An Investigation of Instructional Rounds and Novice Teacher Self-Efficacy:

An Evaluative Case Study

by

© Rachelle Meneghetti

A thesis submitted to

the School of Graduate Studies

in partial fulfillment of the requirements for

the degree of Master of Education (Educational Leadership)

Faculty of Education

Memorial University of Newfoundland

(May 2025)

St. John’s, Newfoundland and Labrador, Canada

Abstract

The purpose of this qualitative study, situated at an independent Vancouver school, was to investigate the use of instructional rounds as a collaborative professional learning tool in promoting novice teacher self-efficacy. The study utilized an evaluative case study approach to explore the experiences of four novice teachers as they engaged in several rounds of classroom observation, group debrief, and self-reflection. Data were collected using semi-structured interviews, document reviews, and research field notes. Findings from the research suggest that instructional rounds provide an effective vehicle for professional learning and for building educators' self-efficacy beliefs. Participants attributed heightened impressions of self-efficacy to several elements of the instructional rounds process, including (1) creating a shared vision and goals, (2) engaging in non-evaluative classroom observations, (3) collaborating in a safe and supportive learning environment, and (4) critically reflecting on their own teaching practices. The study provides useful insight for administrators and policy makers as they plan high-quality professional learning aimed toward continuous school improvement. It also underscores the complexity of implementing robust professional learning initiatives that are designed to foster greater teacher professionalism. Suggestions are made to help schools renew their focus on professionalism and teacher self-efficacy, which may help retain a growing number of early career teachers who choose to leave the profession. Recommendations are also made for further research.

General Summary

While ‘rounds’ have become an effective learning tool in the field of medicine, their application in teacher education is a relatively new practice. This study explored the experiences of four novice teachers as they engaged in instructional rounds through a series of classroom observations, group discussions, and self-reflection; the purpose was to better understand the value of rounds in building teachers’ feelings of self-confidence, along with their beliefs in their teaching abilities. Data analysis focused on (1) how participation in instructional rounds influenced participant perceptions of self-confidence and (2) the benefits and challenges of using instructional rounds as a collaborative professional learning tool. Findings reveal that rounds have several benefits, including fostering collaboration and ongoing dialogue among participants, reflecting the needs of individual schools, providing teachers with a sense of ownership over teaching and learning, and as a result, boosting the confidence of novice teachers.

Acknowledgements

The completion of this thesis would not have been possible without the support of my family, supervising professor, and teaching colleagues. First and foremost, I would like to thank my husband (Fabiano) and twin daughters (Juliana and Rebecca) for their encouragement, accommodation, and motivation as I completed my graduate studies—and culminating thesis—in Educational Leadership. Juliana and Rebecca, I wish you all the best as you continue your own post-secondary journeys; thank you for modeling perseverance, determination, and the importance of embracing a growth mindset.

To my supervising professor, Dr. Gerald Galway—thank you for facilitating this learning experience and for your continuous guidance, insight, and constructive feedback throughout the research and writing process. Your time and expertise have been greatly appreciated.

Finally, I would like to extend a special thanks to the teachers who participated in this case study, along with those who opened their classrooms to observation. Your voices are what help schools improve as we strive to positively impact the learning experiences of *all* students.

Table of Contents

List of Figures, Tables & Appendices

Definition of Key Terms

Asymmetry: In qualitative research, this refers to an imbalance between the knowledge of the researcher and the participants involved in the practice(s) being studied (Willig & Stainton Rogers, 2017).

Boundary Spanning: In educational organizations, this concept can be explained as building mutually beneficial relationships between stakeholders—including school administrators, community partners, faculty, and staff (LeCompte & Preissle, 1993; Weerts & Sandmann, 2010).

Collaborative Learning: Collaborative learning refers to a pedagogical practice "that promotes socialization and learning for students from kindergarten to the college level and beyond" (Gillies, 2022, p. ix). It actively engages two or more learners as they work together to solve problems and understand new concepts (Gillies, 2022).

Continuous Improvement: Continuous school improvement is a cyclical process, intended to help organizations (e.g., schools, districts, or networks of multiple districts) set goals, identify ways to improve, and modify these in light of experience (Argyris, 1999; Wong & Headrick, 2021).

Instructional Core: The essential interaction between teacher, student, and content that creates the foundation of learning (Elmore, 2008).

Instructional Rounds: A practice that involves a network of educators identifying a problem of practice, observing classroom instruction, debriefing, and determining the next level of work; the goal of rounds is to support schools and teachers as they develop effective and powerful teaching and learning (City et al., 2009; Marzano, 2011).

PeaceWorks: The PeaceWorks program provides a lesson-based approach to social-emotional learning for Grades Pre-K through 12. It provides strategies for children to learn sharing, reflective listening, anger management, and problem-solving skills in the classroom setting (Collaborative for Academic, Social, and Emotional Learning, 2024).

Problem of Practice: Localized issues that may or may or may not exist in wider districts and that focus on the instructional core. Problems of practice are directly observable, actionable, and connect to a wider school improvement strategy (City et al., 2009; University of California Davis School of Education, n.d.).

Professional Development: Gaining new knowledge and skills through ongoing education and career training after entering the workforce (Harvard Division of Continuing Education, 2023).

Professional Learning: An opportunity for teachers to collaborate with each other to refine their professional knowledge, skills, and practices. With its student-centered structure, professional learning aims to improve the quality of instruction that students receive (Ontario College of Teachers, 2016).

Reflective Practice: A self-study in which teachers consider alternatives to their actions, with an awareness of their own biases about teaching, about themselves, and about their students (University of Manitoba, 2023).

Reggio Emilia Approach: The Reggio Emilia approach is an educational philosophy and pedagogy, developed in northern Italy during the mid-nineteenth century. The approach typically focuses on preschool and primary education through a student-centered and social constructivist model. Central to the Reggio Emilia approach is the idea that three ‘teachers’ facilitate children’s learning—the parents, the teachers, and the classroom environment (Reggio Children S.R.L., 2022).

Second Step: Like mathematics or reading, social-emotional skills can be taught explicitly in classroom settings and programs like Second Step have been designed to support children as they build these skills. More specifically, the Second Step Early Learning and Elementary programs teach young children techniques to build confidence, set goals, make better decisions, and collaborate with others (Committee for Children, 2024).

Scaffolding. Scaffolding is an instructional practice where teachers provide students with the appropriate support needed to effectively participate in learning, complete a challenging task, or learn a new concept. Support can be provided for content, process, or learning strategies, with the goal of gradually removing teacher guidance as students become increasingly competent. Scaffolding requires careful planning, ongoing assessment, and monitoring of student growth (Tomlinson, 2001).

Teacher Self-Efficacy: Refers to teachers' own feelings of confidence and how prepared they feel to influence students in terms of their educational experiences and learning outcomes. Self-efficacy is measured in terms of one's skills in managing the classroom, engaging students in learning, and using a variety of instructional strategies to support student understanding (Bandura, 1977, 1997; Kelm & McIntosh, 2012; Tschannen-Moran & McMaster, 2009).

Chapter 1—Introduction and Statement of the Research Problem

The use of instructional rounds (IR) as a form of professional learning has become increasingly widespread in recent years, as schools and districts around the globe strive to improve student outcomes and meet jurisdictional standards (City, 2011; City et al., 2009; Del Prete, 2016). Adapted from the field of medicine, IR—also referred to as learning walks, or educational rounds—engage teachers in communities of practice and involve a high level of collaboration, dialogue, and reflection. In North America, for example, the IR model has been used in education as a form of professional learning since the early 2000s, its intention to raise the quality of instruction and to enhance school improvement initiatives (Blanding, 2009; Goodwin et al., 2015; Roegman & Riehl, 2012). The IR model provides a disciplined way for schools to:

- focus on and improve learning tasks within classroom settings;
- develop a *shared* vision of high-quality teaching and learning, and;
- foster a culture of collaboration that ultimately supports student learning (City et al., 2009; Harvard Graduate School of Education, 2024; Marzano, 2011; Philpott & Oates, 2017).

Essentially, IR help educators look more purposefully at what is happening in classrooms in a facilitated and systematic way. Although more commonly used with in-service teachers, there is emerging evidence to suggest that IR are beneficial for both prospective and novice teachers to identify and solve common problems they may experience related to teaching and learning and their initiation to the profession (Roegman & Riehl, 2015; Tietel, 2009).

