addressed with more empathy (Hammond & Moore, 2018).

Question 5 was an opinion question that helped me to understand the perceived efficacy of IC by teachers at a school-wide level: What *impact do you believe instructional coaching may* 

have on Readiness Charter now and in the future? This question also served as an opportunity to understand the perceived role of IC in RCS more holistically as an institution.

Question 6 was both an opinion and hypothetical question that asked participants, How would you recommend improving instructional coaching at Readiness Charter for next year?

This was a critical question that reflected adult learning theory, by enabling teachers' voices to be central to the process of change and improvement of IC at RCS, the responses to which may inform program improvement.

Questions 7 offered participants the opportunity to add anything else they might have liked to share about their experience, as memories and opinions may have surfaced over the course of the interview: *Is there anything else you would like to share with me about your experience with instructional coaching at Readiness Charter?* 

#### Administration

Participants took and submitted the questionnaire via email, indicating their willingness to participate in an interview. Based upon the response to Item 8 of TEQ, *Would you recommend coaching to others?* I intended to develop my extreme case sample and invite these individuals for a follow-up interview via email. The duration of each interview was approximately 30 minutes. In order to maintain confidentiality, I used pseudonyms in my final transcript, and omitted all participant names from transcripts and notes. The interviews took place via the Zoom™ platform, or via phone call, due to social distancing guidelines during COVID-19.

At the beginning of each interview, Ireviewed the informed consent, and verified that participants were willful. I will also reminded participants that they could decide to withdraw

from participation in the study at any time, and I indicated that this choice had no bearing on their professional status.

Interviews were recorded using either the Rev Recorder<sup>™</sup> on my personal cell phone, or video and audio will be recorded by Zoom<sup>™</sup> and subsequently transcribed by Rev (rev.com., n.d.). These files were sent via email, stored on my password-protected, personal computer, and saved under the participants' pseudonyms and the date of interview.

**Transcription.** All interviews were transcribed using the transcription service, Rev. Rev utilises professional transcriptionists for all interviews to ensure quality and accuracy of transcriptions (rev.com, n.d.). Rev's professional transcriptionists are trained in confidentiality, and have signed both nondisclosure and confidentiality agreements (rev.com, n.d.). Rev is preferable to an automated transcription service since the transcriptionists are assessed for quality prior to hire, and all interviews are encrypted (rev.com, n.d.).

After receiving the transcriptions, I saved each one as a Google doc on my password-protected computer and subsequently reviewed all interview transcripts for accuracy. I deleted any identifiable information from the transcripts, and replaced names with pseudonyms to ensure confidentiality. Then, I wrote a summary of the main points in each interview for participants to review. All interview summaries were member-checked for accuracy, and to confirm responses (Stake, 2010). I invited participants to add to, correct, or delete their responses during the member check process.

#### **Credibility Measures**

Patton (2002) describes the importance of credibility for reporting findings based upon the "fundamental appreciation of naturalistic inquiry, qualitative methods, inductive analysis, purposeful sampling, and holistic thinking" (p. 552-553). Marshall and Rossman (2011) offer eight strategies to achieve credibility. During the course of this study, I implemented several of these credibility measures, which are outlined below.

First, trustworthiness was achieved through the triangulation of multiple data sources, in this case, questionnaire responses and interview responses (Marshall & Rossman, 2011). Triangulation increases the confidence in evidence via member checks and peer-review (Stake, 2010). Second, I engaged in reflexivity by being forthright with readers and participants—from the inception of the study—about my position as the instructional coach and researcher in order to highlight potential conflict (Marshall & Rossman, 2011). Third, member checking was used after each interview so that participants could review and confirm the accuracy of transcripts/observations (Marshall & Rossman, 2011). Member checks helped me to "seek accuracy... possible insensitivity, and new meanings" in the data (Stake, 2010, p. 126). Fourth, prolonged engagement in the field was achieved by nature of my role as instructional coach in the setting. I spent nearly nine months conducting a pilot IC program, and ten months conducting IC at RCS. During this time, I grew familiar with the participants, developed rapport, and increased the likelihood of participation and honesty for both data collection measures. Fifth, I employed rich, thick descriptions by describing the problem, setting, and participants in clear and descriptive detail. Finally, collaboration was attained through peer-review (Stake, 2010). As Stake, 2010 posits, "multiple eyes is one of the most important triangulations" (p. 127). That being the case, I sought the perspectives of my doctoral colleagues in order to provide either confirmation, or differing views with the purpose of added depth of awareness (Stake, 2010).

## Qualitative Data Analysis

Based upon interview transcripts, I first used line-by-line and open coding to create "conceptual categories" and organize the qualitative data first by the interview questions, and then by category (Marshall & Rossman, 2011). Following this process, I utilised axial coding by grouping the initial categories I created, based upon their shared characteristics (Marshall & Rossman, 2011).

The initial process of line by line coding involved immersing myself in the data by examining each interview transcript separately, and highlighting words and phrases that stuck out as relevant to teacher involvement in IC. In order to organize these words and phrases, I generated and sorted them into categories based upon the interview question being asked, and additional categories if the words and phrases did not fit within the question being asked. The categories I initially sorted these words and phrases into included: (a) Positives about IC, (b) Challenges of Participating in IC, (c) Areas of Growth/Suggestions for IC, (d) Teaching Challenges, (e) Impact on Personal Development, (f) Impact on Professional Development, (g) Impact on students, (h) Personal Feelings/Emotions, (i) Changes, (j) Feelings about the community of RCS, and (k) High Impact Items. These categories arose naturally from the interview questions, but did not encompass the range of conceptual categories created by using open-coding. Rather, they served as organizational categories for the original 198 codes generated via line-by-line coding. The 198 codes generated from line-by-line and open-coding ranged from one word take-aways to full phrases. Some codes were exact quotes of teacher responses, while others were one or two words to encompass a sentiment being expressed in long-winded or indirect ways.

As Stake (2010) states, "...code categories are progressively focused, changing as the research question takes on new meaning and as the fieldwork turns up new stories and relationships." Because of the progressive focusing of code categories in the process of understanding teacher responses, some codes needed to be re-coded and reclassified. Thus, the second step in the process of coding interview responses was to examine the 198 codes generated, and the initial sorting categories, and shift these codes into more appropriate and representational categories. I did this by grouping the codes that shared similar characteristics within each interview question category. Then, I grouped these clusters into categories that more accurately represented their meaning. In some cases, the overarching categories of the interview questions aligned with the clusters, and in other cases, new categories were created to better encompass their meaning and sentiment. Patterns emerged through the organization and categorization of data that related to both the qualitative research question, and to salient research about IC.

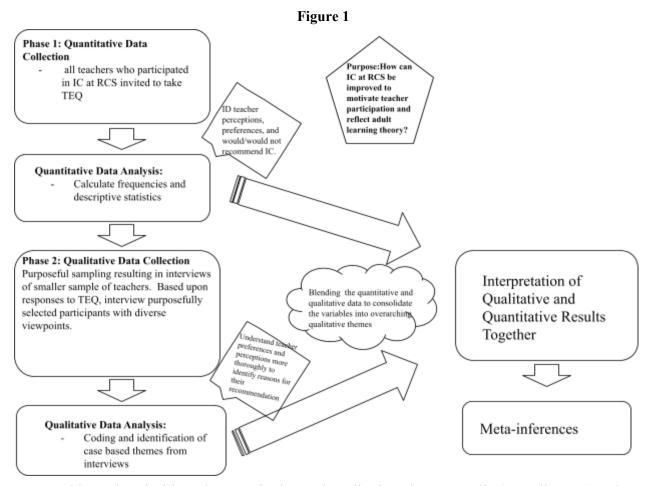
Next, I used axial coding by grouping the initial categories I created, based upon their shared characteristics (Marshall & Rossman, 2011). Open, line by line, and axial-coding are appropriate data analysis strategies given my data collection methods because they allow for blending the types of data, thus creating overarching categories about teacher experience (Creamer, 2018; Marshall & Rossman, 2011). I took a step by step approach to data collection, using the "logic of replication" to reproduce the same procedures for each case (Creswell, 2006, p. 74). Utilizing the data I have collected through both quantitative and qualitative methods, I will develop case-based themes to illuminate the various teacher perspectives (Creswell, 2006).

## **Mixed Data Analysis**

Next, I used the analytical procedure of blending the quantitative and qualitative data to consolidate the variables, which means "a variable, category, or factor is created by combining qualitative and quantitative data" (Creamer, 2018, p. 104). Blending allows the researcher to "explore differences between groups." Finally, I constructed meta-inferences by interpreting the results of my findings in order to conceptualize the conclusions in broader, more explanatory terms, in which the quantitative and qualitative outcomes are linked (Creamer, 2018). All of this information systematically informed the composite descriptions of teachers' experience with IC, and answered the aforementioned, broader mixed method research questions (Creswell, 2006).

#### Levels of Integration

Methodological integration was thoughtfully considered and carried out throughout this study (see Figure 1). Creamer (2018) describes priority, timing, and mixing as key features of a mixed method study. In a mixed methods, sequential explanatory study, the "primary focus is to explain quantitative results by exploring certain results in more detail or helping explain unexpected results (e.g., using follow-up interviews to better understand the results of a quantitative study)" (Terrell, 2012, p. 262).



This study prioritizes the quantitative and qualitative phases equally (Terrell, 2012). The sequential timing of data collection reflects that of an explanatory study (Terrell, 2012). During the first phase, quantitative data will be collected using a researcher created questionnaire, the Teacher Experience Questionnaire (TEQ). Based upon the quantitative results, purposive sampling was used to purposefully select a sample of participants with varying perceptions of IC, based upon salient responses to the questionnaire. During the second phase, in-depth interviews wereused to glean deeper insight into teachers' diverse perspectives, and more holistically answer the research questions: *How do teachers perceive their involvement in IC at RCS?* and *What is teacher experience of IC at RCS?* 

Complementarity and enhancement of responses mean that the questions being asked were answered through quantitative and qualitative means, and that the answers of each were triangulated. But more importantly, they were answered in more full and robust ways than either method alone could afford (Creamer, 2018).

#### Limitations

Marshall and Rossman (2011) state that "all proposed research projects have limitations; none is perfectly designed" (p. 76). The main limitation of this study was my role as the researcher, and professional colleague of the participants. Because I served as the instructional coach at RCS, there may have existed a perceived conflict of interest. Thus, I took measures to be aware of my dual roles and potential influence. These measures included: (a) briefly describing the purpose and goals of this study to participants via email and Zoom meetings prior to their participation, (b) communicating to participants that the choice to participate in this study is voluntary, (c) directing their inquiries to my Arcadia University email account, so that my role as the researcher is clear and not indirectly connected to my RCS account (d) Clarifying what safeguards were in place for confidentiality (i.e., the use of pseudonyms, scrubbing transcripts of identifying markers, and having all data collection sent directly to my Arcadia University account, (e) using reflexivity to describe my role as the researcher and doctoral student.

#### **Consent and Confidentiality**

Prior to conducting my study, I submitted all related documents to the Institutional Review Board at Arcadia University, in order to obtain approval.

# **Summary**

The purpose of this proposed mixed methods, sequential explanatory case study is to understand teacher experience at RCS in order to improve IC based upon feedback from the stakeholders themselves. By conducting this study, and using the results to inform future IC at RCS, I aim to demonstrate to teachers that their perceptions, preferences, and experience with IC are important and actionable, so that they may feel motivated to participate in IC that reflects the principles of adult learning theory. In this chapter, I have described the mixed methods approach I propose to employ, the setting and participants, and the rationale for conducting this case study. I have also outlined the data collection procedures I used, and the steps I took to ensure confidentiality of participants.

#### **Chapter V- Data Analysis and Results**

Instructional coaching (IC) is a strand of Professional Development (PD) involving individualized support for teachers, within the context of the school environment. Whereas traditional PD relies heavily upon the use of group-style, one-off lectures, IC focuses on one-on-one support in the form of goal-setting, observations, reflection, and discussion between a teacher and an instructional coach. Research indicates that IC can be effective for instruction and achievement when certain potentially influential factors are taken into account, and when instructional coaches make specific autonomous professional and interpersonal decisions and actions within their practice (Kraft et al., 2018; REL West, 2019).

Although there is an abundance of reliable research on the effectiveness of IC for instruction (Blazar & Kraft, 2015; Kraft & Papay, 2014; Kraft et al., 2018; Kretlow & Bartholomew, 2010; Slavin, 2013), few rigorous studies focus on teacher experience. The purpose of this mixed methods study was to understand teacher experience with IC at Readiness Charter High School (RCS) by identifying the various operational components of IC that teachers preferred and their overall feelings about IC including: topics discussed, relationships with instructional coaches, its impact on instruction, and emotions such as confidence (Hammond & Moore, 2018; Yopp & Burroughs, 2010a). Understanding teacher experience is valuable in order to develop future IC programming that reflects the principles of adult learning theory, and encourages teacher participation.

In this chapter I will present the results of this mixed method study. First, I will reiterate the research questions I set out to investigate. Then, I will elaborate on the data collection methods, participants, and response rates from the quantitative and qualitative phases.

Following this, I will present the results and analysis of the quantitative and qualitative phases of this study.

### **Research Questions**

The quantitative research question guiding this study is:

- What is teachers' perceived impact of IC at RCS?

The qualitative research question guiding this study is:

- How do teachers perceive their involvement in IC at RCS?

The mixed methods research question guiding this study is:

- What is teacher experience of IC at RCS?

#### **Quantitative Methods**

Survey methodology was used to understand teacher's perceived impact of IC at RCS.

All RCS teachers who participated in IC during the 2019-2020 school year were invited to take part in a survey about their experience.

### Survey

For the purposes of this study, I distributed a researcher-created, online survey to all participants, entitled the Teacher Experience Questionnaire (TEQ). The online format was selected to allow participants to complete the survey at their convenience, from whichever location they preferred, and at a time that worked best for them. This was particularly important during the months that the survey was active, during the COVID-19 pandemic. Additionally, providing an online platform ensured that participants were able to complete the survey without undue pressure from the school environment, where IC typically takes place.

TEQ was emailed to all teachers who participated in IC during the 2019-2020 school year. The purpose of this study is to understand teacher experience with the goal of improving IC at RCS and aligning IC with the adult learning needs of participants. Thus, TEQ was designed to elicit responses that described teacher perceptions and teacher preferences of IC. In this section, I will present the data from TEQ. Based upon the responses to Items 1-8, I will use frequencies and descriptive statistics to describe the data, and understand and explain the spread of responses. In addition to Items 1-8, I will use the open-response questions (Items 9-11) to further illuminate teacher perceptions and preferences.

## **Participants**

All teachers who participated in IC at RCS were invited to participate in this study. Twenty-one teachers were invited to take the survey. The group of invited participants consisted of: four each of history and science teachers, three each of Spanish, Specials, and English teachers, and two each of Math and Special Services teachers. Participants represented a range of experience from first year to veteran teachers. Of the 21 invited participants, five had only ever served as full-time teachers at RCS, ten had participated in IC for three or more cycles during the 2019-2020 school year, and eleven had participated in at least one IC cycle.

## Response Rate

Overall response rate. A total of 21 teachers at RCS were invited to complete TEQ. Of the 21 total teachers, 15 completed the consent form and responded to at least one item of the TEQ. Of the 15 respondents, ten (66%) responded to all items, including the open response questions.