1.1 Significance of the Study

The importance of gaining field experience as a means of strengthening the readiness of pre-service teachers has been well documented (O'Brian et al., 2007). Yet, merely sitting at the back of a classroom and observing how experienced teachers deliver lessons is not an effective

means of pre-service teacher education (Ben-Peretz & Rumney, 1991), as this practice alone does not generally lend itself to critical analysis, reflection, and collaboration (Goodwin et al., 2015). A well-documented problem of learning from observation in a classroom setting is knowing exactly *what* to look for and *how* to interpret what is observed (Werner & Kessenich, 2018). During traditional classroom observations—common in many teacher preparation programs—novices may not know what to focus on when studying the interactions and nuances of meaning, expression or sound between students and their teachers (Grimm et al., 2014; Werner & Kessenich, 2018). In fact, research on both learning processes and teacher expertise suggest that the ability to observe and, more importantly, discern details in their unique classroom environments is what differentiates novices from expert or master teachers (Bransford et al., 1999; Grimm et al., 2014; Wolff et al., 2017). By breaking down the sophisticated practice of classroom teaching, mentor teachers can support pre-service and novice teachers as they learn to identify, and then enact, the essential elements of practice. A particular challenge for novice observers is the ability to accurately determine *if* (and how deeply) students are learning, as their learning may not be particularly transparent (Bransford et al., 1999; Elmore, 2008). On the surface, students may *appear* engaged—in other words, attentive and compliant—and may also receive ongoing teacher feedback (City et al., 2009; Elmore, 2008). Yet, as Richard Elmore queries in his 2008 publication, *Improving the Instructional Core,* what are students actually doing? And, perhaps more importantly, what are they *learning*? (Elmore, 2008).

Although ample studies exist that underscore the effectiveness of rounds as a professional development tool in the field of medicine (Heip et al., 2022; Ratelle et al., 2022), their application to the field of K-12 teacher education is not well studied. The use of IR is a relatively new practice in teacher education and there are wide gaps in our understanding of their application to continuous professional learning (in-service) (Hatch et al., 2016). Given the challenges associated with attracting new teachers to the profession, coupled with teacher

attrition from the teaching ranks, research is also needed to help to understand the value of IR in promoting pre-service and novice teacher self-efficacy (Goodwin et al., 2015; Gümüş & Bellibaş, 2023) and suggests a need to investigate the effects of educational rounds on classroom teaching practices and overall student learning outcomes (Hatch et al., 2016; Philpott & Oates, 2017).

1.2 Purpose Statement

The purpose of this study was to investigate the practice of IR as a professional development tool, and to assess its value in promoting novice teacher self-efficacy. The research participants were early career teachers who took part as teacher observers, along with several experienced teachers, acting as either IR facilitator or classroom hosts (City et al., 2009; Hatten, 2019).

1.3 Context for the Research

School A is an independent school, located in Vancouver, British Columbia, and enrolls students from Pre-Kindergarten through Grade 12. To develop a collective vision of high-quality teaching and learning, School A has invested resources in professional development and engaged in practitioner research of so-called ‘best practices’ in education (British Columbia Ministry of Education, 2023; K. McDonald, personal communication, May 30, 2023). As the school enters the 2024/25 academic year and looks toward its long-term strategic goals, it will continue to offer practicum placements to teacher candidates from local universities. A number of its faculty members will also be in the early years (years 1-5) of their teaching careers. Many of the current professional development opportunities, while robust and collaborative in nature, are not structured in a way that enhances pre-service and novice teachers’ awareness of how (or why) to use specific instructional strategies (Reagan et al., 2015)—or help them critically examine the ‘problems of practice’ that are common in educational settings (Teitel, 2009).

When teachers and administrators conduct IR, they focus on *why* a problem of practice

persists school-wide, and *how* they can go about improving it (City, 2011; City et al., 2009). And, if executed well—in a way that is sustainable over the long-term, involves stakeholder 'buy in,' and complements a school improvement strategy—IR hold the potential to develop learning environments in which teachers may improve self-efficacy and students can achieve the intended learning outcomes (City et al., 2009; Elmore, 2008; Fullan et al., 2015).

1.4 Research Questions

Keeping in mind that qualitative research is emergent—and that interview questions can be modified in the field (Creswell & Guetterman, 2019)—the following questions were used to guide the collection of data:

1. What do novice teachers perceive to be the benefits and challenges of using IR as a collaborative professional learning tool?
2. To what extent do IR engage novice teachers in the collaborative process of observation, reflection, and inquiry?
3. How and to what extent does participating in the practice of IR create shifts in teacher beliefs?
4. How do novice teachers perceive the value of IR (as a professional development tool) on their self-efficacy and student learning outcomes?

1.5 Organization of the Thesis

This thesis is organized into five chapters. Chapter 1 introduces the study—the impact of IR on novice teacher self-efficacy. It describes the significance of the study, outlines the research purpose, and defines key terms that are used throughout the paper.

Chapter 2 contains a review of extant literature relevant to the research topic. In this chapter, I provide information regarding teacher self-efficacy, the importance of teacher professional learning—including components of high-quality professional development—and a background and description of IR in education.

Chapter 3 details the methodology for this qualitative research. In this chapter, I explain the use of the case study approach and rationale for this choice—along with the theoretical perspective (social constructivism) that underpins the research. I also present the research design and the procedures that guide the research, situated at a small school in Vancouver, British Columbia. Semi-structured interviews, document and artifact analysis, and field notes are used in collecting data from and about the participants and setting. Data analysis strategies and the issue of trustworthiness are also explained in this chapter.

Chapter 4 presents a detailed description of the research findings and an analysis of the data, gathered from research field notes, artifacts (e.g., participants' observation forms), and interview transcripts.

Chapter 5 is the final chapter of the thesis. In this chapter, I carefully examine the principal findings of the case study, while identifying and discussing educational implications of the research and suggestions for further research. I also provide a reflective discussion and interpretation of the research findings and explore themes arising from participant viewpoints (in relation to both the research questions and the extant literature).

Chapter 2—Literature Review

According to Teitel (2009, 2013), a small but growing number of educators are using IR as a professional development tool to look closely at what is happening inside classrooms and work collaboratively to provide high-quality teaching and learning for all students. This qualitative case study examines how the implementation of IR may contribute to new teacher self-efficacy, which is an important contributor to overall student success (Goddard et al., 2000).

Careful examination of existing literature revealed several emerging themes that relate to the use of IR in education. This chapter provides an overview of the literature relating to Bandura's conceptualization of self-efficacy and its application to teacher self-efficacy, current research on professional learning (with a focus on collaborative professional learning), and the application of the IR model.

2.1 Teacher Self-Efficacy

Perhaps one of the best-documented attributes of effective teachers is their strong sense of self-efficacy (Henson et al., 2001). Teacher self-efficacy—namely, teachers' beliefs in their own abilities to effectively navigate the tasks and challenges of their profession—plays a significant role in influencing student learning outcomes, including student motivation and achievement (Barni et al., 2019; Goddard et al., 2000; Tschannen-Moran et al., 1998). Research on teacher self-efficacy dates to the 1970s when the American non-profit RAND Corporation based its studies on Rotter's Locus of Control, a social learning theory (George et al., 2018; Rotter, 1966). Today's widely adopted integrated model of teacher self-efficacy, however, was proposed by Tschannen-Moran et al. (1998), in accordance with Albert Bandura's social cognitive theory of behavioural change (Bandura, 1997; George et al., 2018; Tschannen-Moran et al., 1998).

The construct of teacher self-efficacy continues to be strongly influenced by Bandura's social cognitive theory—in which he describes individuals as self-regulating, proactive, and self-reflecting agents of their life circumstances (Bandura, 2001; Weißenfels et al., 2022)—and