Individual response rate. Response rates for Items 1-11 are displayed in Table 4. Individual item response rates ranged from 53% (Item 11) to 100% (Items 1-8), with one item yielding a response rate of 93% (Item 10). This may be due to the lengthier open-response style of Items 9-11, compared to the Likert-Style and choice-selection style of Items 1-8. Item 10 asked for recommendations for improving group-style PD, including PLCs. Teachers responded with more recommendations on this topic than they did for either improving IC at RCS (Item 9) or for noting any additional comments about their experience with IC (Item 11).

Table 4

Items 1-11 Response Rates

Item#	То	otal	Mis	sing
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
1	15	100	0	0
2	15	100	0	0
3	15	100	0	0
4	15	100	0	0
5	15	100	0	0
6	15	100	0	0
7	15	100	0	0
8	15	100	0	0
9	9	60	6	40
10	11	73	4	27
11	8	53	7	47

### **Quantitative Results**

## Item 1 Results (Teacher Experience)

Item 1 of TEQ asked *How do the following describe your experience with coaching?* which aims to yield responses about overall teacher experience with IC, before delving into the

various operational components. Respondents selected a value from one to five on a Likert scale, with one meaning "not at all" and five meaning "to a great extent." Responses for each of the categories within Item 1 are displayed in Table 5.

Table 5

Item 1 Response Frequencies

Item #	1			2		3		4		5	Total
	<u>N</u>	<u>%</u>									
1.1 - I feel comfortable communicating with my coach.	0	0.0	0	0.0	0	0.0	0	0.0	15	100	15
1.2 - My coach respects my opinions.	0	0.0	0	0.0	0	0.0	0	0.0	15	100	15
1.3 - My coach understands my situation and the challenges I face.	0	0.0	0	0.0	0	0.0	5	33	10	67	15
1.4 - I feel comfortable with my coach's reflecting on my teaching practices.	0	0.0	0	0.0	0	0.0	1	6.7	14	93	15
1.5 - I value my coach's input.	0	0.0	0	0.0	0	0.0	0	0.0	15	100	15
1.6 - My experience with coaching was worth my time.	0	0.0	0	0.0	0	0.0	0	0.0	15	100	15

As seen in Table 5, one hundred percent of respondents (n = 15) chose five, "to a great extent" for four of the six response options: *I felt comfortable communicating with my coach, my coach respects my opinions, I value my coach's input, and my experience with coaching was worth my time*. This indicates a strong positive overall experience with IC. The response option with the least vehemently positive response rate was Item 1.3, "my coach understands my situation and the challenges I face," however, 67% of respondents (n = 10) still selected five "to a great extent" and the remaining 33% (n = 5) chose four.

# Item 2 Results (Scope of Work)

Item 2 of TEQ asked teachers to reflect on discussions they had with their coach about: rigor, student participation, classroom environment, student understanding, questioning strategies, objectives and goal-setting, reflecting on student learning, and reflecting on teaching. This item was intended to yield teacher perceptions of the scope of work completed with their instructional coach, in order to compose a holistic picture of the IC program offerings at RCS, and provide a basis for teacher experience. Participants selected as many options that applied to their experience. Table 6 shows the categories and choice count for each in Item 2. Figure 2 displays these choice counts visually for ease of comparison.

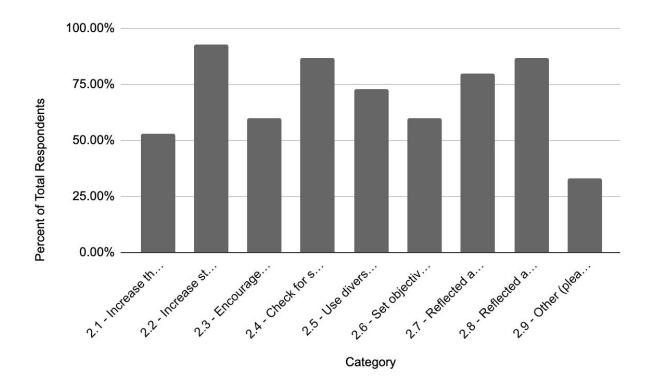
Table 6

Item 2 Response Frequencies (Choice Count)

Item #	Category	Choice Count	Percent Selected
2.1	Increase the level of rigor in my classroom.	8	53
2.2	Increase student participation.	14	93
2.3	Encourage a respectful classroom environment.	9	60
2.4	Check for student understanding.	13	87
2.5	Use diverse questioning strategies	11	73
2.6	Set objectives or instructional goals	9	60
2.7	Reflected about student learning	12	80
2.8	Reflected about my teaching practice	13	87
2.9	Other (please specify)	5	33

Figure 2

Percent of Responses per Category for Item 2



As seen in Figure 2, ninety-three percent of respondents (n = 14) discussed increasing student participation with their instructional coach. Eighty-seven percent (n = 13) discussed checking for understanding, and reflected on their teaching practice with the instructional coach. Eighty percent (n = 12) reflected on student learning, and seventy-three percent (n = 11) discussed using diverse questioning strategies (i.e., higher-order thinking, wait time, cold-calling, etc.). Sixty percent (n = 9) discussed encouraging a respectful classroom environment, and setting instructional goals or objectives together with their instructional coach. Approximately half of respondents (n = 8), or 53%, stated that they discussed increasing the level of rigor in their classrooms. Thirty-three percent of respondents indicated that they discussed additional

items with their instructional coach (e.g., organizing and planning materials, data-driven instruction, classroom environment, project-based learning, and streamlining systems and practices).

Based upon these responses to Item 2, the priority for collaboration between teachers and the instructional coach was engaging students through increasing participation, ensuring students understood the material, and adjusting instruction by reflecting on teaching and student learning. Increasing the rigor, and using higher-level instructional strategies were not as high of a priority, suggesting that teachers' goals for IC were primarily to get a strong base for classroom instruction and learning, rather than pushing academic rigor.

## Item 3 Results (Emotional Impact)

Item 3 asked teachers to rate, on a scale of one (no impact) to five (most impact), the perceived impact of IC on six emotional aspects of their teaching practice (e.g., comfort in the school setting, willingness to participate in discussions about instruction and achievement, sense of community with other teachers, level of comfort sharing ideas about teaching with other teachers, level of comfort sharing ideas about teaching with administration, and level of comfort managing a classroom environment). Table 7 displays the frequencies for the impact of IC on each emotional component.

As illustrated in Table 7, more respondents found that IC had the greatest perceived emotional impact on managing a classroom environment. Forty-seven percent (n = 7) of respondents selected "most impact" for this option. Similarly, forty percent (n = 6) of respondents selected "most impact" for teacher willingness to participate in discussions about instruction and student achievement. Despite the positive response rates to these options, they

were also two of the three emotional aspects that respondents selected as least impactful, with thirteen percent (n = 2) selecting "no impact." The second tier of aspects where IC had the most emotional impact were: level of comfort sharing ideas about teaching with other teachers, level of comfort sharing ideas about teaching with administration, and comfort in the school setting.

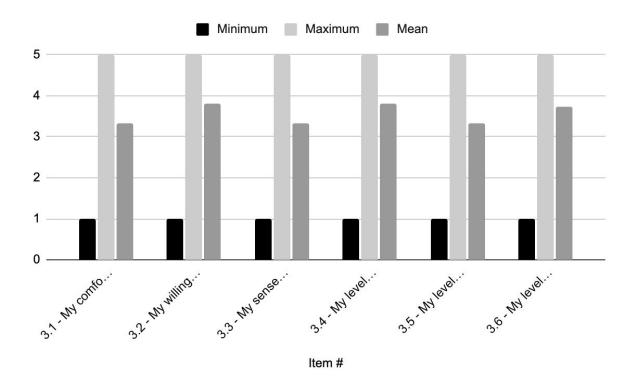
Table 8 shows that the mean impact across all response options for Item 3 ranged from 3.3 to 3.8, indicating that no option was particularly more or less impactful than the others overall, but that all were somewhat impactful. The range of responses for Item 3 was wider than for Item 1, which used a similar Likert scale to assess overall experience, suggesting that overall experience may have been overarchingly positive, but the emotional impact of IC wasn't necessarily the reason why. The arithmetic mean for Item 1 was 4.9 whereas the arithmetic mean for Item 3 was 3.6.

**Table 7**Item 3 Response Frequencies

Item #		1		2		3	4	4	:	5	Total
	<u>N</u>	<u>%</u>	N	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	
3.1 - Comfort in the school setting	2	13	1	6.7	4	27	6	40	2	13	15
3.2 - Discuss instruction and achievement	2	13	0	0.0	3	20	4	27	6	40	15
3.3 - Sense of community with other teachers	1	6.7	1	6.7	7	47	4	27	2	13	15
3.4 - Sharing ideas about teaching with other teachers	1	6.7	0	0.0	3	20	8	53	3	20	15
3.5 - Sharing ideas about teaching with administration	1	6.7	1	6.7	6	40	6	40	1	6.7	15
3.6 - Managing a classroom environment	2	13	0	0.0	5	33	1	6.7	7	47	15

Table 8

Item 3 Minimum, Maximum, and Mean



## Item 4 Results (Usefulness of Feedback)

Item 4 asked respondents to rank seven aspects of IC feedback from 1 (most useful) to 7 (least useful). The seven aspects of IC feedback were: lesson plan feedback, detailed observation notes, specific observation suggestions (bullet points and take away points [TAPs]), in-person meetings (classroom and coaches' office), weekly shout-out emails, emailed resources and other information, and virtual check-ins (i.e., via phone call, Google hangouts, or text). Table 9 illustrates the item response ranking frequencies for each type of feedback.

 Table 9

 Item 4 Response Frequencies (Feedback Rankings)

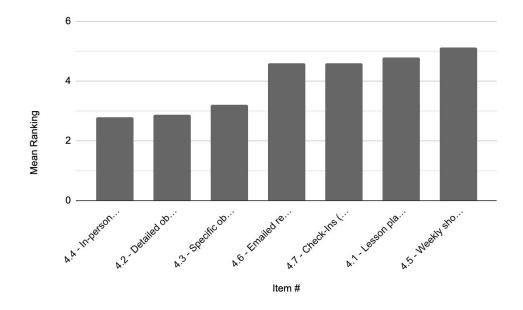
Item #	1			2		3		4		5		6		7	Total
	N	<u>%</u>	<u>N</u>	<u>%</u>											
4.1 - Lesson plan feedback	1	6.7	1	6.7	1	6.7	4	27	3	20	0	0.0	5	33	15
4.2 - Detailed observation notes	6	40	1	6.7	4	27	1	6.7	0	0.0	2	13	1	6.7	15
4.3 - Specific observation suggestions	3	20	4	27	3	20	1	6.7	1	6.7	2	13	1	6.7	15
4.4 - In-person meetings	3	20	4	27	5	33	1	6.7	0	0.0	2	13	0	0.0	15
4.5 - Weekly shout-out emails	1	6.7	1	6.7	0	0.0	3	20	2	13	4	27	4	27	15
4.6 - Emailed resources	0	0.0	3	20.0	0	0.0	2	13	6	40	3	20	1	6.7	15

being the most useful and seven being the least useful), the three most impactful forms of feedback were: in-person meetings ( $\bar{x}=2.8$ ), detailed observation notes ( $\bar{x}=2.87$ ), and specific observation suggestions ( $\bar{x}=3.2$ ). The least impactful forms of feedback were: emailed resources and other information ( $\bar{x}=4.6$ ), virtual check-Ins ( $\bar{x}=4.6$ ), lesson plan feedback ( $\bar{x}=4.8$ ), and weekly shout-out emails ( $\bar{x}=5.1$ ). Each of the most useful forms of feedback rely heavily on in-person one on one interactions, whereas the less useful forms of feedback involve more virtual connections.

Based upon the mean ranking for each type of feedback, as seen in Figure 3, (with one

Figure 3

Average Usefulness of Types of IC Feedback



Item 5 Results (Nature of the Instructional Coach)

Item 5 of TEQ asked participants about the nature of the instructional coach. This topic was chosen based upon salient literature related to teacher experience (Hammond & Moore, 2018). Six specific traits were rated from 1 (no impact) to 5 (most impact): positive nature, willingness to collaborate, level of empathy, ability to listen, ability to ask thoughtful questions, and provision of feedback. A seventh option, "other" was offered, in case participants found additional traits of the instructional coach to be helpful.

Of the seven response options, the two most impactful, based upon the greatest number of response frequencies, were the instructional coach's positive nature and ability to listen, with sixty-seven percent of respondents selecting "most impact" (n = 10). These were followed closely by: willingness to collaborate, ability to ask thoughtful questions, and provision of

feedback, with sixty-percent of respondents selecting "most impact" (n = 9) for each of these categories. See Table 10 for a full breakdown of all response frequencies.

Table 10

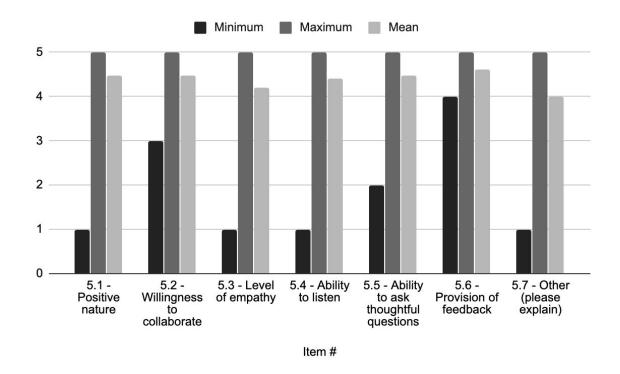
Item 5 Response Frequencies

Item#		1		2		3		4		5	Total
	<u>N</u>	<u>%</u>									
5.1 - Positive nature	1	6.7	0	0.0	0	0.0	4	27	10	67	15
5.2 - Willingness to collaborate	0	0.0	0	0.0	2	13	4	27	9	60	15
5.3 - Level of empathy	1	6.7	0	0.0	2	13	4	27	8	53	15
5.4 - Ability to listen	1	6.7	0	0.0	1	6.7	3	20	10	67	15
5.5 - Ability to ask thoughtful questions	0	0.0	1	6.7	0	0.0	5	33	9	60	15
5.6 - Provision of feedback	0	0.0	0	0.0	0	0.0	6	40	9	60	15
5.7 - Other (please explain)	2	25	0	0.0	0	0.0	0	0.0	6	75	8

The mean for all response options ranged from 4.2 to 4.6, indicating that all of the characteristics listed were considered impactful overall. Figure 4 illustrates the minimum, maximum, and mean rating for each characteristic, and Figure 5 illustrates the median rating for each characteristic. The response option "other" was selected by eight respondents, and yielded five unique characteristics, with the remaining three indicating "n/a." The five additional characteristics that respondents rated "most useful" were: consistency of support, enthusiasm, encouraging nature, knowledge of pedagogy, and willingness to meet at almost any time.

Figure 4

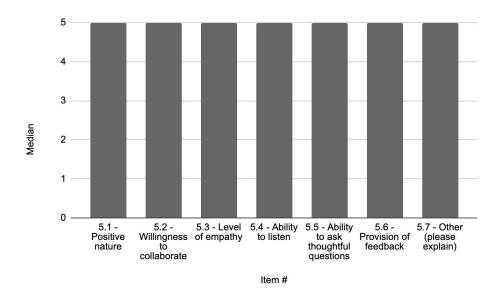
Minimum, Maximum, Mean for Coach Characteristics



Despite the great variance between the minimum and maximum ratings for the characteristics of the instructional coach, the median rating demonstrates that each of these characteristics rated highly across responses, indicating that very few individuals rated any of the characteristics as not impactful.