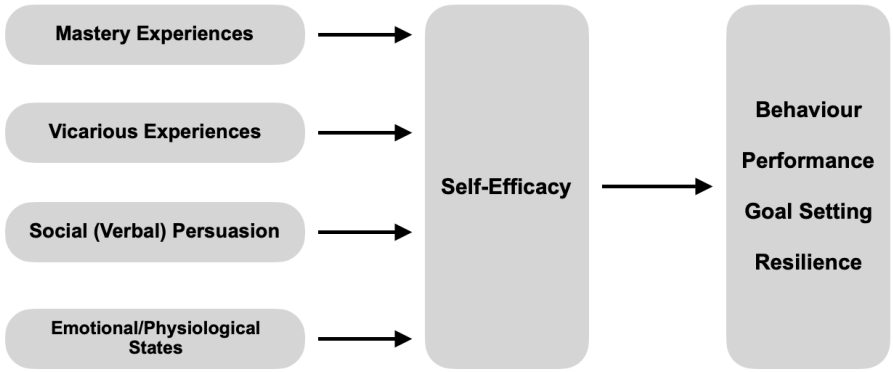
posits that learning occurs in a social context, involving the dynamic interplay between person, environment, and behaviour (Boston University School of Public Health, 2022). As the construct is applied to teaching, self-efficacy is conceptualized as “the teacher’s belief in his or her capability to organize and execute courses of action required to successfully accomplish a specific teaching task in a particular context” (Tschannen-Moran et al., 1998, p. 233). In other words, self-efficacy is a teacher’s belief that he or she can bring about positive changes through student engagement, classroom management and instructional strategies (Guo et al., 2012; Tschannen-Moran & Hoy, 2007). Several cross-sectional studies have been conducted on the topic of teacher self-efficacy, demonstrating a link between a teacher’s perception of their teaching efficacy and important student learning outcomes, such as motivation and achievement (Guo et al., 2012; Kim & Seo, 2018; Klassen & Tze, 2014; Podell & Tournaki, 2007). Specifically, what these studies highlight is that teachers who hold high self-efficacy are more likely to adopt student-centered (as opposed to teacher-centered) approaches to teaching, encourage student autonomy, and differentiate instructional strategies to meet the needs of diverse learners (George et al., 2018; Kim & Seo, 2018). Conversely, teachers with a low sense of instructional efficacy are less likely to persist in teaching students with learning differences, set goals for their students, or support the inclusion of special education students into general education classrooms (Caprara et al., 2006; Powell-Moman & Brown-Schild, 2011).

Bandura (1977) proposed that self-efficacy is derived from four sources: mastery experiences (i.e., performance accomplishments), vicarious experiences, social persuasion, and the interpretation of emotional and physiological states (see Figure 1). Once self-efficacy is established, it is resilient and remains relatively stable. Bandura (1997) argued that the most effective way for an individual to develop a strong sense of efficacy is through what he termed ‘mastery experiences.’ He theorized that there is no better way to foster belief in one’s ability than to set a goal, persist through challenges along the way, and ultimately attain that goal. Once an individual—a teacher, for example—has done this enough times, he or she will come

to believe that sustained effort and perseverance will serve its purpose in the end and grow one's belief in the ability to succeed. In contrast, failing to tackle challenges or expecting rapid results can undermine self-efficacy (Bandura, 2008; Moore, 2016).

Figure 1

Bandura's Four Sources of Self-Efficacy[1]



While mastery experiences are thought to be the most significant source of self-efficacy, according to Bandura (1997), the role of both vicarious experiences and social persuasion cannot be underestimated—particularly during teachers' initial years in the classroom, before s/he has had an opportunity to accumulate very many mastery experiences (Tschannen-Moran & Hoy, 2007). Observing fellow teachers as they successfully complete tasks (i.e., vicarious experience), is another key source of self-efficacy, since "seeing people similar to oneself succeed by sustained effort raises observers' beliefs that they too possess the capabilities to master comparable activities" (Bandura, 1995, p. 3). Regarding social persuasion, Bandura asserted that individuals can be encouraged to believe that they possess the skills and competencies necessary for success. Receiving verbal encouragement from peers can help people overcome self-doubt and focus their efforts on the task at hand (Tschannen-Moran & McMaster, 2009). Hatzigeorgiadis et al. (2008) further suggested that individuals can verbally

[1]*Note*: Self-efficacy refers to an individual's belief in his or her capacity to execute the behaviours needed to produce specific performance outcomes. It is a concept first introduced by psychologist Albert Bandura. From: *Self-efficacy: The exercise of control* (1997) by Albert Bandura. Copyright 1997 by W.H. Freeman.

persuade themselves to believe in their capabilities, thus strengthening self-efficacy. Lastly, an individual's own responses (or reactions) to situations play an important role in self-efficacy; moods, physical reactions, and stress levels all impact how a person perceives his or her abilities in particular situations or contexts (Hoy & Miskel, 2013; Moore, 2016). "It is not the sheer intensity of emotional and physical reactions that is important, but rather how they are perceived and interpreted" (Bandura, 1994, p. 74).

Although Bandura (1997) portrayed self-efficacy as a stable construct, he postulated that it could be malleable in the early years of learning (Tschannen-Moran et al., 1998), which, in the case of teachers, pertains to the period during which they are learning how to teach (George et al., 2018). Studies have also revealed that the availability of teaching resources—including professional development—along with interpersonal support received from school leaders, peer teachers, and the wider school community has a stronger effect on the self-efficacy levels of novice teachers than teachers with extensive teaching experience (Dixon & Hawe, 2016; Withy, 2019).

The following section outlines research that addresses the need for teacher professional development, along with components of high-quality professional development and the role they play in developing teacher self-efficacy.

2.2 The Role and Importance of Professional Learning

A key practice in the field of education, professional learning—also known by the near-synonymous term, professional development—has the potential to influence teachers' beliefs and practices which, in turn, influences student engagement and learning (Yoo, 2016). In fact, considerable research supports the claim that efficacy beliefs are an important influence on human achievement in a variety of settings, including schools (Klassen et al., 2011). In the context of Canadian education, a longitudinal research project was carried out between September 2011 and October 2013, under contract from the Alberta Teachers' Association and funded by Alberta Education. The goal was to research districts and schools where professional

learning had reportedly made a positive difference in professional practice, teachers' beliefs about teaching and learning—and ultimately, in student learning and engagement (Beauchamp et al., 2014).

Over the course of two years, a team of researchers from the University of Alberta explored teacher beliefs (including self-efficacy), along with their preferred learning practices (Beauchamp et al., 2014)—as described through the lens of five specific modalities of teacher professional development:

1. *models designed to support individual teachers* (e.g., stipends or leaves of absence for individual professional development, including graduate studies);
2. *collaborative professional (direct service) models* (e.g., mentoring, literacy coaching, instructional coaching);
3. *collaborative and cooperative models* (e.g., small study groups, professional learning communities);
4. *models for curricular and instructional change;* and
5. *traditional workshop models* (Beauchamp et al., 2014; Joyce & Calhoun, 2010).

Notably, the theoretical framework underpinning this qualitative study used Bandura's (1997) social cognitive theory, suggesting that how individuals learn influences—and is influenced *by*—both personal (e.g., self-efficacy) and environmental factors (e.g., school context). Specifically, Beauchamp et al. (2014) proposed that teachers' professional learning enhances efficacy beliefs through four sources: mastery experience, verbal persuasion, vicarious experience, and physiological or affective states and that these personal and environmental influences encourage teachers' professional growth and effective teaching practices (Beauchamp et al., 2014).

2.2.1 Teacher Efficacy and Collaboration

In *Exploring the Development of Teacher Efficacy Through Professional Learning Experiences* (Beauchamp et al., 2014), Beauchamp and his colleagues highlighted collaborative

approaches, such as mentoring and instructional coaching, as the best forms of professional learning to increase teachers' sense of self-efficacy—and as a result, positively impact student learning. Teachers new to the profession were more likely to report changes in self-efficacy as a direct result of their professional learning experiences. As one first year teacher from the Beauchamp et al. (2014) study noted:

> [W]orking and learning from other teachers has helped me become successful. I have been able to bounce ideas off them and ask for advice. They have helped me break down the curriculum and come up with better ways to teach given topics. The best professional development that I have learned from is collaboration with other teachers. (p. 44)

While most teachers, including novices, did not reference the term 'self-efficacy' specifically, they noted shifts in their teaching practices as a result of professional learning experiences and articulated increased levels of self-confidence. During structured interviews with the researchers, novice teachers elaborated on how different forms of professional learning increased their skill set or enthusiasm in various areas—from helping them master specific content to increasing their sense of confidence and willingness to implement new teaching strategies (Beauchamp et al., 2014). The importance of collaboration—specific to professional development in the field of education—continues to draw research attention (Mora-Ruano et al., 2019). As Hargreaves and Fullan (2012) note, a "more collaborative and collegial profession improves student learning and achievement." Similarly, Hargreaves and O'Connor (2018) posit that "no collaboration is a culture of teaching that has to be left behind wherever it can" (p. 5).

Similar research conducted in the United States and Australia echoes the results of the Beauchamp et al. (2014) study and underscores that professional development is most impactful if it allows teachers to engage in collaboration and active learning, focus on student engagement, and sustain their learning over time. Most of this literature points to the value of collective practices or collaboration between adult learners (i.e., teachers)—with the provision of forums for teachers to discuss and reflect upon their experiences, teaching strategies,

successes, and areas for improvement (Australian Institute for Teaching and School Leadership, 2017; Darling-Hammond et al., 2009; Lind, 2007; Tournaki et al., 2011). Mentoring is one form of collaborative professional learning featured in a growing body of research, particularly as it can support new teachers through their early months and years in the classroom (Burley & Pomphrey, 2011; Flores, 2019). In fact, mentorship has often been cited as a critical element for success in any field and is often harnessed as a resource to improve both the pedagogical practices and self-efficacy of pre-service and novice teachers (Ryan, 2019). According to Schrubbe (2004):

> Balancing teaching, research, and scholarship can be an overwhelming task for junior faculty and is influenced by the environment and the interactions we have with colleagues. Effective mentorship can play a critical role in professional growth and development… . (p. 324)

Mentorship programs involve cultivating professional relationships between experienced mentor teachers and mentees, and emphasize the importance of emotional support, open communication, and collaboration between participants (Hobbs & Putnam, 2016). Internationally, mentorship has become an important component of professional learning as it is increasingly used to induct new teachers into schools (Howe, 2006). In fact, schools that have adopted mentoring programs report consistently positive impacts on novice teachers—particularly in the areas of teacher retention, job satisfaction, classroom instructional practices, and overall student engagement (Darling-Hammond, 2012; Ingersoll & Strong, 2011). Furthermore, the use of mentoring as a professional learning tool has been correlated with improvements in novice teacher self-efficacy (Chizhik et al., 2018; LoCasale et al., 2012).

Best practices in mentorship programs support beginning teachers as they develop the following behaviors and skills:

- building connections between what is learned in professional development and the teacher's own work context;
- analyzing and reflecting on practice to determine one's strengths and needs;

- observing the practice of fellow teachers (including a mentor);
- including various instructional approaches in their practice; and
- using student work to inform practice (American Institutes for Research, 2015; Burley & Pomphrey, 2011).

Like mentoring, instructional coaching has evolved as a way of embedding professional learning into the day-to-day work of novice teachers (Kraft et al., 2018) and the benefits of this intervention have been examined with respect to student, teacher and school outcomes (Warnock et al., 2022). The instructional coaching model is rooted in a formal and structured professional relationship between the teacher and a coach and focuses on goal setting, reflection, and ongoing feedback to support teacher growth in identified target areas (Knight, 2011). Instructional coaches may also be enlisted to assist teachers as they implement new curricular materials or instructional resources (Kraft et al., 2018)—and as they work toward differentiating classroom instruction (Elfarargy et al., 2022). In addition to supporting the development of teacher knowledge, skills, and collaboration (Knight, 2007), multiple studies have suggested that working with an instructional coach positively impacts teachers' self-efficacy (DeJong & Campoli, 2018; Eastman, 2019; Sailors & Price, 2015; Shields & Murray, 2017), along with overall student achievement (Kraft et al., 2018; Wei et al., 2010).

Finally, a collaborative climate can be fostered through professional learning communities that focus on curriculum or instructional change (Eaker & DuFour, 2015). As Fullan (2015) notes, "when schools establish professional learning communities, teachers constantly search for new ways of making improvements" (p. 62). Professional learning communities facilitate collegial thinking, provide forums for members to brainstorm innovative ways to differentiate student learning, and help teachers prioritize and integrate teaching strategies and accommodations (Pan & Cheng, 2023). Research has shown that as teachers immerse themselves in the collaborative culture that learning communities foster, they gain confidence in their abilities to facilitate student learning (Guillory-Anderson, 2020; Pan & Cheng, 2023).

Participation in professional learning communities has also been linked to improvements in teachers' collective efficacy as they plan units of instruction together, observe each other teach, and collaboratively implement school improvement initiatives (Guillory-Anderson, 2020; Wei et al., 2010) Furthermore, Wei et al. (2010) have cited considerable empirical evidence to support their argument that professional learning communities are effective in increasing student achievement.

After deciphering thousands of responses to questionnaires, surveys and teacher interviews over their two-year study, Beauchamp and his team concluded that teachers seek and value multiple forms of professional growth (Beauchamp et al., 2014). Connecting with others seems foundational to this growth as it can support Bandura's proposed sources of self-efficacy—including vicarious experiences (e.g., observing another teacher as part of a PLC), verbal persuasion (e.g., receiving positive feedback in the case of coaching or mentoring) and affect (e.g., feeling less isolated as part of PLC, building trusting relationships with colleagues) (Bandura, 1977; Santamaría & Santamaría, 2016; Wei et al., 2010; Weißenfels et al., 2022).

While there are barriers—including individual resistance to change, a focus on immediate results, and top-down initiatives that undermine teacher ownership (Fullan et al., 2015)—building a more nuanced understanding of how professional learning influences new teacher self-efficacy can lead to improved student learning (Beauchamp et al., 2014). The findings from a growing body of research can be used to support schools and districts as they develop and implement professional learning initiatives (Darling-Hammond et al., 2009; Lind, 2007; Tournaki et al., 2011). Keeping this knowledge in mind, the next section focuses on IR as a professional learning tool.

2.3 Instructional Rounds in Education

Sophisticated forms of teaching are required to develop so-called '21st century competencies'—including mastery of challenging content, critical thinking, complex problem solving, and effective communication skills (Pellegrino & Hilton, 2012). In turn, active

professional development is needed to help teachers learn and refine the instructional strategies required to teach these skills to students (Darling-Hammond et al., 2017).

As both City et al. (2009) and Elmore (2008) highlight, the IR model provides educational leaders and teachers with a framework to identify and solve common problems related to teaching and learning. The model has been adapted to education from the field of medicine and involves a high level of collaboration, dialogue and reflection. Because the implementation of IR in the field of education is relatively new—its inception dating back to the work of a Harvard University research team in 2009 (City et al., 2009)—limited research has been conducted on the impact of this approach to professional learning on classroom teaching practices and the achievement of student learning outcomes (Goodwin et al., 2015; Philpott & Oates, 2017). That said, the practice of using IR as a professional learning tool has been growing in use throughout the United States, Canada, and Australia in recent years (Australian Institute for Teaching and School Leadership, 2017; Moyer, 2017; Roberts, 2012; Roegman & Riehl, 2015). The iterative process associated with IR was originally conceptualized by Richard Elmore of the Harvard Graduate School of Education for district superintendents and school administrators to network, conduct rounds, and inform their school improvement efforts (City et al., 2009; Elmore, 2008; Roegman & Riehl, 2012). From the initial design, several variations have evolved, often termed Learning Walks or Classroom Walkthroughs. As Elmore and his colleagues indicated in their book *Instructional Rounds: A Network Approach to Teaching and Learning* (2009), the original design can be modified for teachers to observe peers and use the process to improve classroom instruction (City et al., 2009; Roegman & Riehl, 2012).

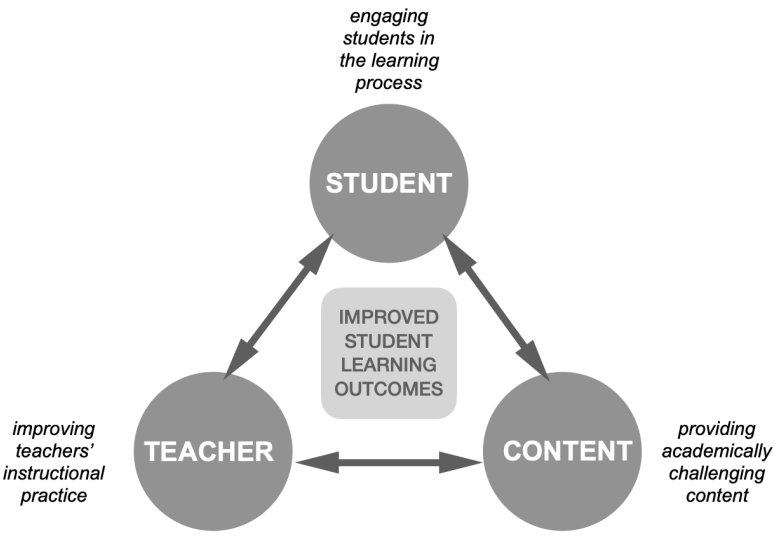
Marzano (2011) notes that IR “are one of the most valuable tools that a school or district can use to enhance teachers’ pedagogical skills and develop a culture of collaboration” (p. 82). The goal of the rounds process is *not* to provide feedback to teachers being observed; rather, its primary purposes are for those observing to compare their own instructional strategies with

peers', engage in meaningful dialogue surrounding teaching and learning, and self-reflect on their own practices (City et al., 2009; Marzano, 2011; Teitel, 2013).