Figure 5

Median Rating for Coach Characteristics



#### Item 6 and Item 7 Results (Motivation to Improve Instruction and Achievement)

Item 6 asked respondents to rate their motivation to improve their own instruction. Item 7 asked respondents to rate their motivation to improve student achievement. Motivation to improve is a main factor that Hammond and Moore (2018) indicated leads to successful IC. Adult learning theory is predicated on the idea that adults are intrinsically, not extrinsically, motivated to learn—one of the principle reasons for understanding teacher preferences and teacher perceptions (Merriam, 2001).

All respondents indicated that they are motivated to improve instruction and achievement, likely one of the reasons they selected to participate in IC in the first place—their intrinsic motivation to learn. Both item responses are shown in Table 11. Ninety-three percent of respondents (n = 14) indicated that they were highly motivated to improve both instruction and achievement, equally. Seven percent of respondents (N = 1) indicated that they were also

motivated to improve both instruction and achievement, but to a lesser extent. There were no noteworthy differences in responses to any other survey items between the individual who rated themselves a four in terms of motivation, and those who rated themselves a five.

 Table 11

 Item 6 and 7 Ratings (Motivation to Improve Instruction and Achievement)

	Instru	action	Achievement		
Rating	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	
1	0	0.0	0	0.0	
2	0	0.0	0	0.0	
3	0	0.0	0	0.0	
4	1	7.0	1	7.0	
5	14	93	14	93	
Total	15	100	15	100	

## Item 8 Results (Teacher Recommendation of IC)

Item 8 asks whether the participant would recommend IC to others. All respondents indicated that they would recommend IC to others. This question was intended to determine an extreme case sample to create a nested sample of participants to invite to participate in an interview, to further understand "why and under what circumstances" teachers would recommend IC to others (Creamer, 2018, p. 109). However, since all respondents indicated that they would recommend IC, an extreme case sample was no longer possible. Instead, open-response answers were used to determine whom to invite to participate in an interview. Responses that were particularly useful for improvement, noteworthy in their vehemence, or descriptive about why their experience was positive were used to determine the interview invitations.

Responses to Items 9, 10, and 11 (Suggestions for Improvement and Additional Feedback)

Item 9 asked respondents if they had any suggestions for improving IC at RCS, in order to provide respondents with the opportunity to share their recommendations. The most common suggestion for improving IC at RCS was to make it a "requirement," specifically, that it be "mandatory for both new teachers and teachers [on improvement plans]." Relevant literature indicates that IC should be voluntary for teachers, so that they only participate if they choose to, and possess the intrinsic motivation to improve (Borman et al., 2006; Knight, 2004; New Teacher Center [NTC], 2019b). However, these comments align with a second participant suggestion, that teachers who do not want to be "part of the solution" to improving academics at RCS are "part of the problem mentality." This same respondent suggested that "we need... a culture of positivity shift." Perhaps, the individuals who suggested that IC become mandatory also feel that those who are "part of the problem" could be impacted to be "part of the solution" by participating in IC. This theme will be revisited in the qualitative analysis.

Four comments in the "suggestions for improving IC" section were directly related to school-wide changes that teachers would like to see coming from RCS administrators. One suggested that formal evaluations should be conducted with differentiated rubrics, depending on a teacher's specific classes. This respondent felt that he might be improving on classroom management in one class, but that the class he is evaluated on could be one where his focus for IC was instruction, and therefore his growth in this target area is not noted in the observation. Along with this suggestion, another respondent suggested that different subject areas should have varying, or differentiated lesson plan formats. However, a third respondent preferred that administrators provide more uniform templates for teachers, in contrast to the first two respondents' suggestions. The fourth suggestion relates to time and accessibility; the respondent

indicated that administration needs to allot teachers more time in the form of prep periods during their daily schedules. Since each teacher's prep time varies, it is possible that this teacher had a very busy schedule that made IC more of a challenge to fit in.

One suggestion for improving IC was to focus less on classroom management, and to focus more on "engaging... fun lessons." The final suggestion was more of a comment about the usefulness of the instructional coach, "[My coach] made herself as available as she could to all teachers and encouraged us to use her as a continued resource for us, even after our six-week coaching cycle was complete. I couldn't have asked for a more supportive, resourceful, and dedicated coach."

Item 10 asked participants if they have any recommendations for improving traditional PD or PLCs at RCS. This question yielded the most responses of the open-ended questions, potentially because the focus of the rest of the survey was on individual IC and not PLCs, and so this question offered a platform for opinions yet unevaluated. Five respondents indicated that PLCs were not very collaborative because their PLC member teachers either: did not show up to meetings, were uncooperative "my cooperating teacher did not want to collaborate," were insufficient in number "I am often alone with regards to collaboration within my school," or were unavailable. A fifth respondent offered a potential solution to these concerns, stating a need for "more administrative oversight and check-ins."

A suggestion for traditional PD was to put more of an emphasis on social justice issues and conversations about racial bias and inequity:

Our staff needs more opportunities to learn and collaborate about social issues that plague our staff, our students, and the communities both groups have inside and outside [RCS's]

walls. Most obvious in my mind right now is the need for education, resources, and opportunities for open discussion on how to be actively anti-racist and how to promote our classrooms (and staff spaces) as safe, anti-racist spaces. While I think we have had great PDs and PLCs concerning academically-focused teaching practices, which is completely necessary and has been extremely beneficial for us, we also desperately need to learn how to be advocates and defenders of ourselves, our staff, and our students. In my opinion, it's about time we cut out some PD time to cover important social topics like this because they impact the engagement of our students and staff at [RCS] just as much as academic-based teaching strategies do.

It is important to disclose that this study was conducted during a time period in United States history when the issues of equity, race, and social justice were becoming nationally and globally prominent. In the wake of ongoing, escalated, and extreme police violence towards Black Americans, citizens across the nation, and notably in the urban area where this study took place, took part in protests and more critical conversations about race and equity. This response aligns with the efforts being made by the instructional coach and several teachers at RCS to bring in more experts in the field of social justice, a goal which has been previously seen as peripheral by school administration. During the course of this study, a Black Lives Matter event was planned and held for students at RCS by the instructional coach and several teachers. The event was not supported by school administration, though later touted as a responsive effort when Black families at RCS questioned how the school planned to support its minority students. The participant response above reflects the importance of these issues at RCS in the eyes of teachers.

Item 11 offered respondents the opportunity to add any additional thoughts about their experience with IC. All of the responses to this open-ended question (n = 8) were positive, and indicate a desire to continue the IC program at RCS. One respondent stated, "It was a positive experience that made my first year as a teacher go more smoothly that it probably would have" which another teacher echoed saying IC was "an extremely helpful and positive experience." Another drew upon her continuing educational assignments as aligning with the process and outcomes of IC. One teacher acknowledged that IC, "Absolutely saved my confidence and solidified my career choice. Having the regular feedback provided in a collaborative, and respectful, manner is huge for improvement." One teacher praised the instructional coach's "thoughtful ideas and helpful tactics," especially the "immediate feedback and suggestions that have helped me progress in the classroom for the better!" A veteran teacher was pleased by the instructional coach's patience and understanding. Finally, another teacher gave a longer narrative response about her experience, that paints a picture of her experience with IC at RCS:

When I heard that I would be one of the first to experience coaching, I was both eager to receive crucial feedback so early in my teaching career and fearful of facing my inadequacies and the mistakes I commonly make in the classroom. [My coach] put all my fears aside. She inspired an enthusiasm for improving my management practices that I did not originally have. [Her] feedback was clear and easy to understand and implement. There were even times I could read her feedback during one block, and immediately apply her suggestions in the next block and reap positive results. [She] was never judgmental about my insecurities in the classroom and always offered an empathetic and

listening ear. Because of the instructional coaching I received, I feel much more confident

in my abilities to calmly manage my students, engage them in dynamic assignments, and try new strategies with the ability to reflect on them constructively. I am glad every teacher has the ability to request instructional coaching.

#### **Qualitative Methods**

Interviews were used to further understand teacher experience with IC at RCS, expand upon the quantitative responses, and answer the qualitative research question: *How do teachers perceive their involvement in IC at RCS?* I utilized a researcher-created, semi-structured interview protocol in which teachers responded to seven questions about their experience with IC. Four teachers were invited to participate in an interview, based upon their open-ended responses to the survey. Initially, an extreme case sample of four teachers was to be selected based upon responses to the survey question, *Would you recommend coaching to other teachers?* However, all respondents indicated that they would recommend coaching. Consequently, I selected four teachers whose open-responses stood out as particularly useful for improvement, noteworthy in their vehemence, or especially descriptive about their experience. All four participants who were invited chose to participate in the interview process.

Interviews are a crucial component to understanding teacher experience; they allow teachers to express their thoughts, opinions, and feelings in a more open and fluid manner than in a questionnaire, and enable participants to expand on their initial responses in a format conducive to original thought processes (Terrell, 2012).

#### Interviews

Interviews were scheduled via the email address participants provided on the initial consent form. All four teachers who were invited to interview accepted and provided the time and format that they preferred (i.e., Zoom with video on, Zoom with video off, or phone call). I began each interview by reiterating the informed consent (see Appendix G). First, participants were re-informed of my role and the purpose of this study before I asked for verbal consent.

Then, when respondents consented, I indicated that I would be recording the audio of our interview and taking notes, and reiterated the option to withdraw from the interview and study at any point in time.

## **Participants**

Each of the four participants was assigned a pseudonym for all notes and transcripts.

Participants included two science teachers, a music teacher, and a history teacher, ranging in experience from novice to veteran. The given pseudonyms for each teacher are as follows: Mr. Asher Jakobs, Ms. Aminah Richardson, Ms. Carla Woolf, and Ms. Marina Scott.

### **Qualitative Results**

## **Open-Coding and Conceptual Categories**

Line by line coding of the interviews resulted in 198 distinct codes, which I subsequently grouped into categories with more encompassing characteristics. Categories that stemmed from the codes generated through line by line and open coding included: (a) emotional benefits of participating in IC, (b) student behavior and academic changes, (c) important components of teacher-coach relationship, (d) high impact items related to the IC cycle, (e) practical components of IC, (f) administrative challenges to participating in IC and teaching at RCS, (g) important coach(ing) characteristics, (h) student challenges to teaching at RCS, (i) personal

challenges to participating in IC, and (j) benefits of IC after completion. Examples of codes found within each category can be seen in Table 12.

Table 12

Examples of Codes by Category

Category	Codes
Emotional Benefits of Participating in IC	improves confidence
	feeling empowered
	less anxiety
Student Behavior and Academic Changes	teaching became positive and engaging with students
	higher student achievement
	students have higher expectations of teachers
Important Components of Teacher-Coach Relationship	teacher choice and autonomy
	empathetic positive delivery of feedback
	working together/togetherness
High Impact Items Related to IC Cycle	observation, feedback, debrief cycle
	rehearsing strategies with coach
	setting goals together
Practical Components of IC	offered more real-life help than college teacher prep program
	provision of resources
	immediate discussion, feedback, and collab after observation
Administrative Challenges to Teaching	administration doesn't support teachers
	constant critique from administration
	distrust of administration
Important coach(ing) characteristics	coach's pedagogical experience
	asks questions does not demand
	confidence was kept, creating trust in coach
Student challenges to teaching	out of control classes
	teaching diverse learners
	being flustered by student behavior
Personal Challenges to Participating in IC	too much on the mind
	not enough time
Benefits of IC after completion	offers lifelong lessons personally and professionally
	risk-taking/trying new instructional practices

teacher retention shift in perspective about teaching and self

## **Teaching Challenges and IC Solutions**

In each of the four interviews conducted, themes around challenges to teaching at RCS and the related benefits of IC emerged. The three main categories of challenges to teaching were: administration, student, and personal. Teachers linked each of these challenges to solutions presented through participation in IC, including: emotional benefits, positive student behavior and academic changes, and long-term benefits. In this section, I will present the primary challenges identified by teachers in their interviews and share the perceived benefits and impact that teachers identified. Following this, I will detail the high-leverage components of IC that teachers noted, and suggestions that teachers shared for improving IC at RCS.

## Administration Challenges

A common theme that emerged from the interviews was that administration at RCS made the culture of teaching more difficult. In their interviews, teachers noted: a lack of support from administration, receiving only critical or negative feedback from the Principal and Assistant Principal (along with anxiety-inducing evaluations), and unclear expectations. Mr. Asher Jakobs discussed the lack of support he received as a new teacher at RCS:

In undergrad and as a student teacher you get observations, but when you're in a controlled environment like that it's easy to be given a good situation. Coming into a different situation, teaching full time at [RCS], it hit me hard when there wasn't assistance

early on. My professional and personal confidence was torn down.

Mr. Jakobs went on to describe how this lack of support, prior to the creation of an IC program, impacted his personal life, even outside the walls of RCS. Mr. Jakobs was very clear in his understanding and perception that his early struggles with teaching were neither due to his own personal lack of motivation, nor to student behaviors, "Early on before coaching existed... there was no assistance; it was like throwing meat to sharks. So then coaching and building confidence made me realize the issues I was experiencing weren't stemming from myself or from the students."

Another teacher, Ms. Marina Scott, explained that she often "had trouble receiving feedback" from administration because she felt that it was a reflection on her as a person, since it was generally focused on only the negative aspects of her practice. Ms. Carla Woolf and Ms. Scott both described the self-doubt that arose from administrative evaluations they received, "I am really hard on my teaching practice, thinking I was terrible," and "I am always anxious when I am observed."

Particularly when it came to receiving feedback from the Assistant Principal, Ms. Scott felt that she was being scrutinized, "I had our midyear evaluation with our Vice Principal and I was nervous. If I hadn't had coaching, I would have been way more nervous. Any feedback the Vice Principal gave me, I would have melted and felt like it was a reflection on me." Building on this theme, Ms. Woolf explained that when administrators had spent time in her classroom taking notes on her instruction, she felt that "that kind of note taking has been negative with admin... Admin evals always make me feel like 'this could be negative' ... We're used to critique being negative as teachers." Ms. Woolf explained that there is a lack of trust between teachers and administrators because she perceives them as constantly evaluative, and not

necessarily supportive, "the way our meritocracy works is that we think if someone is here in my room, it must be an assessment."

Unclear expectations from administrators have led to teaching challenges at RCS, as well. Ms. Aminah Richardson indicated that, other than her coach, there was no one with whom she could talk about and reflect on her practice. Similarly, Ms. Woolf described feeling unsure about where she stood, or if she was teaching in such a way that was aligned with schoolwide expectations. "Sometimes it can feel like 'am I doing what I am supposed to be doing?' ...you can be unsure if you don't know what you're doing in a new place... Being in a classroom can be isolating sometimes." Mr. Jakobs referenced this culture of unclear expectations, "You know, it is tough with the culture at [RCS] that currently exists, comparative to other schools." In the face of administrative challenges, teachers referenced several emotional benefits of participating in IC, these will be discussed in the following section.

### Emotional Benefits of IC

Teachers described the emotional benefits of participating in IC that led to ongoing professional and personal solutions, and self-efficacy. The main emotional benefits teachers referenced after participating in IC were: confidence, reduced anxiety, increased trust, and togetherness. These emotional benefits were exacted through: constant support through IC, positive and uplifting feedback from their instructional coach, and non-evaluative observations built on trust.

Mr. Jakobs described the support he received during IC as enabling him to construct a clear path to improvement, and reducing the anxiety he felt at school that he, in turn, had

previously carried into his personal life:

Being able to build from a place of growth, and knowing what I needed to do to build a path forward helped... move forward. Participating in coaching took a lot of stress away from my personal life. This helped me relax and be confident inside and outside of the school environment. The positives kept balancing and then building on each other. This made life easier at school and at home. Which makes it easier for me to do the work that's necessary. If I don't feel like what I am doing is effective it's difficult to do the work.

Coaching helped me feel confident that I am effective, which helps me be comfortable.

Ms. Scott stated that the support she received during IC impacted her emotions. She explained, "I always felt like I had someone to go to for resources, or if I was having a bad day to be able to unpack it all together. I felt comfortable... I already feel more confident compared to before coaching." Ms. Scott elaborated on feeling more confident as a teacher, despite her anxiety around administrative evaluations and feedback:

Coaching made me more confident in myself and my ideas and the way I wanted to run my classroom. I feel encouraged to try new things even when they may not be immediately successful. I feel confident in my abilities. My biggest takeaway is that you encouraged me to know I can do my job well... The way you delivered feedback to me was helpful to build myself up and take it as it was, and apply it and work to improve on my instruction, rather than focus on it being a reflection of me as a person. That was helpful especially after we were done with our 6 week cycle [when] I had our midyear evaluation with our Vice Principal.

Ms. Woolf discussed how trust played a big role in her emotional development as a teacher. She explained that, often, teachers cannot trust that someone else observing their class is present for their benefit, "The challenge of the perceived notion of 'oh someone's in my room' but you made sure that wasn't true, you explicitly said 'this is not evaluative.' I confided in you about what I was struggling with and you didn't tell this to the admin. My confidence was kept." This trust in her instructional coach, and the processes they engaged in together encouraged Ms. Woolf to the extent that she felt, "Coaching impacted me to have more confidence in my teaching, and therefore confidence in my school." This trust led Ms. Woolf to conclude that IC could assist in retaining teachers at RCS, even when other factors may induce anxiety:

I wanted to talk my ideas out with someone. Knowing that there is someone who that's your job, calms a lot of anxiety. Makes me feel not alone... Having someone else looking over your work or helping you talk through this idea and collaborating lessens anxiety, builds confidence. More teachers will stay in teaching, and at that specific school, because they know someone is there to support them.

Ms. Richardson touched on the component of togetherness and teamwork with her instructional coach, "Together we could bounce ideas, and you get to see your own practice in someone else's eyes. It's really nice to see or hear this, and it is important for my development as a teacher." In the next section, I will present the student challenges that teachers described at RCS, and the related components of IC that helped to mitigate the challenges and grow teachers' instruction and classroom culture.

## **Student Challenges**

Teaching students with varying needs and abilities, in an urban setting, presents unique challenges that teachers reflected upon in their interviews. However, it is important to note that the teachers interviewed did not describe student challenges as overtly negative. Rather, teachers saw these challenges as areas for instructional growth, indicating they needed support: acquiring resources, seeing their practice from an outside perspective, developing instructional strategies, and cultivating classroom culture solutions.

When asked about his overall experience with IC, Mr. Jakobs described it as "exceptional" and reflected right away on how it improved his ability to teach students:

It made a huge difference in my confidence as a teacher, and in my ability to find resources, utilize them, and provide a more conducive environment for students to learn. Coaching also helped me to bring this info and knowledge forward in my classroom and mind in terms of dealing with classroom management and student behavior.

Finding resources, creating a better learning environment, and more confidently managing student behaviors are three areas that were reflected in all four interviews. Ms. Scott described an incident that occurred during an IC observation, during which a student had thrown an inappropriate object across the classroom, which landed right in the middle of the stage where class was being conducted:

I saw it and I was flustered internally, but I think I handled it well and having the feedback in real time from [my coach], right then, to know how to remove it from the situation and continue with the lesson was encouraging for me. I felt confident that if anything outrageous were to happen again I could tackle it without feeling panicked.

Ms. Scott also described feeling that she wanted to change her outlook on teaching, and her potential impact on students because of her participation in IC:

I always went into my job knowing there was an expiration date... I now want to make these three years as positive as can be. Before coaching, I was more hasty to get through it, rather than to make an impact with the kids... now I think of it as an intrinsic 'this is going to be great.' You want teachers to have a good attitude going into the year. Before coaching, I wasn't there yet. After coaching, I knew I could be a good teacher for them, that I can do this. My previous lack of confidence didn't let me connect to that feeling. I am driven to be a good teacher for them now.

Mr. Jakobs reflected that students are acutely aware when teachers are putting in effort to teach their students. He elaborated that IC allowed him to build deeper relationships with students by increasing the expectations they held for one another. He noted that, prior to participating in IC, he saw the whole class as a difficult force working against him. But that after participating in IC, he was able to see them in a new light, and thus deliver instruction more effectively:

My [ninth grade] section had often felt out of control, I sensed that I didn't have their attention... The very first [coaching meeting] gave me another perspective that I hadn't had on the class, and you told me they looked engaged and involved. The observation notes and our discussion helped me take a step back and not be as critical of the class or myself. Looking back on it, just a few individual students had given me an image of the whole class that wasn't fair. It was helpful to get the grounding, and to be able to reevaluate how the class actually was. This offered me a new appreciation, and the whole

observation cycle helped me build relationships with the class.

The relationship-building factor that Mr. Jakobs felt for instruction and learning extended to perceived student appreciation for him, "[Coaching] made me see how much they appreciate the time and effort I put in."

Similarly, Ms. Richardson found that IC provided her with the eyes and ears to see and hear her students in a new light, and design differentiated instruction to meet their varying learning needs. Ms. Richardson had participated in IC with one specific class composed of students with a wide range of learning styles and specific behavior goals. Through the IC cycle, Ms. Richardson described reflecting on classroom behaviors and introducing new instructional strategies with students. When asked if any particular moment of IC stood out to her she did not hesitate to relay this anecdote:

The thing that really stands out for me is sitting down with my coach and talking about how to improve on this one particular class section that was giving me a hard time. The moment that stands out for me was seeing them improve. I talked with my coach on how to improve independent practice. There was this "aha!" moment in class where I saw that improvement in real time, and this really stands out to me.

Student challenges that teachers discussed were all coupled with IC strategies and outcomes that indicated a positive shift in both culture and academics. Teachers perceived the effort that they put forth as participants in IC was reflected in their instruction, and in student achievement.

## Personal Challenges

In addition to the challenges presented by administration and students, teachers noted that they faced some personal challenges which made teaching more difficult. Three of the personal

challenges that teachers faced were: a perceived lack of time, feeling overwhelmed with the responsibilities they faced each day, and overcoming a culture of distrust at RCS.

Mr. Jakobs linked not having enough time with feeling that he had too much on his mind at any given moment in time. He stated that a general personal challenge was:

Finding time to build on things we discussed. Keeping it at the forefront of my thoughts to implement practices, especially early on in teaching with so much else on my mind. Coaching threw in another thing to think about—not a bad thing, but it added a time challenge. For me, if it's not challenging, you're not growing. I could see the results improve my practice.

Ms. Scott explained that a personal challenge for her was overcoming the wariness and discomfort of being observed, even in a non-evaluative manner. But, when asked if there was anything she would have changed about the way we conducted IC she stated:

There was nothing negative that I would change. There were aspects I needed to grow more comfortable with. I am always anxious when I am observed, but that was a crucial component to coaching. You needed to see me in real time. There were challenging aspects but no negative aspects.

Participating in IC is a growth process, and Ms. Scott explained that this was something she was aware could help her improve, despite the initial discomfort she felt. Similarly, Ms. Woolf described a personal challenge as growing comfortable with the note-taking style of IC observations:

It really stood out to me that during our debriefs you went through my questions with me.

You happen to take notes in a way that is stream of conscious, minute by minute. My past

experience with that kind of note taking has been negative... It stood out to me that working with you with notes like that and follow up questions was less scary. I learned to be a part of that process. So now, I feel that I am more comfortable and can assert myself, and participate in the feedback.

Ms. Woolf indicated that the initial worry that notes about her class could be negative, ended up becoming a point of IC that helped her grow as a teacher and professional. This was one of several long-term benefits of participating in IC that teachers reflected upon in their interviews. In the next section, I will delve into the perceived long-term benefits of participating in IC, past the six week IC cycle.

## Long-Term Benefits of IC

In each of the interviews conducted about their participation in IC, teachers reflected beyond the immediate changes in their practice or emotional demeanor and described outcomes that they felt will impact them or their school community personally and professionally, now and in the future. One such long-term benefit related to the community of RCS. Mr. Jakobs explained that:

For new teachers coming into this school it is going to be huge. It will make a large difference in the teaching practice overall in the school, the level of appreciation students will have for teachers, building trust with teachers. If teachers are aware of what they do and their impact on students, this builds trust... Implementing coaching may be a hurdle, but if it can take roots it can change [RCS] for the better.

Mr. Jakobs had also referenced his increasing confidence as impacting his anxiety and reducing his stress at home, which compounded positively over time.

Ms. Scott described her perception of IC helping the school community over time as well:

I know I was a first year teacher but this is impactful for anybody. You help teachers look at things in a different way. We have our perceptions of how to teach and relate to kids, and sometimes it's good and sometimes we need to improve on things. We all see as teachers coworkers what can be improved upon. You serve as a really good lens for that. No matter where the teacher is coming from.

This notion that IC provides a lens to reevaluate instruction, no matter what the teacher's experience or background provides a rationale for maintaining IC as a long-term practice within the school.

# High-Leverage Components of IC

Given the positive emotional, professional, and community outcomes referenced by teachers in their interviews, it is worth examining the specific components of IC that teachers identified as most impactful, or highest leverage. Table 13 provides a list of the high-impact items that teachers described in their interviews.

Table 13

Teacher Mentions of High-Impact IC Items

Count
4
4
4
3
3
3
3
2

questioning style	2
video library	1
exemplars	1
rehearsing strategies with coach	1
goals tailored to needs	1
focused perspective	1

Ms. Woolf and Mr. Jakobs both elaborated on the importance of the IC cycle structure.

Ms. Woolf discussed the lack of pressure because she was aware of the structure:

I liked that it was on a cycle, like "we're trying this for six weeks, and this is your time frame." That structure was helpful. It was planned out in advance, you planned it like I could try a different type of lesson, for planning purposes. There was no pressure to have the best lesson because you were there repeatedly. It was not an exhausting amount of time, it did not feel like too much. Having the cycle period was helpful and being able to sign up for more than one cycle period, or even signing up for a prep period on the fly to talk about things.

Mr. Jakobs also mentioned the practical components of each aspect of the IC cycle, "Having the pre-observation, observation, and post-observation cycle provides the opportunity for self reflection, context, and provision of real time information I wasn't aware of myself. This was particularly helpful for me."

Ms. Scott mentioned three specific and sequential components that she found useful: immediate feedback, video libraries/modeling exemplars, and rehearsing strategies with the instructional coach, "...You had shown me a few videos of instructors practicing the things we talked about. I watched the videos, we rehearsed the strategies, and then I could put them in front

of the kids immediately the next day." Building on this, Ms. Scott referenced how being in the physical space of her classroom, and practicing these strategies in real time increased her comfort level when it came to using these strategies in front of students:

The most positive ones were when we would meet to debrief after you would observe me

teaching, and we would physically go into my teaching space and map out on the stage in my room how I could be more effective with my spacing, with my physical stance...

Ms. Richardson appreciated the focused perspective that occurred during debrief meetings, and indicated that these focused debrief sessions were the most impactful for her, "The more impactful times are when we were reflecting together, on a particular class. Those were times that really stick out to me. It was nice to hear how the class was going from someone else's point of view." Much of the interview data yielded positive responses, with teachers referring back to IC as a program that allowed them to grow as educators within the RCS community, but one of the main goals of this study was to ascertain teacher suggestions for program improvement. In the next section, I will outline the main suggestions for improvement as described by participants.

## **Suggestions for Improvement**

A main research question that this study aimed to answer was *What is teacher experience at RCS*? with the goal of understanding how to improve IC at RCS to reflect the principles of adult learning theory. All interview participants were asked how they would recommend improving IC at RCS. Their responses pointed to one major improvement: ensuring that the quality of teaching at RCS continues to improve across the board, by making IC

mandatory for all teachers, or by implementing consequences for teachers who do not demonstrate instructional growth.

Ms. Scott was vehement in her insistence that all teachers should participate in IC, for the benefit of students:

I think every teacher should be required to have at least one round of it. This is hard because you are focusing on teachers who are motivated to ask for help... others may be adamant about what they are already doing, but that can be not conducive to building our school in a way that's possible. Don't just make it available, make it a "we need to all get on board" which will streamline how teachers will act towards the kids. Kids see now that their teachers can be on different planets, and this is confusing for them. Having teachers all on the same page will benefit everybody.

Ms. Scott would like to see all teachers on the same page, whether from participating in IC, or via administrative oversight. Mr. Jakobs agreed entirely:

I do think that for more challenging teachers, teachers whose data shows their practice isn't where it should be but who are resistant to change, a level of cooperation and accountability with higher ups to hold people more accountable to require coaching would have more impact. There needs to be some level of—not necessarily negative consequences—but something at stake for teachers to take it seriously and take the steps needed to follow up on that.

In his statement, Mr. Jakobs references accountability by administration for the outcomes of teachers. RCS does not offer pay based on performance, but this is one avenue that could be explored to reflect Mr. Jakob's suggestion. The stagnation of teachers seems to be a concern that

Ms. Scott, Mr. Jakobs, and Ms. Richardson hold. Ms. Richardson responded to this question unequivocally, "I think that would be something positive for all teachers to have a coach, and in a cycle that lasts longer, just to see how they grow from the beginning of the school year to the end of the school year." Ms. Richardson also suggested that RCS employ more instructional coaches so that all teachers could participate in the program more efficiently, "It's hard to have one coach for all the teachers. All teachers should have an instructional coaching cycle, there should be more coaches at [RCS] to make this occur more efficiently."

Finally, Ms. Woolf suggested that teachers be encouraged to collaborate more often and in deeper, more meaningful ways, especially as related to traditional PD, "... If it's a PD have teachers share a great lesson and a poor lesson. Interdisciplinary and cross-curricular. I learned a lot from other teachers in other subjects, those ideas. Being able to share stories is important." This suggestion speaks to the need for teacher voice to be more present in traditional PD, beyond the collaboration of self-selecting teachers who participate in IC.

# **Mixed Data Analysis**

One of the benefits of collecting both quantitative and qualitative data with the intention of mixing the results, is the ability to expand on the quantitative results with more comprehensive qualitative responses. As referenced in Chapter 3, a mixed methods, sequential explanatory study is one in which the "primary focus is to explain quantitative results by exploring certain results in more detail or helping explain unexpected results (e.g., using follow-up interviews to better understand the results of a quantitative study)" (Terrell, 2012, p. 262). Thus, the research questions which guided this study are answered through quantitative and qualitative means, and these responses are triangulated. More importantly, however, mixed

method analysis enabled them to be answered in more full and robust ways than either method alone could allow (Creamer, 2018).

#### Blending

In order to further explain the quantitative results, I used the mixed method strategy of blending, in which a "variable, category, or theme generated from one type of analysis (e.g., qualitative or quantitative) is tested using another type of data" (Creamer, 2018, p. 104). From this testing, I was able to generate new categories, or, meta-inferences which included the blended results of the quantitative and qualitative data (Creamer, 2018).

The mixed method research question I set out to answer through this study was, *What is teacher experience of IC at RCS?* The following meta-inferences and themes aim to address this question, based upon the quantitative and qualitative data combined.

# Meta-Inferences and Themes

Eight themes emerged from blending the quantitative and qualitative data:

- 1. Teacher experience with IC was positive and worth it, despite time constraints and administrative challenges.
- 2. An outsider's perspective adds a crucial benefit to teaching, and results in a personal positive perspective shift.
- 3. The emotional benefits of IC can help to mitigate administrative stressors and yield teacher confidence to participate in difficult conversations about instruction.
- 4. Participating in IC can lead to increased confidence in instructional practices and a spirit of collaboration within and between teachers.