While Elmore (2008) stresses that "teaching causes learning" (p. 5), there is often an underemphasis on instruction when it comes to educational improvement efforts. For a host of reasons, teaching may be relegated to the sidelines by other priorities and classroom pressures—including standardized testing, frequent revision of curricula, educational restructuring, political agendas, and dwindling school budgets (Anderson & Sivasubramaniam, 2017; Sheppard & Dibbon, 2011). Yet, as Elmore argues, the 'instructional core'—what he describes as the essential interaction between teacher, student, and content that creates the foundation of learning and depicted in Figure 2—is the *first* place that schools should look to improve student learning (Elmore, 2008) and serves as the anchor for IR (City et al., 2009).

Figure 2

The Instructional Core[2]



[2]*Note:* Adapted from *Improving the instructional core [Unpublished manuscript],* by R. Elmore, 2008 (www.teacher.justinwells.net/Downloads/improving_the_instructional_core_elmore_ 2008.pdf). Copyright 2008 by Richard Elmore.

2.3.1 Instructional Rounds—The Four-Step Process

As shown in Table 1 below, the IR protocol is a four-step iterative process that involves networks of teachers, dedicated to working with each other to improve student learning and achievement over the long term (City, 2011; City et al., 2009; Teitel, 2013). Since high quality professional development is effectively supported through the inclusion of formal or informal learning communities and active involvement on the part of teachers (Beauchamp et al., 2014; Fullan et al., 2015;), the four step IR process aligns with these characteristics.

Table 1

The Four-Step IR Process[3]

Problem of Practice	School identifies a problem of practice that: ● focuses on the instructional core ● is directly observable ● is actionable (i.e., within the school's control and can be improved in real time) ● connects to a broader school improvement initiative
Observation of Practice	Observation teams collect data that is: ● descriptive (not evaluative) ● specific ● focused on the instructional core ● related to the problem of practice
Observation Debrief	Observation teams discuss the data in steps: ● ***describe*** what you saw ● ***analyze*** the descriptive evidence (e.g., What patterns do you see? How might you group the data?) ● ***predict*** what students are learning (e.g., If you were a student in this classroom/school, and you did everything the teacher told you to do, what would you know? And what would you be able to do?)
Next Level of Work	Collaboratively, create an action plan: ● in the current school context, what resources or professional learning opportunities are required to continue making improvements in student learning (as related to the problem of practice) ● identify next steps, or next level of work, for "this week/next month/by the end of the school year" ● tie these suggestions to the school's theory of action

[3]*Note:* Adapted from *Improving teaching and learning through instructional rounds,* by L. Teitel, 2009, p. 2 (https://education.ucdavis.edu/sites/main/files/file-attachments/improving_teaching_and_learning_through_instructional_rounds_teitel_hel_2009.pdf?1448916699). Copyright 2009 by Harvard Education Press.

Step 1: Identifying Problems of Practice. To begin the IR process, a group of teachers (i.e., a network) develops what City et al. (2009) term a 'problem of practice'. Essentially, a problem of practice is an area that a school (or district) identifies as an instructional issue and seeks to understand more deeply; it focuses on the instructional core, is directly observable and actionable, and connects to a broader school improvement initiative.

As City et al. (2009) describe it, a problem of practice "is not a whim and does not emerge from thin air. … The problem of practice is grounded in some kind of evidence, preferably shareable evidence" (p. 102). The following examples illustrate this notion:

> Example 1: Students in grades 4 and 5 have limited opportunities to apply their math skills in real-world settings, which leads to challenges in meeting the expectations of state standards and tests.
>
> Example 2: Teachers of advanced math, science, and technology courses do not have sufficient time to collaborate around supports for students with interdisciplinary capstone projects, which leads to inconsistent guidance and feedback (United States Department of Education, 2019, p. 3).

Once a problem of practice has been identified, participants in IR develop a theory of action, or tentative solution, to address the problem and connect their work to Elmore's instructional core (i.e., student, teacher, content). Their theory of action seeks to uncover the key activities needed to improve both teaching and learning and reflects each participant's belief about how the work they do contributes to overall student success (City et al., 2009). In many cases, teacher participants draft a general theory of action and then refine it as they identify specific—and concrete—actions that will lead to improvements in student learning (City et al., 2009; Hanover Research, 2022). An effective theory of action meets the criteria outlined in Table 2 below.

Table 2

Criteria for Effective Theories of Action[4]

Supporting IR—Criteria for Effective Theories of Action
The theory of action, or tentative solution, begins with a statement that suggests a causal relationship between an individual's actions and effective classroom instruction. Like a hypothesis, the theory of action is phrased as an *'if-then'* statement.
The theory of action is empirically falsifiable. In other words, evidence collected during IR can disqualify all or part of the theory.
The theory of action is open-ended. Causal relationships can be further refined as an individual learns more about his or her actions.

Developing concrete theories of action helps IR participants align actual classroom practices with school improvement strategies (Hanover Research, 2022; University of California Davis School of Education, n.d.)—and is grounded in the work of Chris Argyris and Donald Schön, as it relates to organizational and double-loop learning (Argyris, 1999; City et al., 2009). Double-loop learning refers to group's ability to reflect honestly about its own learning and entails modifying goals or decision-making in light of lived experience (Argyris, 1999). With double-loop learning in mind, "rounds can create a culture of creative problem solving when discussions are about the actual instruction in classrooms, as opposed to people's projections of their own ideas of what's happening …" (City et al., 2009, p. 52). As City et al. (2009) note, the more concrete a theory of action, the more workable it will be and therefore, the more likely to achieve its intended outcomes. Sample theories of action are shown below in Table 3.

[4]*Note:* Adapted from *Instructional Rounds in education: A network approach to improving teaching and learning,* by E. A. City, R. F. Elmore, S. E. Fiarman and L. Teitel, 2009, pp. 41-42. Copyright 2009 by Harvard Education Press.

Table 3

Sample Theories of Action[5]

Sample Theories of Action
If we devote increased time and resources to develop the instructional expertise of teachers, then teaching practices will be strengthened and students will learn in deeper and more meaningful ways.
If we create environments of collaboration—focused on improving standards, instruction, and assessment practices—then shared accountability will create an urgency for change and support the ongoing improvement of learning for all students.

Step 2: Classroom Observation (Observation of Practice). After a network of teachers selects a problem of practice and develops an accompanying theory of action, the next step is to engage in classroom observation. Small groups of 4-5 peer teachers visit several classrooms, observing for approximately 20 minutes in each. Their goal is to gather descriptive data, rather than assessing fellow teachers, or students, against a rubric (Teitel, 2013). That said, observers focus on a series of questions such as, "[w]hat are students doing and saying? What's the teacher doing and saying? What's the task?" (City, 2011, p. 37). Throughout their observations, teachers avoid disrupting instruction or distracting students, although, they may quietly circulate to ask students what they are working on or, perhaps, what they could do when they struggle to understand a particular concept or instruction (City, 2011; City et al., 2009; Marzano, 2011). In this regard, the so-called problem of practice works as a filter. In other words, observers seek to determine *why* the problem of practice exists and what can be done to help the school overcome it (City et al., 2011; Marzano, 2011). Between their classroom visits,

[5]*Note:* Adapted from *Instructional Rounds in education: A network approach to improving teaching and learning,* by E. A. City, R. F. Elmore, S. E. Fiarman and L. Teitel, 2009, p. 47. Copyright 2009 by Harvard Education Press.

teachers reflect on what they have observed and, at the same time, refrain from discussing with others what they observed or what they thought. They save that dialogue for the subsequent, formal debrief (City, 2011; Teitel, 2013).

Step 3: Observation Debrief. The purpose of this third stage is for teaching networks to engage in collaborative, professional dialogue about what was observed during their classroom visits and its potential impact on student learning. The goal of the debrief is not to evaluate the teaching per se, but to better understand the practice of teaching and the process of learning (City et al., 2009; Marzano, 2011). Teachers take a closer, more analytical look at the interactions among the three elements of Elmore's 'instructional core'—in other words, between students and teachers (teaching), between students and content, and between teachers (teaching) and content (City et al., 2009; Elmore, 2008; Teitel, 2013). Additionally, the network discusses potential solutions to the problem of practice, in the context of the tentative theory of action (City et al., 2011). The formal debrief itself is highly structured and requires the teaching network to:

- describe what they observed in each classroom;
- analyze patterns that many have emerged; and
- predict the kind of learning they would expect from their observations.

  (Blanding, 2009; City et al., 2009)

Step 4: Next Level of Work. The final phase of the IR protocol involves the next level of work, meaning that participants brainstorm solutions and recommend future actions (or supports) for those seeking to improve their practice (City et al., 2009; Teitel, 2013)—while keeping in mind the underlying assumption that classroom teachers are doing the best they can with the knowledge they have at hand (City et al., 2009). The dialogue surrounding next steps also remains student-centered and as Teitel (2013) notes, the more specific and concrete the suggestions, the more helpful they are to classroom teachers.