- 5. Written and verbal feedback offered the highest change-driven impact, along with the collaborative components of IC between teacher and instructional coach.
- 6. Instructional coach actions may be more important than demeanor.
- 7. Teachers recommend improving the school culture of improvement by requiring IC for all.
- 8. There is an increased need for collaboration across subject areas for traditional PD.

Positive Experience with IC Despite Time Constraints. Item 1 of TEQ asked respondents to rate their overall experience with IC, using several specific aspects of the process. Every survey respondent (n=15) chose the highest quantitative rating for the following options on survey item 1, which discussed overall teacher experience: I felt comfortable communicating with my coach, my coach respects my opinions, I value my coach's input, and my experience with coaching was worth my time. Further exploration of these responses through the qualitative lens aligns with this sentiment. All four teachers who were interviewed indicated that they felt comfortable and collaborative with their instructional coach, and that their experience participating in IC was "excellent," positive and worth their time, even though they did not always feel that they had enough time to focus on IC as they would have liked. In the survey, all respondents said that they would recommend IC to other teachers. Interview responses confirmed this overwhelmingly positive feedback.

Benefit of an Outsider's Perspective and Positive Perspective Shift. Item 2 of TEQ asked teachers to reflect on the scope of work they discussed or took on while participating in IC. The most common responses to this were: increasing student participation, checking for student understanding, and reflecting on their own teaching practice. These three components were also

referenced in the teacher interviews, in which teachers discussed student outcomes resultant of IC. The most commonly referenced benefit of working with an instructional coach, however, was the benefit of an outsider's perspective in order to improve their teaching practice, and see themselves from another perspective. A major change that three of the teachers noted was a shift in perspective from being heavily self-critical, to confident and composed.

Increased Confidence and Spirit of Collaboration. Item 3 of TEQ asked teachers to evaluate the emotional impact they felt that IC had on their experience teaching. The greatest emotional impact that teachers identified was their comfort managing a classroom, followed closely by their comfort discussing their own instruction and student achievement. These two themes were heavily present in the qualitative portion of this study, in which teachers discussed how much more at ease they felt managing student behaviors, and shifting the classroom culture from negative to positive after participating in IC. The level of comfort discussing instruction and achievement was also referenced by two teachers in their interviews, particularly when it came to developing a sense of collaboration around their teaching practice, which had evolved from a constant fear of evaluation into one of pride and assurance.

# High Impact Written and Verbal Feedback and Collaboration Components.

Feedback is a major component of the IC cycle, usually discussed during the debrief portion of the cycle. The quantitative results show that the three most impactful forms of feedback were: in-person meetings, detailed observation notes, and specific observation suggestions. The qualitative results confirm and expand upon these, and similarly indicate that teachers found high-impact items included the written notes, TAPs, and detailed observation notes (scripts). Within the category of in-person meetings, teachers honed in on specific practices that they

found to be more impactful than others. These specific practices during the in-person meetings included: the use of video libraries and exemplars, rehearsing strategies together with the instructional coach, collaborative discussions, a structured approach, and importantly, positive feedback.

Instructional Coach Actions May Be More Important Than Demeanor. The instructional coach is a key player in the IC process. When teachers are working together with only one other individual, that other individual must possess certain characteristics that enable a professional relationship founded on shared values. The quantitative portion of this study indicated that teachers found the two most impactful characteristics of the instructional coach were her positive nature and ability to listen. However, several other characteristics were also rated highly: willingness to collaborate, ability to ask thoughtful questions, and provision of feedback. The qualitative portion of this study reinforced the quantitative data, and added characteristics that were not options on the TEQ survey. Table 14 shows the consolidated open codes of important coach characteristics from the interviews. The characteristics mentioned in the qualitative portion focused more on the actions of the instructional coach than on her inherent personal characteristics. The common thread between each of these actionable characteristics is that the instructional coach must serve teachers from a place of openness, flexibility, and humility.

Table 14

Important Coach Characteristics

#### Coach Characteristics

Teacher Motivation and Student Behavior is Not the Main Challenge to Improving

**Teaching.** TEQ asked teachers to rate their motivation to improve their own instruction, and to improve student achievement. All but one respondent indicated that they were highly motivated to improve both. The one respondent who answered differently indicated that she was also motivated to improve both, and only slightly to a lesser degree. When I posed these survey questions, I was curious if there would be any differences of perspective between respondents who were more or less motivated to improve instruction and achievement. Quantitatively, there

were no differences, though, since the variance in motivation was so minimal, it is hard to know if there might have been otherwise.

After examining the qualitative data, two themes emerged about motivation. Interview respondents were clear in their belief that teacher motivation and student behavior and achievement were not barriers to successful participation in IC. Rather, they indicated that a negative self-perception, founded and reinforced by school leadership, was the major challenge they faced. Additionally, all four interviewees indicated that the self-selecting nature of IC at RCS means that the teachers who are least motivated to improve, just do not participate in IC. They suggested that all teachers should be required to participate in IC, particularly if their data indicated that student achievement was stagnant or below average.

Teachers Recommend Improving School Culture of Achievement by Requiring IC for All. One of the main goals of this study was to elicit teacher recommendations for IC improvement at RCS, based upon their experience participating in IC. The main suggestion from both quantitative and qualitative results was to make IC mandatory for all teachers. Both data sets revealed that teachers perceive a negative school culture, and that teachers who do not want to improve their own instruction add to a culture of negativity. The teachers who participated in IC believe that overall school culture and quality of teaching can be improved by using IC as a school-wide tool for increasing academic progress at RCS.

Collaboration Across Subject Areas for Traditional PD. TEQ asked teachers specifically about improvements to Professional Learning Communities (PLCs) and traditional PD. The main suggestion for improvement, stemming from both survey and interview results, was to encourage more collaboration across content-areas, and to ensure that teacher voice was

increased in both areas. One suggestion for PLCs was to increase accountability and oversight, since several teachers indicated that their PLC partners were reticent to participate or did not show up at all. This suggestion aligns with the previous theme of improving the school culture of achievement and teacher accountability. One suggestion that did come up in the quantitative analysis that was not present in any of the interviews, was to place a stronger emphasis on diversity, equity, and inclusion training during PD. Perhaps the interviews did not allow space or ask questions targeted to elicit responses on this topic.

In Chapter 5, I presented the results and analysis from the quantitative and qualitative data collection of this mixed method case study. In Chapter 6, I will summarize the results of this data analysis and offer tentative interpretations of the findings presented in Chapter 5. Then, I will draw connections between the results, tentative findings, and the relevant literature about IC, which was previously discussed in Chapter Two. Finally, I will share potential implications for practice, limitations of this study, and suggestions for future research into teacher experience with IC.

### **Chapter VI- Summary and Discussion**

Through this mixed method case study, I examined teacher experience with instructional coaching (IC) at Readiness Charter High School (RCS), an urban public charter school. The purpose of this study was to understand teacher perceptions and teacher preferences by identifying the various operational components of IC that teachers preferred and their overall feelings about IC including: topics discussed, relationships with instructional coaches, its impact on instruction, and emotions such as confidence (Hammond & Moore, 2018; Yopp & Burroughs, 2010a), with the goal of program improvement reflective of adult learning theory (Knowles, 1980).

#### **Overview of Methods**

Quantitative, qualitative, and mixed methods were used to generate data to answer the three research questions:

- What is teachers' perceived impact of IC at RCS?
- How do teachers perceive their involvement in IC at RCS?
- What is teacher experience of IC at RCS?

Survey methodology was used to understand teacher's perceived impact of IC at RCS. All teachers who participated in IC at RCS during the 2019-2020 school year were invited to take part in an 11-Item researcher-created, online survey about their experience with IC. The Teacher Experience Questionnaire (TEQ) was emailed to participants. TEQ was designed to elicit responses that described teacher perceptions and teacher preferences of IC, including open-responses, to further understand teacher recommendations for improvement.

Interviews were used to delve deeper into teachers' involvement and experience with IC at RCS, and to expand upon the quantitative responses. A researcher-created semi-structured interview protocol was implemented in which teachers responded to seven questions about their experience with IC. Four teachers were invited to participate in an interview, based upon their open-ended responses to the survey. All four accepted the invitation and participated in the interview.

Since this is a mixed method study, results from the quantitative and qualitative data were considered together, resulting in researcher generated meta-inferences and themes. I used the mixed method strategy of blending the quantitative and qualitative results through which I was able to generate new categories, or, meta-inferences (Creamer, 2018). The value-added of mixed methods was the opportunity to elicit both breadth and depth of perspectives about IC at RCS, enabling all teachers to offer their experiences quantitatively, and a purposefully selected group of teachers to offer their individual and in-depth experiences in a more robust fashion, qualitatively.

#### **Summary of Results**

Quantitative results indicated that teacher participants overwhelmingly found IC to be a positive experience, would recommend it to others, and are motivated to improve instruction and achievement. Participants emphasized three categorical operational preferences about their experience with IC, including:

The positive emotional impact on: managing a classroom environment, willingness to
participate in discussions about instruction, and willingness to participate in discussions
about student achievement.

- 2. The most impactful forms of feedback: in-person meetings, detailed observation notes, and specific observation suggestions.
- 3. The most impactful characteristics of the instructional coach: positive nature and ability to listen (followed closely by willingness to collaborate, ability to ask thoughtful questions, and provision of feedback).

The quantitative results included answers to open-ended questions about suggestions for improvement to IC at RCS. The most common suggestion for improving IC at RCS was to make it a "requirement," specifically, that it be "mandatory for both new teachers and teachers [on improvement plans]." A second suggestion for improvement indicated that participants felt that there is a negative culture at RCS, and that other teachers who do not want to be "part of the solution" to improving academics at RCS are "part of the problem mentality" indicating that "we need... a culture of positivity shift." Although this suggestion does not drive at improving IC specifically, it does speak to the nature of the environment in which IC is taking place at RCS. Four suggestions originally intended to offer solutions for improving IC instead yielded responses related to school-wide changes that teachers would like to see coming from RCS administrators: differentiated evaluation rubrics, differentiated lesson plan format options, more uniform templates for teachers, and more prep time allotted per day.

In the qualitative portion of this study teachers identified three main categories of challenges to their teaching experience: administrative, student, and personal. Teachers linked each of these challenges to solutions resultant of participation in IC, including: emotional and professional benefits, positive student behavior and academic changes, and long-term benefits.

A common theme from the interviews was that administration at RCS made the culture of teaching more challenging. Teachers noted: a lack of support from administration, receiving only critical or negative feedback from the Principal and Assistant Principal (along with anxiety-inducing evaluations), and unclear expectations. In response to the administrative challenges to teaching at RCS, teachers described the emotional benefits of participating in IC that led to ongoing professional and personal solutions, and self-efficacy. The four main emotional benefits teachers cited after participating in IC were: confidence, reduced anxiety, increased trust, and togetherness. Teachers indicated that these emotional benefits were achieved through: constant support through IC, positive and uplifting feedback from their instructional coach, and non-evaluative observations built on trust and mutual goal-setting.

The student challenges that teachers described were related to teaching students with varying needs and abilities, and managing the classroom environment when student behaviors became particularly difficult. Importantly, teachers did not deem student challenges as overtly negative, but rather, a part of their learning experience that they were eager to improve upon. Teachers indicated that they received support from IC through: resource acquisition, seeing their practice from an outside perspective, developing instructional strategies, and cultivating classroom culture solutions. Teachers perceived the effort that they put forth as participants in IC was reflected in their instruction, and in student achievement.

Personal challenges that participants faced included: a lack of time, feeling overwhelmed with the myriad responsibilities they faced each day, and overcoming the culture of distrust at RCS. Teachers reflected upon the long-term benefits of IC that could help to mitigate the personal challenges they felt, such as: increased confidence to speak up for themselves, the

ability to to see their path forward for professional growth more clearly in terms of actionable steps, and increased trust between teachers and students.

As noted previously in Chapter 5, teachers also pointed to specific components of IC as most impactful, or highest leverage (see Table 13).

Table 13

Teacher Mentions of High-Impact IC Items

IC Components With Highest Perceived Impact	Count
immediate feedback	4
IC cycle/structure (observation, feedback, debrief)	4
collaborative discussions	4
use of the physical space	3
encouragement to feel empowered	3
setting goals together	3
positive feedback	3
written notes/scripts/TAPs (feedback)	2
questioning style	2
video library	1
exemplars	1
rehearsing strategies with coach	1
focused perspective	1

In concert with the quantitative results, teachers offered one main suggestion for improvement during the qualitative portion of this study: ensuring that the quality and culture of teaching at RCS continues to improve across the board, by making IC mandatory for all teachers, or by implementing consequences for teachers who do not demonstrate instructional growth.

Through the use of blending and consolidating variables from the quantitative and qualitative results, I was able to develop eight meta-inferences and themes about teacher experience with IC at RCS:

- 1. Teacher experience with IC was positive and worth it, despite time constraints and administrative challenges.
- 2. An outsider's perspective adds a crucial benefit to teaching, and results in a personal positive perspective shift.
- 3. The emotional benefits of IC can help to mitigate administrative stressors and yield teacher confidence to participate in difficult conversations about instruction.
- 4. Participating in IC can lead to increased confidence in instructional practices and a spirit of collaboration within and between teachers.
- 5. Written and verbal feedback offered the highest change-driven impact, along with the collaborative components of IC between teacher and instructional coach.
- 6. Instructional coach actions may be more important than demeanor.
- 7. Teachers recommend improving the school culture of improvement by requiring IC for all.
- 8. There is an increased need for collaboration and teacher voice across subject areas for traditional PD.

#### Discussion

In this section, I will offer tentative interpretations of the findings from this mixed method case study based upon the quantitative, qualitative, and mixed results. Then, I will connect these findings to the review of literature from Chapter 2, and draw inferences between the two in order to illuminate potential theoretical implications of this study, and related implications for practice. Following this, I will offer recommendations for practice and future

research into IC, based upon any disconfirming evidence, gaps in knowledge, or areas of IC theory and practice worth examining further.

# Insight into the Findings

Overarchingly, teachers who participated in IC at RCS found it to be a positive experience. Both the quantitative and qualitative results highlight this finding, which aligns with widely-published research about IC (Hammond & Moore, 2018; Kretlow & Bartholomew, 2010). In this section, I will describe the tentative rationale for why teachers found IC to be positive, despite the potentially negative culture at RCS.

The three main operational areas of IC at RCS that contributed to teacher experience were the emotional impact, usefulness and style of feedback, and the characteristics and actions of the instructional coach. Within each of these categories, specific components were indicated as being most useful or impactful for their positive experience:

- Emotional impact on managing a classroom environment, willingness to participate in discussions about instruction, and willingness to participate in discussions about student achievement.
- 2. Feedback in the form of in-person meetings, detailed observation notes, and specific observation suggestions.
- 3. Characteristics and actions of the instructional coach including their positive nature and ability to listen (in addition to their willingness to collaborate, ability to ask thoughtful questions, and provision of feedback).

A theme that weaves throughout these three areas (emotional impact, usefulness of feedback, and characteristics and actions of the instructional coach) is the notion of mutual

respect, teacher autonomy and voice, and co-construction of goals. At no point during the IC cycles at RCS did the instructional coach demand changes from teachers, dictate steps forward, or set goals without teacher input. The culture and scope of the IC program at RCS was intentionally predicated on the tenets of adult learning theory. Thus, teachers were deeply involved in the process of their own learning. This is the greatest takeaway and potentially the strongest contributing factor as to why teachers found the program to be so positive. Teachers:

- 1. Selected whether to participate in IC or not;
- 2. Shared their strengths and areas of potential growth with the instructional coach;
- 3. Co-constructed goals for their IC experience and re-evaluated and shifted these goals as needed together with their instructional coach;
- 4. Chose when and how often they wanted the instructional coach to observe their classes;
- 5. Had the opportunity to request more, less, or different forms of feedback;
- 6. Selected times to discuss their progress with the instructional coach, and were able to reschedule when needed;
- 7. Shared their feelings about their instruction, and had the opportunity to ask for feedback or simply receive affirmations, depending on their professional and emotional needs at the time;
- 8. Continuously provided the instructional coach with feedback to tailor their experience via conversations, emails, and surveys;
- 9. Chose whether to participate in follow-up IC cycles.

In contrast to the administrative challenges experienced at RCS, IC offered a fresh perspective for teachers on their practice, without judgement or evaluation, in which teacher needs and voice took the forefront. IC offered conversation and collaboration, and it provided teachers with the opportunity to reflect on their practice in such a way that their vulnerabilities and concerns were heard and validated without repercussions.

Teacher involvement in the process of their own learning, continuous feedback loops about the path forward for their individual journey with IC, and teacher trust in the instructional coach's intentions were validated through the quantitative and qualitative data. Teachers described the importance of setting goals with their coach, their level of comfort having strong and open discussions with their instructional coach, and the confidence that their trust would be kept (see Table 14). These areas directly reflect adult learning theory, and connect to salient literature about IC (Desimone & Pak, 2017; Hammond & Moore, 2018; Knight, 2011; Kraft et al., 2018; New Teacher Center [NTC], 2019b; REL West, 2019.

#### Connections to the Literature on IC

Connections between the tentative findings of this study relate to the concepts and theories from relevant literature referenced in Chapter 2. Chapter 2 describes the importance of andragogy, or adult learning theory, and outlines the practitioner focused practices (PFPs) that instructional coaches can take to increase teacher involvement, efficacy, and appreciation of IC, as well as teacher perceptions and preferences impacting their experience with IC.

Each of the PFPs referenced in Chapter 2 coordinates with adult learning theory: differentiating IC based upon individual teacher preferences and needs, tracking teachers'

progress together throughout the course of IC, and building positive, trusting relationships (NTC, 2019b; REL West, 2019).

IC at RCS was tailored to each teacher's individual needs, beginning with the first meeting between teacher and instructional coach in which strengths, areas of growth, and goal-setting were considered together. From this point forward and throughout the entire IC cycle, teachers and coach co-constructed knowledge together.

In their synthesis about IC, Desimone and Pak (2017) recommended three organizational components to support the implementation of IC: active learning, coherence, and collective participation. Two of these organizational components were noted as particularly useful and impactful for teachers who participated in IC at RCS: active learning and coherence. Active learning refers to what Desimone and Pak (2017) specified as the opportunities teachers have to practice and receive feedback about what they have learned, creating more impactful IC on their instruction. Participants in this case study about IC at RCS directly mentioned their perceived impact of practicing strategies with the instructional coach, and the usefulness of ongoing feedback in the form of written notes, debrief sessions, and take away points (TAPs). Coherence is the alignment between IC and a teacher's instructional goals, and the intentionally supportive conditions for teacher growth (Desimone & Pak, 2017). Participants in this case study referenced setting goals together, collaborative discussions, and encouragement to feel empowered (see Table 13).

Teacher perceptions and teacher preferences are two areas noted in the literature that are particularly impactful for positive teacher experience with IC. Hammond and Moore (2018) examined teacher experience in a qualitative portion of their larger study. They found that two

teacher preferences stood out as impacting teacher experience with IC: the nature of the instructional coach and the type and style of feedback provided. Traits that teachers preferred in the instructional included: optimism, empathy, strong listening skills, reflection, and trustworthiness (Hammond & Moore, 2018). The instructional coach's positive nature and empathetic style encouraged teachers to remain in the program, even if they had initial doubts about IC (Hammond & Moore, 2018). These findings align directly with the results of this case study, in which teachers indicated that they felt comfortable with the instructional coach, that she offered positive feedback, listened and asked targeted questions, and was honest and trustworthy (see Table 14). The type and style of feedback preferred by participants in Hammond and Moore's (2018) study was specific, positive, and targeted. This case study supported these findings; teachers found the most useful feedback to be written scripts and TAPs that were immediate, focused, and positive (see Table 13).

Adult learning theory is a common theme in all of the aforementioned connections.

Adult learning theory, or andragogy, serves as the conceptual framework for this investigation into teacher experience at RCS, and leads to the assumption that IC should be responsive to the priorities of adults (Knowles, 1980). As referenced in Chapter 2, adult learning is an ongoing process where adults are recognized as being both autonomous and collaborative (Kretlow & Bartholomew, 2010; Merriam, 2001). Thus, in designing and implementing IC at RCS, it was important to build in space for reflection about each teacher's practice, so that IC could be an ongoing process of reflection, inquiry, and praxis to propel teachers' learning (Knight, 2011). The results of this mixed method case study reflect the implementation of adult learning theory, and support its tenets. Teachers felt that they had the opportunity for self-reflection,

collaboration, and voice in the process of IC. Teachers described increased trust and confidence after participating in IC, and all participants recommended it for others. Teacher voice and autonomy were honored throughout the process of IC, and even in the design and scope of this study, offering participants the opportunity to participate in interviews, and to provide suggestions for improvement. The IC program at RCS may continue to reflect the principles of adult learning theory, if these suggestions are implemented in future IC cycles.

### Implications for Practice

The findings from this study suggest that certain recommendations from the literature may not apply to all settings. Three areas of divergence are that: administrative support for instructional coaches may not be crucial for program success, voluntary IC may not always be the solution for teacher satisfaction with IC, and that PLCs could focus less on instruction and achievement and more on schoolwide and community-based cultural concerns.

The first suggestion from the literature that did not overlap with the process and outcomes of this case study is that instructional coaches need support from administration in order to be successful. The theory of action presented by NTC (2019a; 2019b), indicated that instructional coaches need two specific supports: professional development (PD) and appropriate and reasonable workloads. In this case study, the instructional coach was regularly discouraged/disallowed from attending PD because her responsibilities overlapped so greatly with those of administration's. That is to say, the workload of the instructional coach included coordinating and running IC in addition to: fulfilling school wide operational tasks, filling in for disciplinarians, teachers, and administrators, and gathering resources for program development—all of which can diminish time spent in IC cycles, and may inhibit effectiveness

(NTC, 2019b). However, the outcomes of this case study indicate that teachers overarchingly found IC to be useful and their perceptions were not negatively altered by the instructional coach's added responsibilities. Ideally, the instructional coach would not have these ancillary responsibilities, but they may not determine the outcomes or perceived success of IC from the perspective of participating teachers. As the instructional coach and researcher, I can confirm that the added responsibilities did take away some of the time I would have preferred to have spent working with teachers and planning for our debrief sessions together. However, I did not allow them to impact the work I conducted with teachers, because their experience with IC was my priority. Had I been able to attend PD to develop my practice as an instructional coach, and focus solely on IC, I do believe the IC program at RCS could have been more robust, and that I could have increased my efficacy. However, based upon the results of this study, there did not appear to be a negative impact on teacher experience.

Importantly, the third suggestion from NTC (2019a; 2019b) is one that arose in this study as both a reason why teachers perceived IC positively, and an area that teachers recommended changing in the future: voluntary participation in IC. NTC (2019b) suggests that one way that school leaders can reflect adult learning theory and support the instructional coach and teachers is by allowing participation in IC to be voluntary, rather than assigned. Voluntary IC aligns with adult learning theory, whereas mandatory IC may lead to teacher resistance and negative teacher perceptions (Borman et al., 2006; Knight, 2004; NTC, 2019b). Voluntary IC may propel instructional coaches to collaborate with teachers more often, in order to develop positive teacher perceptions, and generate genuine interest in participation (NTC, 2019b).

Teachers who participated in this case study indicated their preference for "teacher choice and autonomy" (see Table 12), yet also recommended that IC be mandatory for at least one cycle, for all teachers, suggesting that if teachers opt out or do not show instructional improvement, "There needs to be some level of—not necessarily negative consequences—but something at stake for teachers to take it seriously and take the steps needed to follow up on that." This was an interesting comment because of the imparity between participants' own experience and preferences and their vision for improving IC at RCS. One possible reason for this is that the teachers who participated in IC have seen their own growth and that of their participating peers, and realize the importance of this process for improving instruction and achievement. Another reason is one that speaks to human nature—if some of us are spending our time improving, then all of us should be putting in the work to improve as well. A third reason is that teachers who participated noticed the improved relationships they developed with students, and because students recognized and appreciated their efforts, they wish to see all teachers putting students first in this same manner:

Don't just make it available, make it a 'we need to all get on board' which will streamline how teachers will act towards the kids. Kids see now that their teachers can be on different planets, and this is confusing for them. Having teachers all on the same page will benefit everybody.

An area of growth for IC at RCS is the collective participation referenced by Desimone and Pak (2017). In their synthesis, Desimone and Oak (2017) recommended that instructional coaches "facilitate shared learning" by sharing their pedagogical expertise and providing teachers with additional insightful solutions via participation in Professional Learning

Communities (PLCs) (p. 8). In this case study, teachers referenced PLCs only in the quantitative open-responses, citing the need for "more administrative oversight and check-ins." One participant even suggested that PLCs and traditional PD focus more on socio-cultural issues, rather than academics, since IC covers instruction. This is an area of growth for IC at RCS that can be improved upon based upon the recommendations of teachers in this study. If IC manages to drive instruction and achievement in such a way that teachers find to be positive and impactful, then perhaps the other strands of IC such as traditional PD and PLCs could offer a greater scope and variety of sessions tailored to the evolving needs of the school community.

#### Limitations

In Chapter 4, I discussed the limitations of this study. The main limitation was my role as the instructional coach and professional colleague of the participants, which may have indicated a potential conflict of interest. In order to mitigate this perceived conflict of interest, I took the following steps: (a) briefly describing the purpose and goals of this study to participants via email and Zoom meetings prior to their participation, (b) communicating to participants that the choice to participate in this study is voluntary, (c) directing their inquiries to my Arcadia University email account, so that my role as the researcher is clear and not indirectly connected to my RCS account (d) Clarifying what safeguards are in place for confidentiality (i.e., the use of pseudonyms, scrubbing transcripts of identifying markers, and having all data collection sent directly to my Arcadia University account, (e) using reflexivity to describe my role as the researcher and doctoral student.

Due to the ongoing professional relationships that teachers and I developed, it is possible that their responses to this study may have skewed more positively than if I had been an outside researcher.

# Recommendations for Future Research

Future research into teacher experience with IC is warranted, especially in light of the few rigorous studies that examine this topic. My bounded case study represents just one setting. Therefore, I would recommend that additional research focus on teacher experience, but with a larger, random sample to allow for a greater variety of descriptive statistics and teacher perspectives in the form of interviews and focus groups.

Areas worth investigating may include: the impact of teacher motivation on teacher experience with IC, the impact of administrative support and school culture on teacher experience with IC, and a longitudinal study in which teacher experience is tracked over the course of an academic year or even longer, in order to determine the long-term effects of IC on teacher's emotional well-being, connection to school culture, and professional trajectory.

Additional categories I would suggest exploring and analyzing would be differences in teacher experience with IC based upon: teacher experience/years taught, the size and type of school setting (i.e., large/small, urban/suburban/rural, charter/traditional public/independent/parochial), size and scope of the IC program (i.e., one or more instructional coaches, focus on rigor and academics, focus on classroom management, focus on project-based learning, content-specific IC and general IC), and the role of the instructional coach (i.e., full-time instructional coach versus administration or master teachers serving as the instructional coach). More closely examining the connection between teacher experience with IC and their involvement in and preferences for

school-based traditional PD may offer insight into how to improve traditional PD so that it may offer teachers a more comprehensive and targeted understanding of topics that intersect with the components covered in IC.

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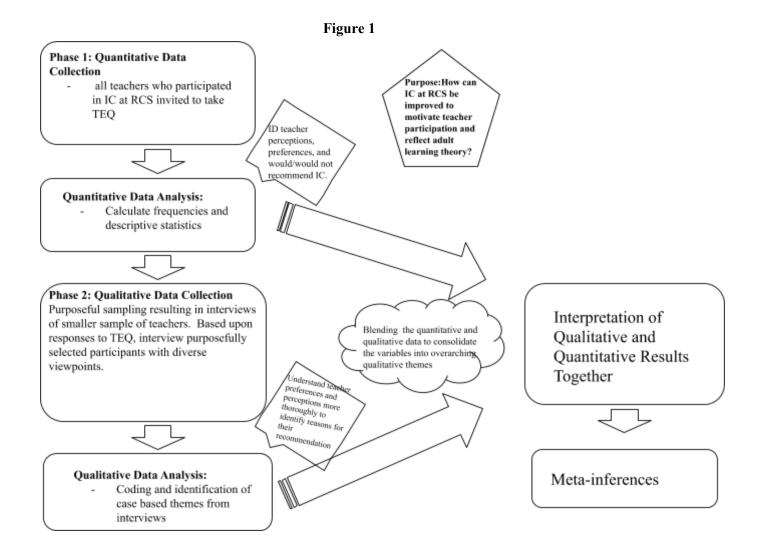
**Table 1**Summary of Results from Kraft et al.'s (2018) Meta-Analysis of IC

	Outo	Outcome	
	Instruction	Achievement	
Overall Effect <sup>a</sup>	0.49*(n=43)	0.18*(n=31)	
Impact of Potentially Influential Factors			
School Level <sup>a</sup>			
Pre-K	0.48* (n = 27)	0.11*(n = 10)	
Elementary	0.56*(n = 10)	0.22*(n=14)	
Middle	0.45*(n=9)	0.18*(n=11)	
High	0.49*(n=5)	0.30*(n=4)	
Program Focus <sup>a</sup>			
Content-Specific	0.51*(n = 27)	0.20*(n=26)	
General Practices	0.47*(n=16)	0.07 (n = 5)	
Program Size <sup>ac</sup>			
Small	0.63*(n=26)	0.28* (n = 15)	
Large	0.34*(n = 17)	0.10*(n=16)	
Paired with PD <sup>b</sup>			
Group Training	0.31*(n=43)	0.12 (n = 31)	
Instructional Resources	0.21 (n = 43)	0.08 (n = 31)	
Video Libraries	-0.27*(n=43)	-0.07 (n = 31)	
Mode of Delivery <sup>b</sup>			
Virtual	-0.16 (n = 43)	-0.04 (n = 31)	
Hours of Participation <sup>b</sup>			
IC	0.00 (n = 43)	0.00 (n = 31)	
Total PD	0.00 (n = 43)	0.00 (n = 31)	

*Note.* IC = instructional coaching; PD = professional development.

<sup>&</sup>lt;sup>a</sup>Mean weighted effect size. <sup>b</sup>Change in mean weighted effect size.