As City et al. (2009) stress, the theory of action should be reviewed regularly and revised considering observation and experience; it is the act of repeatedly revisiting the theory that matters most to group members' learning. The authors further suggest that groups treat their theories of action as touchstones for their own professional and cognitive development and most importantly, as works in progress. If theories remain open-ended and subject to repeated dialogue and revision, they serve as valuable learning tools to practitioners—as opposed to finished products or symbolic artifacts (City et al., 2009).

While the IR model is not intended to single handedly improve learning outcomes for students, this tool can be used as part of a comprehensive professional development plan "that separates people from their practice and creates norms that make individual and organizational learning possible" (City et al., 2009, p. 171). The process is cyclical in nature as participants continually strive to identify problems of practice, create action plans, implement new teaching strategies, and reconvene to evaluate progress (Curtis & City, 2010). Furthermore, the IR model encompasses many components of high-quality professional learning—including non-evaluative and job-embedded collaboration, reflection, and active learning. Through its focus on building a shared understanding of teaching and learning, IR are thought to hold great potential for increasing new teacher self-efficacy—which, in turn, enhances student achievement (Beauchamp et al., 2014; City et al., 2009; Fullan et al., 2015; Goddard et al., 2000; Wei et al., 2010).

2.4 Summary

In this chapter, I presented a review of existing literature relating to the use of IR in education. I introduced Bandura's conceptualization of teacher self-efficacy and highlighted what he considered to be the most influential drivers of self-efficacy: mastery experiences, vicarious experiences, social persuasion, and emotional states (Bandura, 1977, 1997). Additionally, I provided a discussion of current research on professional learning, including what we know about how effective initiatives foster collaboration, allow teachers to engage in

meaningful dialogue and reflection, and connect to Bandura's notion of self-efficacy. The chapter concluded with a detailed description of the four-step IR protocol that was utilized in this case study.

The following chapter outlines the methodology used for this qualitative case study, including the design of the study and the methods that were used, theoretical (epistemological) issues, researcher positioning and ethical considerations.

Chapter 3—Methodology

This chapter provides an overview of qualitative research, the specific research methodology employed in this study, a description of both study location and participants, how data were collected and analyzed, and the role and positionality of the researcher. Additionally, it takes into account ethical considerations in qualitative research, along with the issues of limitations and trustworthiness.

This qualitative study was grounded within the constructivist theoretical literature, particularly theories of cognitive and social constructivism. Cognitive constructivism takes the position that learning is an active process where individuals construct new ideas or concepts, based on their pre-existing understandings. The theory is centered on providing learners with contexts that enable them to generate experience-based knowledge—either individually or through their interactions with others (Stapleton & Stefaniak, 2019). Social constructivism draws on the work of Vygotsky (1962, 1978, 1991), Wenger (1998) and Wertsch (1985), who conceptualize learning as the product of social interactions—co-constructed through collaborative problem solving, peer engagement, and mentorship opportunities. Both models of constructivism are situated in the belief that truly effective learning is highly contextualized meaning that it occurs within authentic settings and involves realistic approaches to problem solving (Vygotsky, 1962; Vygotsky, 1978; Vygotsky, 1991; Wenger, 1998; Wertsch, 1985).

Of relevance to this study on IR is Wenger's (1998) construct known as 'communities of practice.' As Wenger (1998) described, communities of practice are formed as groups (or networks) of people engage in the collective process of learning, particularly about a topic of interest or problem (Wenger, 1998). A community of practice does not refer to the actual group itself, but rather the social process of negotiating knowledge with others—over time and through participants' shared attempts to build meaning (Farnsworth et al., 2016).

Within this theoretical framework, the current study was designed to address the following research questions:

1. What do novice teachers perceive to be the benefits and challenges of using IR as a collaborative professional learning tool?
2. To what extent do IR engage novice teachers in the collaborative process of observation, reflection, and inquiry?
3. How and to what extent does participating in the practice of IR create shifts in teacher beliefs?
4. How do novice teachers perceive the value of IR (as a professional development tool) on their self-efficacy and student learning outcomes?

3.1 Design of the Study

Over the past several decades, educational research has been characterized by a distinct turn toward more interpretive practices and particular paradigms tend to be associated with certain methods and methodologies. Qualitative research, for example, is central to most subjective-interpretive approaches as it strives to make sense of both human actions and social practices within a particular context (e.g., school) (Cohen et al., 2018; Creswell & Guetterman, 2019).

Educational researchers carry out investigations to help themselves and others in the field gain a better understanding of what constitutes, among other topics, effective teaching and learning (Atkins & Wallace, 2012). The purpose of this disciplined inquiry was to uncover the impact and overall effectiveness of professional practice, the systems in which teachers operate, and other factors considered critical to school improvement efforts (Atkins & Wallace, 2012; Clark et al., 2020; Sackney, 2007). Furthermore, research "is central to the concept of teaching as a *profession"* (Atkins & Wallace, 2012, p. 2) and educational stakeholders—including administrators, superintendents, and policy makers—rely on research to make informed decisions that ultimately impact the quality of schooling for their students (Clark et al., 2020).

In the same way that topics of educational research vary, so do the approaches to

conducting educational research in the classroom (Clark et al., 2020). A researcher's approach will be shaped by the context of the study, his or her professional identity, and the paradigm—or set of beliefs and assumptions—that guides the inquiry (Cohen et al., 2018; Creswell & Guetterman, 2019). As noted, while there are several theoretical approaches to research design, among the broad methodologies used in social research (i.e., quantitative, qualitative, and mixed methods), qualitative research has seen an increase in both use and relevance in recent years (Creswell & Guetterman, 2019; Thelwall & Nevill, 2021) and its objectives and strategies make it well suited to research in the field of education. According to Creswell (2009):

> Qualitative research is a means for exploring and understanding the meaning individuals or groups ascribe to a social or human problem. The process of research involves emerging questions and procedures, data typically collected in the participant's own setting, data analysis inductively building from particulars to general themes, and the researcher making interpretations of the meaning of the data. (p. 4)

3.1.1 Approaches to Qualitative Research

One of the goals of the research undertaken here was to better understand how early career teachers represent the influence of IR on self-efficacy. Since qualitative research focuses on gathering descriptive information (e.g., participants' perceptions, beliefs or emotional responses), a qualitative approach seemed most appropriate (Cleland, 2017; Merriam & Tisdall, 2016). The ultimate goals of the study were to explore how teachers interpret their experiences while participating in IR and ultimately, what meaning—in terms of their efficacy as teachers—they attach to these experiences. Furthermore, using a qualitative method permits the adaptation of questions in natural settings (e.g., classrooms) and in real-time, while uncovering how participants' perspectives are reflected in both their thinking and professional practice (Crowe et al., 2011; Merriam & Tisdall, 2016).

As Creswell and Guetterman (2019) note, there are five traditions in qualitative research—ethnography, phenomenology, case study, grounded theory, and narrative analysis. What each of these approaches has in common is a general process that begins with identifying a research problem and moving toward questions, data collection and analysis, interpretation

and finally, the research report. The approaches differ in terms of focus, types of problems suited for the design, units of analysis, data collection forms, analysis strategies, and the nature of the final written report (Creswell & Guetterman, 2019).

3.1.2 Utilizing the Case Study Approach

As Creswell and Guetterman (2019) note, no single paradigmatic framework is considered 'correct' and it is ultimately up to the researcher to determine which research design will best answer the question(s) under study. While several traditions were considered, an evaluative case study was ultimately selected as the qualitative design for this research. A case study involves a detailed examination and interpretation of a *case*—defined as a single setting, subject, event, entity, or program (Bogdan & Biklen, 2007; Campbell, 2015); it is often used to understand a complex social phenomenon and ultimately, contribute to the body of knowledge regarding that phenomenon (Yin, 2014). The purpose of this proposed research was not simply to give an in-depth description and analysis of the IR protocol in a particular school—but, rather, to explore this approach as a means of improving early career teacher self-efficacy (Spaulding, 2014). As Merriam and Tisdell (2016) argue, evaluative case study research "collects data or evidence on the worth or value of a program, process or technique" (p. 4) for stakeholders to make judgements regarding the worth of a particular technique, improve program effectiveness, or inform decisions regarding future programming (e.g., professional development). As an evaluative case study, the research required description, explanation, and judgment (Merriam & Tisdell, 2016).