<sup>°</sup>Small = < 100 teachers. Large =  $\ge 100$  teachers. \* p < .05



# Appendix A

# **Learning Forward Tool**

# TOOL 10.4

	ease return to the student achievement coach.  ase complete this brief survey so I can get to know you better and we can work together to me
sch	ool goals.
	ur name
Gr	ade level and subject
1.	What do you feel is your area of teaching expertise?
2.	What are your strengths in your job? (You may include any strength, such as parent relationship class management/rapport with students/knowledge of subject area, etc.)
3.	What interests and skills do you have outside of the classroom that you might like to share?
4.	Do you have any of the following that you would be willing to share with other staff members? (Please describe briefly.)
	• Units
	• Strategies
	• Lessons
	Best practice ideas
	• Other



Chapter 10: Teacher-coach relationships

#### TOOL 10.4 cont'd

5	5. What area do you feel you could use support in this year?
6	<ul> <li>6. How do you see the role(s) of the student achievement coach as it pertains to you?</li> <li>(Please explain briefly.)</li> <li>Mentor</li> </ul>
	• Resource
	• Co-teacher
	• Coach
7	7. Please list any immediate needs with which the student achievement coach could help you.
8	3. What resources do you foresee needing from your student achievement coach over the next few months?
9	Do you have any burning questions about the student achievement coach's role or how this role could benefit you?
10	0. Would you be open to allowing other teachers to observe you teach in your classroom?
So	Yes No  Durce: Connie Wardwell, student achievement coach, Adams 12 Five Star Schools (Thornton, CO).
ACHI	ING MATTERS www.learningforward.or

# Appendix B

# **Post-IC Survey**

#### **End of Coaching Cycle Interview Questions**

Rate how strongly you agree with each statement on a scale of 1-5

1 = disagree strongly 2 = disagree 3 = neutral 4 = agree 5 = agree strongly

l = disagree strongly 2 = disagree 3 = neutral 4 = agree 5 = agree strongly	
My instructional coach communicates regularly with me.	1-2-3-4-5
My instructional coach gives me the opportunity to provide input in the direction and content of our coaching	r 1-2-3-4-5
Instructional coaching helps me overcome barriers to teaching and learning.	1-2-3-4-5
My instructional coach uses information about student performance (gradebooks, exit tickets, etc.) to help me improve my instruction.	1-2-3-4-5
My instructional coach helps me to identify and solve problems.	1-2-3-4-5
My instructional coach introduces me to new ways to do things better.	1-2-3-4-5
Instructional coaching contributes positively to the improvement of my instruction.	1-2-3-4-5
My instructional coach believes in celebrating instructional and academic improvement.	1-2-3-4-5
My instructional coach communicates information clearly and concisely.	1-2-3-4-5
My instructional coach maintains open, two-way communication with me.	1-2-3-4-5
My instructional coach assists in developing appropriate student assessments.	1-2-3-4-5
My instructional coach communicates the importance of focusing on the needs of students.	1-2-3-4-5
My instructional coach conducts planning and feedback sessions with me.	1-2-3-4-5
Instructional coaching helps to create a school environment conducive to increasing achievement.	1-2-3-4-5
My instructional coach contributes to a culture of continuous improvement.	1-2-3-4-5
My instructional coach provides feedback on lesson plans and instruction.	1-2-3-4-5
Instructional coaching helps me to understand the other practices occurring in the school, and contributes to a collaborative practice.	1-2-3-4-5
My instructional coach works with me to ensure that objectives are aligned with the lesson structure and exit ticket.	1-2-3-4-5
My instructional coach assists me in instructional planning.	1-2-3-4-5
My instructional coach models research-based instructional procedures and helps me to implement these procedures.	1-2-3-4-5
My instructional coach shares research-based strategies with me in person or via email and publications.	1-2-3-4-5
My coach has helped me perform better.	1-2-3-4-5

#### **End of Coaching Cycle Interview Questions**

My coach has helped me reach my professional goals.	1-2-3-4-5
My observations and feedback have helped me grow as a teacher.	1-2-3-4-5
I have gained helpful resources from my coach.	1-2-3-4-5
I trust my coach.	1-2-3-4-5
I feel I can ask my coach for resources.	1-2-3-4-5
I would like to receive instructional coaching again.	1-2-3-4-5

- 1. Do you feel you benefited from the coaching cycle? How?
- 2. What changes, if any, have you made to your instructional practice as a result of our work together?
- 3. Has student performance changed during the time you worked with a coach (either academically or behaviorally)? What about the way we worked together believe contributed to this result?
- 4. What, if anything, do you feel we could have done differently with regard to instruction?
- 5. What, if anything, do you feel we could have done differently with regard to classroom management?
- 6. How has your thinking grown or changed from this process?
- 7. Based on the work in our coaching cycle, what are the implications for your work going forward? What are your major take-aways?

# Appendix C

# Sample IC Cycle Schedule

	А	В	С	D	E	F
1		Monday	Tuesday	Wednesday	Thursday	Friday
2	Adv. (7:15-8:15)	9th Grade Group	10th Grade Group	11th Grade Group	12th Grade Group	Opt-In Grade Group
3	1 (8:16-9:06)	Lesson Plan Feedback	Office Hours for Staff	Art Teacher Observation	Observe English 2 Teacher B	Feedback Biology Teacher B
4	2 (9:08-9:58)	Lesson Plan Feedback	Mod. Algebra 1 Teacher A Observation	English 1 Teacher A Feedback	Feedback Senior Seminar Teacher	Specials PLC
5	3 (10:00-10:50)	ELL Teacher Observation	Prep for Mod Algebra 1 Teacher A	Spanish 1 Teacher A Resource Meeting	Prep for Biology Teacher A	Algebra PLC
6	4 (10:52-11:42)	Art Teacher Feedback	Mod. Algebra 1 Teacher A Feedback	Office Hours for Staff	11th History PLC	Observe Biology Teacher A
7	5L (11:44-1:03)	Office Hours for Staff	English 1 Teacher A Observation	Bio Teacher A Resource Acq. and Collaboration	Observe Biology Teacher B	Office Hours for Staff
8	6 (1:03-1:53)	Chemistry Teacher A Observation	Chem PLC	Prep for Senior Seminar Collaboration	Office Hours for Staff	Health PLC
9	7 (1:55-2:45)	Chemistry Teacher A Feedback	English 2 Teacher B Resource Acq. and Collaboration	History PLC	Observe US History Teacher A (written feedback only!)	Prep for Art and Chem
10			-			
11						
12		Interested	Scheduled			
13	1	US History Teacher A	x		Key:	
14	2	Spanish 1 Teacher A	x		Office Hours for Staff	
15	3	Mod. Algebra 1 Teacher A	x		Observations of Classes	
16	4	Biology Teacher A	x		Feedback/Debrief Session	
17	5	English 1 Teacher A	x		Prep for Coaching Meetings	
18	6	English 2 Teacher B	x		PLC	
19	7	Chem Teacher A	x		LP Feedback/Grade group meeting	
20	9	Art Teacher	x			
21	10	Biology Teacher B	x			
22	11	Senior Sem Teacher				

#### Appendix D

#### **Teacher Experience Questionnaire (TEQ)**

Please rate each of the following statements on a scale of 1-5, with 1 meaning *not at all* and 5 meaning *to a great extent*.

- Q1. How do the following describe your experience with coaching?
  - 01 I feel comfortable communicating with my coach.
  - 02 My coach respects my opinions.
  - 03 My coach understands my situation and the challenges I face.
  - 04 I feel comfortable with my coach's reflecting on my teaching practices.
  - 05 I value my coach's input.
  - 06 My experience with coaching was worth my time.
- Q2. My coach and I discussed ways to:
  - --Select all that apply--
  - 01 Increase the level of rigor in my classroom.
  - 02 Increase student participation.
  - 03 Encourage a respectful classroom environment.
  - 04 Check for student understanding.
  - 05 Use diverse questioning strategies (e.g., higher-order thinking, wait time, cold-calling, etc.)
  - 06 Set objectives or instructional goals
  - 07 Reflected about student learning
  - 08 Reflected about my teaching practice
  - 09 Other (please specify)
  - 10 None of the above
- Q3. How much, if at all did instructional coaching impact the following emotional aspects of your teaching?
  - --Please rate on a scale of 1 (no impact) to 5 (most impact)--
  - 01 My comfort in the school setting.
  - 02 My willingness to participate in discussions about instruction and student achievement.
  - 03 My sense of community with other teachers.
  - 04 My level of comfort sharing ideas about teaching with other teachers.
  - 05 My level of comfort sharing ideas about teaching with administration.
  - 06 My level of comfort managing a classroom environment.

02 No

Q4. How useful, if at all, were the following aspects about coaching feedback?
Please rate on a scale of 1 (not useful) to 5 (most useful)
01 Lesson plan feedback
02 Detailed observation notes
03 Specific observation suggestions (bullet points and TAPs)
04 In-person meetings (classroom and coaches' office)
05 Weekly shout-out emails
06 Emailed resources and other information
Q5. How much, if at all did the following characteristics about your instructional coach impact
your experience with instructional coaching?
Please rate on a scale of 1 (no impact) to 5 (most impact)
01 Positive nature
02 Willingness to collaborate
03 Level of empathy
04 Ability to listen
05 Ability to ask thoughtful questions
06 Provision of feedback (lesson plan, observations, written, verbal)
Q6. In general, how motivated are you to improve <b>your own instruction</b> ?
1 - Not at all motivated
2
3
4
5 - Highly motivated
Prefer not to say
Q7. In general, how motivated are you to improve <b>student achievement</b> ?
1 - Not at all motivated
2
3
4
5 - Highly motivated
Prefer not to say
Q8. Would you recommend coaching to other teachers?
01 Yes

- Q9. Do you have any suggestions for improving coaching at RCS in the future?
- Q10. Do you have any recommendations for improving traditional group-style Professional Development or PLCs at RCS?
- Q11. Is there anything else you would like to add about your experience with instructional coaching?

# Appendix E

## **Lesson Plan Format**

Subject:Date:Grade:Teacher:Unit of Study:Standard(s):

Days Planned	1	2	3	4
Objective (SWBAT) What will students be able to do/demonstrate knowledge of by the end of class?				
Opening/ Do Now How will you engage students in the lesson? What spiraled or routine skills/ content will you address?				
Direct + Guided Instruction What will you do/teach so that students meet the objective?				
Activities/Procedures How will students gradually take on the lesson on their own? What activities will they complete in order to master the objective?				
Assessment and Closure Write it here. How will students demonstrate mastery of the objective? How will you end the class?				

Material Resources (Physical/ Technological).	Differentiation Strategies (Inclusive of all students).
Special Education Students (individual names listed with suggestions for using strategies, applying accommodations/modifications as needed).	ELL Students (Individual names listed with suggestions for using strategies, applying accommodations/ modifications as needed).
Tier II Students (Individual names listed, strategies matched to individual students).	Tier III Students (Individual names listed, strategies matched to individual students).

# Appendix F

#### **TRIS**

Teacher Reflection and Impact Survey, 1 of 6

# Teacher Reflection and Impact Survey

The following survey will ask you to reflect on the coaching you've received from your instructional mathematics coach. If you're unsure about an answer, simply give us your best recollection.

Ent	ter your name or ID code:
rec	Please record (as a numeral, 0 or greater) the number of times you eived coaching from your coach this school year to date in the followin ntexts:
	ow many times were you coached in mathematics?
	ow many of the sessions included in answer (a) included a pre-observation conference, a on observation or model, AND a post-observation conference?
	ow many of the sessions included in answer (b) involved lessons in number sense and ations?
	ow many times, if any, were you coached by your coach in a subject outside of hematics?
2. 1	How often did your coaching sessions include a pre-lesson conference?
C	Never
C	Less than half the time, but sometimes
C	Half the time
O	More than half the time, but not always
C	Always
3. 1	How often did your coaching sessions include a lesson observation?
C	Never
C	Less than half the time, but sometimes
C	Half the time
O	More than half the time, but not always
C	Always

Continued on next page ...

Teacher Reflection and Impact Survey, 2 of 6

4. How often did your coaching sessions inclu	de a p	ost-les	son c	onfer	ence?
C Never					
C Less than half the time, but sometimes					
C Haif the time					
More than half the time, but not always					
C Always					
5. During this school year, how often has you	r math	emati	cs coa	ch me	odeled
a lesson for you?					
C Never					
C Once					
C Twice					
C Three times					
More than three times					
6. Please rate each of the following statement 1 meaning not at all and 5 meaning to a great be your overall assessment of the coaching. You individual coaching sessions, but rather encapquality of your coaching relationship over the	exten You are psulati	t. The e not a ng you	se rati iverag ir view	ings s ing	hould
	Not at all				great
	1	2	3	4	5
a. I felt comfortable communicating with my coach.	C	C	C	C	C
<ul> <li>I felt my coach respects my opinions and understands my situation and the challenges I face.</li> </ul>	C	C	C	C	C
<ul> <li>I felt comfortable with my coach's reflecting on my teaching practices.</li> </ul>	C	C	C	C	C
d. I valued my coach's input.	0	C	0	C	0

#### **Topics Discussed**

7. Please rate each of the following statements on a scale from 1 to 5, with 1 meaning to at all and 5 meaning to a great extent. These ratings should be youroverall assessment of what occurred during the coaching sessions. These are not value judgments- just a measure of what topics were discussed. You are not averaging individual coaching sessions, but rather encapsulating your view of what was discussed during coaching sessions over the academic year.

A low rating on an item means that you didn't focus on that particular topic, which is fine. You may not have focused on that topic for good reasons. We are simply keeping track of what youlid discuss, not whether or not it needed to be discussed.

Teacher Reflection and Impact Survey, 3 of 6

Mat	hema	atics	Con	tent

	Not at all	2	3	4	To a great extent 5
a. My coach and I discussed significant and worthwhile mathematical content.	C	C	C	C	C
b. My coach and I discussed mathematical content that I teach.	C	0	0	C	C
c. My coach and I discussed ways to increase the level of cognitive demand of the mathematical content I teach.	C	C	0	C	C
d. My coach and I discussed mathematics content beyond the grade(s I teach.	C	C	C	C	C

#### **Mathematical Concept and Inquiry**

7	Not at all	1	3		To a great extent
	1	4	3	4	5
<ul> <li>e. My coach and I discussed ways of incorporating investigative, inquiry-based or discovery-based mathematics learning into my lessons.</li> </ul>	C	C	C	С	C
f. My coach and I discussed ways to infuse more mathematical concept development into my lessons.	C	0	C	C	C
g. My coach and I discussed ways to infuse more mathematical problem-solving into my lessons.	C	C	C	C	C
<ul> <li>h. My coach and I discussed ways to engage students in thought- provoking activities centered on important mathematical ideas.</li> </ul>	C	0	C	C	C
Ny coach and I discussed ways to emphasize elements of mathematical abstraction or sense-making into my lessons.	C	C	0	C	C

#### Classroom Environment/Culture

classicom Environment, curtare	Not at all	I.			To a great extent
	1	2	3	4	5
j. My coach and I discussed ways to encourage students to pursue intellectual rigor, constructive criticism and/or challenging of ideas.	C	C	C	C	C
<ul> <li>k. My coach and I discussed ways to increase student participation in mathematics lessons.</li> </ul>	C	C	C	C	C
My coach and I discussed ways to create an environment where students listen to one another's mathematical ideas.	C	C	C	C	C
m. My coach and I discussed ways to "read" or detect students' levels of understanding of the mathematics being taught.	C	C	C	C	C
n. My coach and I discussed ways to improve the use of questioning strategies in the context of mathematics instruction (such as, but not limited to, higher-order questions, open questions or wait time).	C	C	C	C	C

Continued on next page ...

Teacher Reflection and Impact Survey, 4 of 6

# Reflection and Planning To a great extent Not at all 2 3 4 5 o. My coach and I set goals and objectives aimed at implementing lideas and addressing issues we discussed. p. My coach and I were reflective about my students' learning. q. My coach and I were reflective about my teaching practice.

#### **Likely Impact on Your Instruction**

Continued on next page ...

Teacher Reflection and Impact Survey, 5 of 6

8. Please rate each of the following items on a scale from 0 to 5, with 0 meaning the topic wasn't discussed or was not a point of emphasis, 1 meaning no impact and 5 meaning very large impact. These ratings should be your overall assessment of the coaching sessions' impact on your instruction. These are not value judgments—just a measure of whether or not your instruction changed because of the coaching sessions. You are not averaging individual coaching sessions, but rather encapsulating your view of the sessions' impact on your teaching practices over the academic year.

Please rate the LEVEL OF IMPACT ON YOUR INSTRUCTION for each of the following:

	Didn't discuss, or not a topic of emphasis 0	Discussed, but no impact	2	Moderate Impact 3	4	Very large Impact 5
The mathematical content my coach and I discussed.	C	C	C	C	C	C
<ul> <li>Discussions with my coach about ways of incorporating investigative, inquiry-based or discovery-based mathematics learning into my lessons.</li> </ul>	C	С	C	C	C	C
c. Discussions with my coach about ways to infuse more conceptual understanding into my lessons.	C	C	C	С	0	C
<li>d. Discussions with my coach about ways to infuse more problem-solving into my lessons.</li>	C	C	C	C	C	C
e. Discussions with my coach about ways to "read" or detect students' levels of understanding.	C	C	C	C	0	C
f. Discussions with my coach about ways to improve the use of questioning strategies in the context of mathematics instruction (such as, but not limited to, higher-order questions, open questions or wait time).		C	C	С	C	c
g. Discussions with my coach about ways to engage students in thought- provoking activities centered on important mathematical ideas.	C	C	C	C	C	C
<ul> <li>Discussions with my coach about ways to emphasize elements of mathematical abstraction or sense- making in lessons.</li> </ul>	C	C	C	C	C	C
Discussions with my coach about ways to encourage student participation.	C	С	C	C	C	C
j. Discussions with my coach about ways to encourage students to	C	C	0	0	0	0

			Te	acher Reflection	and Impact Sun	vey, 6 of 6
pursue intellectual rigor, constructive criticism and/or challenging of ideas.						
k. The goals and objectives my coach and I set aimed at implementing ideas and addressing issues we discussed.	С	С	C	C	С	C
<ol> <li>Discussions with my coach about my students' learning.</li> </ol>	C	0	C	0	0	C
<ul> <li>m. Discussions with my coach about my teaching practice.</li> </ul>	C	C	C	C	C	C

You have reached the end of the Teacher Reflection and Impact Survey. If you are finished, please submit your responses according to your instructions.

Yopp, D., Burroughs, E., & Sutton, J. (2010). Teacher Reflection and Impact Survey. Bozeman, MT, and Denver, CO: Examining Mathematics Coaching (Montana State University and RMC Research Corporation). Supported by NSF Discovery Research K-12 Program, Award No. 0918326.

#### Appendix G

#### **Interview Protocol**

#### "Teacher Experience"

- Readiness Charter High School
- Interviewer- Shay Reitz
- Interviewee-
- Position/job title of the interviewee-
- Audio recording, hand-written notes

#### I. Introduction

- A. Good morning, my name is Shay Reitz. You know me in a professional context as a former Spanish teacher and instructional coach here, at Readiness Charter High School. I am currently conducting a study with Arcadia University around teacher perceptions and preferences with their experience participating in instructional coaching.
- B. The purpose of my study is to examine teacher experience so that I can use the results for program improvement.
- C. Do you consent to this interview, and to your responses being included in a publicly available study?
- D. This will be an interview in which I record our conversation for later use. I will also be taking notes as we conduct our discussion, my aim is to jot down as much information as possible to capture your responses with the greatest accuracy I can. Your responses have absolutely no bearing on your professional standing or role within this environment, and are completely voluntary.
- E. Do you have any questions for me before we begin our interview today?
- F. For the purposes of this study, instructional coaching is defined as the practice of an individual working with teachers to assist them with classroom management, lesson structure and planning, and overall direct mentorship, under the umbrella of job-embedded professional development.
- 1. How would you describe your overall experience with the one on one instructional coaching that you have received at Readiness Charter this year?
  - a. Have there been any aspects of instructional coaching that you found to be positive?
  - b. Are there aspects you would have liked to change, or found to be negative?
  - c. Are there any moments or experiences that you recall during instructional coaching that stand out to you? If so, can you walk me through one of these moments?
- 2. Has instructional coaching impacted your personal and/or professional development this school year?
  - a. If so, can you elaborate on how it has impacted you?

- b. Were there any aspects of coaching notes, or meetings that stick out to you as more or less impactful?
- 3. How, if at all, has instructional coaching impacted your feelings about teaching, or being a member of the Readiness Charter community?
- 4. Have you experienced any challenges while participating in instructional coaching?
  - a. If so, can you elaborate on these challenges, and explain the role of instructional coaching in either helping to resolve them or in making them worse?
- 5. What impact do you believe instructional coaching may have on Readiness Charter now and in the future?
- 6. How would you recommend improving instructional coaching at Readiness Charter for next year?
- 7. Is there anything else you would like to share with me about your experience with instructional coaching at Readiness Charter?

# Appendix H Consent Form

Dear teacher:	Date

My name is *Shay Reitz* and I am a doctoral student at Arcadia University, Department of Education. You are invited to participate in a study I am conducting for my doctoral dissertation in the topic of instructional coaching. I am interested in learning about teacher experience with instructional coaching, so that I may understand your preferences and inform future instructional coaching with these in mind.

The title of my project is "Understanding Teacher Experience with Instructional Coaching to Inform Program Improvement Reflecting the Principles of Adult Learning Theory: A Mixed Method Case Study." This study is important because it will make a contribution in the area of instructional coaching that honors the principles of adult learning and accounts for teacher perceptions and teacher preferences.

I am asking for your participation because of your experience with instructional coaching, and because you can provide valuable insight from the teacher's perspective. I expect to have 21 teachers participating in this project.

This project will take approximately 1 month. Participation is voluntary and will include the following components:

- 1. <u>A 10-15 minute survey:</u> the survey will consist of eight items, with response options using a 5-point Likert scale. This survey will be emailed to you via your Readiness Charter email account, from my Arcadia email account, s---@-----.
- 2. Possibility to be invited for a follow-up 30-45 min. individual interview: The interview will be conducted via a means and time that is convenient to you, including outside of school hours. We may conduct this interview via phone or Zoom<sup>TM</sup>. If any of the interview questions makes you feel uncomfortable, you will not have to answer them. If you allow me to, I will record the interview to ensure the accuracy of the information. If you prefer me not to record it, I will just take notes during the interview.

As the researcher, I will keep all information resulting from questionnaire responses and interviews confidential. Note that no names or any other identifying information will be used in the results of this study. Also you can, at your discretion, withdraw from this study at any time. If you choose to withdraw, I will delete any information collected from you up to that point.

This study will take place between the months of July and October, 2020. .

Your decision to participate or not will not affect your relationship wit	h the school	or other
school personnel, or Arcadia University. If you have any questions ab	out the stud	y you can
email me at: <u>s</u> or you may call or email the supervise	or of the pro	ject: <b>Dr.</b>
, xxx-xxx, m@ This study has been approved	by Readines	ss Charter
school leaders and Arcadia University Institutional Review Board (IRI	3). To ensur	e that this
research continues to protect your rights and minimizes your risk, the l	RB reserves	s the right to
examine and evaluate the data and research protocols involved in this p	oroject. If yo	ou wish
additional information regarding your rights in this study you may con	tact the Offi	ice for the
Committee for the Protection of Research Subjects at (267) 620-4111.		
Please indicate below the activities that you choose to take part in, rela	ted to this s	tudy. I
appreciate your willingness to participate. If you later decide that you	wish to with	draw your
participation in the study, you may do so at any time.		
This study has been explained to me, and I have read the consent form	. Yes	∐No
I am choosing to:		
Complete the online survey	Yes	□No
(If I am asked) participate in a follow-up interview	Yes	□No
Allow the interview to be recorded	Yes	□No
My email address is:		

### Appendix I **Qualtrics Survey (TEQ)**

12/15/2020 Qualtries Survey Software

#### Default Question Block

Dear Teacher:

My name is Shay Reitz and I am a doctoral student at Arcadia University, Department of Education. You are invited to participate in a study I am conducting for my doctoral dissertation in the topic of instructional coaching. I am interested in learning about teacher experience with instructional coaching, so that I may understand your preferences and inform future instructional coaching with these in mind.

The title of my project is "Understanding Teacher Experience with Instructional Coaching

to Inform Program Improvement Reflecting the Principles of Adult Learning Theory: A Mixed Method Case Study." This study is important because it will make a contribution in the area of instructional coaching that honors the principles of adult learning and accounts for teacher perceptions and teacher preferences.

I am asking for your participation because of your experience with instructional coaching, and because you can provide valuable insight from the teacher's perspective. I expect to have 21 teachers participating in this project.

This project will take approximately 1 month. Participation is voluntary and will include the following components:

- 1. A 10-15 minute survey: the survey will consist of eleven items. This survey will be emailed to you via your Prep Charter email account, from my Arcadia email account, sreitz@arcadia.edu.
- 2. Possibility to be invited for a follow-up 30-45 min. individual interview. The interview will be conducted via a means and time that is convenient to you, including outside of school hours. We may conduct this interview via phone or Zoom™. If any of the interview questions make you feel uncomfortable, you will not have to answer them. If you allow me to, I will record the interview to ensure the accuracy of the information. If you prefer that I do not record it, I will only take notes of your responses.

#### 12/15/2020

#### Qualtries Survey Software

My role as the instructional coach at Prep Charter High School will not impact the research being conducted, nor have reputational or employment impact on participants. As the researcher, I will keep all information resulting from questionnaire responses and interviews confidential. Note that no names or any other identifying information will be used in the results of this study. Any report of the results, after successfully defending the dissertation, will be presented only in aggregate to the school to maintain the confidentiality of participants.

Also you can, at your discretion, withdraw from this study at any time. If you choose to withdraw, I will delete any information collected from you up to that point.

This study will take place between the months of July and October, 2020.

Your decision to participate or not will not affect your relationship with the school or other school personnel, or Arcadia University. If you have any questions about the study you can email me at: sreitz@arcadia.edu or you may call or email my dissertation chair: Dr. Peggy Hickman, (267)-620-4132, hickmannp@arcadia.edu. This study has been approved by Prep Charter school leaders and Arcadia University Institutional Review Board (IRB). To ensure that this research continues to protect your rights and minimizes your risk, the IRB reserves the right to examine and evaluate the data and research protocols involved in this project. If you wish additional information regarding your rights in this study you may contact the Office for the Committee for the Protection of Research Subjects at (267) 620-4111.

Please indicate via responding to the following questions the activities that you choose to take part in, related to this study.

If you later decide that you wish to withdraw your participation in the study, you may do so at any time.

Thank you for your consideration.

Sincerely, Shay Reitz

This study has been explained to me, and I have read the consent form:



2/15/2020	Qualtries Survey Software
I consent t	to complete the online survey.
O Yes	
O No	
I consent t	to participate in a follow-up interview, if selected.
O Yes	
O No	
Please pro follow-up i	vide your email address so that I may contact you about a interview:
recorded.	ected for a follow-up interview, I consent to the interview being
O Yes	
O NO	
Block 2	
	the following questions, please reflect upon the one on one instructional that you participated in at Prep Charter during the 2019-2020 school year.
Block 1	
Please ra	ate each of the following statements on a scale of 1-5, with 1 meaning not at all and 5 meaning to a great extent.

How do t			irvey Software		
	the following des	cribe your	experience w	ith coaching	<b>j?</b>
	1 (not at all)	2	3	4	5 (to a greatent)
I feel comfortable communicating with my coach.	0	0	0	0	0
My coach respects my opinions.	0	0	0	0	0
My coach understands my situation and the challenges I face.	0	0	0	0	0
I feel comfortable with my coach's reflecting on my teaching practices.	0	0	0	0	0
I value my coach's input.	0	0	0	0	0
My experience with coaching was worth my time.	0	0	0	0	0
	My coach an	ıd I discus	ssed ways t	to:	
	anlı				
Select all that ap	pry				
Select all that ap Increase the level of		om.			
	rigor in my classro	om.			
Increase the level of	rigor in my classro ticipation.				
☐ Increase the level of☐ Increase student par	rigor in my classro ticipation. tful classroom envi				
☐ Increase the level of☐ Increase student par☐ Encourage a respect	rigor in my classro ticipation. tful classroom envi nderstanding.	ronment.	er thinking, wai	t time, cold-c	alling, etc.
☐ Increase the level of☐ Increase student par☐ Encourage a respect☐ Check for student ur	rigor in my classro ticipation. tful classroom envi nderstanding. ning strategies (e.g	ronment.	er thinking, wai	t time, cold-c	alling, etc.
Increase the level of Increase student par Encourage a respect Check for student ur Use diverse question	rigor in my classro ticipation. tful classroom envi nderstanding. ning strategies (e.g tructional goals	ronment.	er thinking, wai	t time, cold-c	alling, etc.
☐ Increase the level of ☐ Increase student par ☐ Encourage a respect ☐ Check for student ur ☐ Use diverse question ☐ Set objectives or ins	rigor in my classro ticipation. tful classroom envi nderstanding. ning strategies (e.g tructional goals dent learning	ronment.	er thinking, wai	t time, cold-c	alling, etc.
☐ Increase the level of ☐ Increase student par ☐ Encourage a respect ☐ Check for student ur ☐ Use diverse question ☐ Set objectives or ins ☐ Reflected about student	rigor in my classro ticipation. tful classroom envi nderstanding. ning strategies (e.g tructional goals dent learning teaching practice	ronment.	er thinking, wai	t time, cold-c	alling, etc.

12/15/2020 Qualtrics Survey Software

# How much, if at all did instructional coaching impact the following emotional aspects of your teaching?

--Please rate on a scale of 1 (no impact) to 5 (most impact)--

	1 (no impact)	2	3	4	5 (most impact)
My comfort in the school setting.	0	0	0	0	0
My willingness to participate in discussions about instruction and student achievement	0	0	0	0	0
My sense of community with other teachers.	0	0	0	0	0
My level of comfort sharing ideas about teaching with other teachers.	0	0	0	0	0
My level of comfort sharing ideas about teaching with administration.	0	0	0	0	0
My level of comfort managing a classroom environment.	0	0	0	0	0

How useful, if at all, were the following aspects about coaching feedback?

--Please drag to rank in order from 1 (most useful) to 7 (least useful)--

Lesson plan feedback

Detailed observation notes

Specific observation suggestions (bullet points and TAPs)

In-person meetings (classroom and coaches' office)

Wookly shout-out amails

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other informat					
Emailed resources and other information					
Check-ins (via phone call, Google hangouts, or text)					
I did the fo impact yo instructio scale of 1	ur experie nal coachi	nce with in ng?	dividualize	d	
o impact)	2	3		(most npact)	
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Combine Grances Golfman.

In general, how motivated are you to improve  $\underline{\textbf{your own instruction}}$ ?

--Please rate on a scale of 1 (not at all motivated) to 5 (highly motivated)--



In general, how motivated are you to improve <u>student achievement</u>?

--Please rate on a scale of 1 (not at all motivated) to 5 (highly motivated)--



#### Block 3

Would you recommend coaching to other teachers?

- O Yes
- O No

Do you have any suggestions for improving coaching at Prep Charter in the future?

Do you have any recommendations for improving traditional group-style Professional Development or PLCs at Prep Charter?

Is there anything else you would like to add about your experience with instructional coaching?

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