3.1.3 Additional Considerations

Other qualitative research designs offer avenues to in-depth descriptions of phenomena, however, I believe their use would have been less effective for the purpose of this study on IR. Ethnography, for example, involves the study of social interactions, behaviours, and perceptions that occur within groups, organizations, and communities (typically through embedding the researcher within the community)—and focuses on describing the culture of the group (e.g.,

shared attitudes). The central aim of ethnographic research is to provide holistic insights into participants' views and actions—as well as the nature of the location they inhabit (Reeves et al., 2008). Because ethnography uses culture as the filter through which a researcher describes, analyzes, and interprets data, it was not the best fit for this study—which sought to investigate IR as a *process* (Creswell & Guetterman, 2019). Furthermore, Creswell (2009) notes that ethnography is a challenging endeavour; the researcher needs to have a grounding in cultural anthropology, the time to collect data is extensive, and the narratives are often written in an approach that limits the audience.

Similarly, the narrative tradition, which describes the lived experiences of individuals and offers first person accounts as participants construct story and narrative, would not have been as effective in this context (Creswell & Guetterman, 2019). While focusing on a single participant's experience with IR can provide unique perspectives and insights, this research tradition has limitations—including its time-consuming nature (beyond the interview process itself), the risk of participant withdrawal, and the likelihood that a single (subjective) account would not help teachers and other stakeholders within the school understand the potential of IR as a school-wide professional development tool (Creswell & Guetterman, 2019).

Two final alternatives include phenomenology and grounded research; both traditions were excluded in favour of the case study approach. As Merriam (2009) notes, phenomenological research assumes that there is an 'essence' or central meaning—one that is collectively understood by participants who have experienced the same phenomenon. While this approach could have been utilized for the study, Creswell (2009) cautions that phenomenology requires an understanding of broader philosophical assumptions, along with the bracketing of personal experiences—both of which are challenging for novice researchers, such as myself. Finally, because grounded theory is often an exhaustive process—in that coding data can be time-consuming and laborious—novice researchers may become so overwhelmed with data collection that they lose sight of the emerging ideas and themes (Hussein et al., 2014). In

addition, some experts suggest that sample sizes of 20-30 are better suited to establish data saturation when using a grounded theory approach (Creswell, 1998); the current study on IR relied on data collected from a much smaller sample.

3.2 Location and Participant Selection

Fullan et al. (2015) argue that policy makers—particularly those who develop and adopt school improvement initiatives—must create conditions for internal accountability. They cite several research studies, highlighting that in more successful school systems, greater emphasis is placed on internal accountability through a three-pronged framework: meaningful learning, resource accountability, and professional capacity (Darling-Hammond et al., 2017; Mehta, 2015).

After taking into consideration the practical issue of access, along with typical sampling strategies utilized in case study research (i.e., typical, extreme, purposeful) (Creswell & Guetterman, 2019), I chose to conduct this research at my current school. School A, an independent school located in Vancouver, British Columbia, has long advocated for the development of system-wide professional learning aimed at investing in, building, deepening and circulating professional capital (K. McDonald, personal communication, March 1, 2023). In contrast to many public schools, School A has shifted away from an external accountability system, where, according to Roberts (2012), educators may attempt to enact quick fixes to improve standardized test scores (Santamaría & Santamaría, 2016). Because the IR model includes collaborative, reflective, and data-driven practice—where professional learning is job-embedded and teachers actively engage in learning—School A proved well suited as a research site for the proposed study (City et al., 2009; Marzano, 2011; Teitel, 2009).

As Cohen et al. (2018) note, “[i]n an ideal world the researcher would be able to study a group in its entirety: a population” (p. 307). Because this is rarely possible, researchers are faced with the task of sampling—in other words, selecting participants that represent the larger group, however it may be defined (Cohen et al., 2018). For this research I used purposive

sampling, a procedure where researchers intentionally select participants to meet a set of criteria aligned with the research questions, as this is generally believed to contribute to the richness of data collected (Guba & Lincoln, 1994; Merriam, 2009). In the case study genre, Stake (1995) argued that researchers must select participants who best understand the particular case and can effectively contribute knowledge, understanding, and meaning to the study. The priority for selecting participants in case study research is to maximize what can be learned about the specific case—not to generalize findings or to better understand other cases (Creswell & Guetterman, 2019; Stake, 1995).

In collaboration with the Director of Human Resources and Deputy Head of School A, six teachers were identified as potential participants. These individuals were all faculty members in the early years (years 1-5) of their teaching careers. During the COVID-19 pandemic, many teacher education programs switched to online instruction for prospective teachers to meet the prerequisites for licensing (Jin, 2023; Kim, 2020)—a result of provincial lockdown and quarantine protocols (British Columbia Ministry of Education, 2021). Several novice teachers at School A faced this situation and expressed an interest in participating in an IR protocol. Some commented that they missed the face-to-face practicum portions of their initial teacher training and believe they could benefit from this form of collaborative professional development. Some novice teachers also began their teaching careers using an online platform in lieu of traditional in-class instruction (Jin, 2023; Kim, 2020). In addition to novice teachers, a group of mid-career (5-15 years of teaching experience) and veteran teachers (15+ years of teaching experience) were recruited to participate voluntarily in the study, acting as host teachers for classroom observations (Booth et al., 2021; City et al., 2009; Hatten, 2019). Case study participants represented a variety of grade levels and content areas, ranging from Pre-K through Grade 7. As Creswell and Guetterman (2019) suggest, balance and variety are important in qualitative research to seek multiple realities. And, because the case number is often less than twelve in case study research (and can even include a single case), the sample size of four participants

proved sufficient for the purpose of this study (Campbell, 2015).

Prior to the collection of data, I needed to put arrangements in place to gain access to research participants. In late June 2023, I met with the Deputy Head of School to outline my research proposal, as she was the administrator responsible for School A's teaching and learning initiatives, along with approving professional development and related funding (e.g., teacher release time, substitute teacher coverage). Once my research proposal had been approved at the university level, it was shared with the Deputy Head of School A. Her permission was sought to contact potential participants via email communication or alternatively, through written recruitment letters (distributed by an administrative assistant). Formal permission from School A was also required as part of the application for approval through Memorial University's Interdisciplinary Committee for Ethics in Human Research and granted by the Deputy Head of School.

The opportunity to participate in IR professional learning was offered to novice teachers from the school's Early Years (Junior and Senior Kindergarten) and Junior School (Grades 1-7) divisions. Ultimately, four (4) participants took part in this professional learning initiative and agreed to be interviewed regarding the impact of the IR on their feelings of self-efficacy; the IR sessions took place during the spring term of the 2023-24 academic year. During the interviews, participants were also asked to describe their perceptions regarding the benefits and challenges of using IR as a form of professional learning.

The following table highlights participating teacher demographics to give a sense of the grade levels and subjects taught, plus years of teaching experience. Class sizes at School A range from sixteen students in the early years program to twenty-two at intermediate grade levels.

Table 4

Teacher Demographics

Participant #	Grade Level	Years of Teaching
Interview Participant #1	Teacher on Call, Junior Kindergarten to Grade 7	2
Interview Participant #2	Grade 6 Homeroom Teacher	2
Interview Participant #3	Music Specialist, Senior Kindergarten to Grade 7	2
Interview Participant #4	Music & French Specialist, Junior Kindergarten to Grade 2	3

3.3 The Emotional Challenges of High-Level Tasks

IR is a cognitively demanding process that requires participants to work through a series of high-level tasks. Because these tasks are often ambiguous and allow for multiple solutions to a problem, they can elicit strong emotional responses from participants and require perseverance in the face of setbacks (Roberts, 2012). Taking all of this into account, I gathered the participant group ahead of time to brief them on the background and use of IR, and to mitigate the potential emotional challenges of high-level cognitive tasks like those involved in the research. For the duration of the study, I adhered to the IR protocol itself, as it divides work into smaller, more manageable blocks. Furthermore, I provided participants with time estimates for each step, planned regular breaks, and remained acutely aware that the process was dynamic. Minor adjustments were made along the way in consideration of priority changes, unexpected obstacles (e.g., student interruptions), and certain tasks taking longer than initially anticipated. While their collaboration required stamina and commitment, engaging in IR also allowed teacher participants in this study to experience and model the type of purposeful learning that is expected of students, while fostering a shared accountability for learning in their classrooms.

3.4 Data Collection

In contrast to quantitative research, where researchers collect data to test their hypotheses, qualitative research tends toward more inductive and generative practices—meaning that it begins with data collection to generate theories about topics of interest (Tite, 2010). The main goal is to uncover the representations (e.g., thoughts, perceptions, feelings, and behaviours) of participants as researchers strive to learn from others, particularly as they study topics where little or nothing is currently known (Rahman & Caulley, 2007). While there is no standard set of procedures or rules for conducting qualitative inquiry, Yin (2014) identifies six sources of evidence typically collected through qualitative case studies—interviews, documents, archival records, direct observation, participant observation, and physical artifacts—and highlights that no single source has an advantage over the others. In fact, the six data sources are complementary, and a good case study will rely on multiple sources of evidence (Yin, 2014). Because interviews, documents, and observations are the most common sources of information in qualitative research, they were utilized in this case study. Given that one of the aims of this study was to investigate how teachers' perspectives change after participating in IR, the research took place over several weeks (Cohen et al., 2018; Priya, 2021).

3.4.1 Interviews

As Merriam and Tisdell (2016) note, interviewing remains the primary interactive method of data collection used by qualitative researchers in the field of education. In-depth interviews can be used to gain insight into participants' experiences and act as an effective, and comparatively efficient, data-gathering strategy (Rahman & Caulley, 2007). Interviews differ from survey methods in that they are typically conducted in a face-to-face format. This modality is effective in eliciting the lived experiences of participants and helping researchers understand situations from their participants' subjective points of view (Creswell & Guetterman, 2019). While there is no standard format to the interview process, Merriam and Tisdell (2016) underscore the importance of the researcher as an instrument of data collection and analysis. They encourage

qualitative researchers to engage participants in authentic conversation and focus on what Eisner (1998) describes as concrete examples and feelings, rather than on speculation. As such, interview questions should remain open-ended to avoid simple yes or no responses; asking *'how'* and *'why'* questions allows respondents to provide detailed accounts in their own words as they identify personally relevant issues (Merriam & Tisdell, 2016; Rahman & Caulley, 2007).

Table 5 below presents three types of interview formats, which vary according to structure. If placed on a continuum, the interview formats range from highly structured and questionnaire-driven on one end, to unstructured, open-ended, and conversational on the other (Merriam & Tisdell, 2016). A semi-structured interview protocol was chosen for this case study (Appendix G)—with probes and follow-up questions. During the interview process, I acted as a listener, audio recorded the conversation for transcription into text and strived to avoid asking leading questions that revealed biases or assumptions that I held (Merriam & Tisdell, 2016).

Table 5

Interview Structure Continuum[6]

Highly Structured (Standardized)	Semi-Structured	Unstructured (Informal)
● wording and order of questions are predetermined ● interview is an oral version of a written survey ● typically used to obtain demographic data (e.g., age, gender, ethnicity education level)	● no predetermined wording or order of questions ● interview guide contains a mix of more and less structured interview questions ● each question can be used flexibly ● specific data is usually required from each participant ● largest part of the interview is guided by a list of questions or issues to be explored	● open-ended questions only ● flexible, exploratory ● interview is conducted more like a conversation ● typically used when the researcher does not know enough about a phenomenon to ask relevant or direct questions ● the goal is to learn from the present interview to inform future interviews ● used primarily in ethnography, participant, and case study research

While there are alternate guidelines, Patton (2015) suggests that interview scripts include six types of questions to stimulate responses:

1. *experience and behaviour*—these types of questions uncover participants' behaviours, actions, and activities;
2. *opinion and values*— these questions elicit participants' beliefs and opinions;
3. *feeling/emotion*—these questions "tap the affective dimension of human life" (p. 444) and begin with phrases such as *how do you feel about…?;*

[6]*Note:* Adapted from *Qualitative research: A guide to design and implementation* (4th ed.), by S. B. Merriam & E. J. Tisdell, 2016, p. 110. Copyright 2016 by John Wiley & Sons, Inc.

4. *sensory*—like experience and behaviour questions, these questions attempt to elicit more in-depth data regarding what participants see and hear, and;
5. *background/demographic*—these questions refer to the specific dynamics (e.g., number of years on the job, education) as relevant to the research study.

Since I conducted interviews in the field, questions were drafted to mitigate the use of 'academic armour'—in other words, by using informal or non-academic language (Tite, 2010). Each of the teacher participants is well known to me in a professional capacity and data collection took place in familiar settings (e.g., classrooms at the school's Early Years campus). Throughout the study, my rapport with the participants remained relaxed and conversational. As Conrad and Schober (2021) note:

> To promote the intended interpretation of questions, and thus response accuracy, Conversational Interviewing (CI) authorizes interviewers to clarify questions when they suspect respondents have misunderstood. … Findings consistently show that CI leads to considerably more accurate question interpretation and response accuracy … and does not increase interviewer variance. (p. 203)

Follow up interviews proceeded in accordance with the protocol outlined above and ranged in length from approximately 25 minutes (initial interview) to almost 45 minutes. These variations may be explained by improvements in both my skills as an interviewer and my increased attention to emerging themes. Transcribed interviews were reviewed by participants to ensure both accuracy and resonance with their experiences; no concerns were noted by any of the four participants.

3.4.2 Documents and Artifacts

In addition to conducting semi-structured interviews with participants, researchers often collect data in the form of documents and/or artifacts—a non-interactive source of data. These documents provide valuable information in qualitative studies since they are typically written in the language and words of the participants or the institutional leaders themselves. They are useful in understanding and interpreting alternate perspectives and can provide researchers

with a deeper understanding of the central phenomenon (Creswell, 2012; Yin, 2009). Furthermore, documents can be used to augment evidence gathered from participant interviews (Yin, 2009).

In this study, I carefully reviewed the participants' classroom observation notes, group debrief notes, and individual reflections generated during the IR protocol. During each session of IR, I led the group of novice teachers through a series of classroom observations; a focus sheet was provided to help observing teachers take notes on important parts of each lesson—including student engagement, instructional strategies used by the host teacher, classroom management, and student on and off-task behaviours (City et al., 2009; Marzano, 2011; Teitel, 2009). Once the observation session was over, the observing teachers engaged in individual reflection, lasting approximately 10 minutes. Subsequently, participants were asked to read through their notes, select 8-10 pieces of data that seemed most relevant to the problem of practice identified prior to classroom observation, and record each one on an individual sticky note. As a group, participants were asked to share their observations (sticky notes), analyze the evidence, and create categories. Prompts for this session included the following:

- *What were the strengths of each lesson?*
- *What teaching strategies, and effective classroom management techniques were used?* and
- *What specific strategies did you observe that had a direct impact on student engagement?* (Williams, 2019).

Finally, participants were asked to write individual reflections about the ways that IR impacted their self-efficacy. For this research, self-efficacy was defined as beliefs in one's own abilities to effectively navigate the tasks and challenges of the teaching profession (Bandura, 1977; Tschannen-Moran et al., 1998). Prompts included questions such as:

- *As a result of my experience and observations today, which aspects of my own teaching do I feel were validated?* and

- *As a result of my experience today, what instructional, classroom management, or differentiation strategies can I now implement more confidently in my own classroom practice?* (Barni et al., 2019; City et al., 2009; Goddard et al., 2000).

3.4.3 Observations and the Use of Field Notes

Observations are another source of non-interactive data collection in qualitative research, with the use of field notes widely recommended in qualitative research to enhance data and provide a rich context for analysis (Creswell, 2012; Merriam & Tisdell, 2016; Yin, 2014). As Merriam and Tisdell (2016) note, "[o]bservation is a research tool when it is systematic, when it addresses a specific research question, and when it is subject to the checks and balances in producing trustworthy results" (p. 138). In a qualitative case study like this one, information gathered through observation serves to record knowledge of the context, provide insight into specific incidents, or describe participant behaviours that can serve as a reference point for future interviews (Merriam & Tisdell, 2016). Observations can also be used in conjunction with participant interviews and document collection as a means of substantiating research findings and triangulating emerging themes (Creswell & Guetterman, 2019; Merriam & Tisdell, 2016). Finally, individuals tend toward doing what is expected of them in complex social systems (e.g., schools); their 'theories of action' describe how they intend to act in the world, and this often conflicts with their 'theories in use'—how they actually behave (Argyris, 1999). By observing participants in the field, researchers may note behaviours that interview responses would not reveal, particularly if participants are not able (or willing) to discuss the topic under investigation (Merriam & Tisdell, 2016).

The content of my field notes followed a checklist of elements recommended by Merriam and Tisdell (2016) and Patton (2015):

1. *the physical setting*—describes how space is allocated, along with what objects/resources/technologies are included in the setting.
2. *the participants*—describes the participants, their roles and characteristics,

patterns and frequency of interactions, and the direction of communication. Changes in these patterns may highlight the social environment and culture.

3. *activities and interactions*—records the interactions between participants, how people and activities are connected, and the norms/rules that structure these activities and interactions.
4. c*onversation*—notes the content of conversations, along with who speaks and who listens. Silences and non-verbal cues may add meaning to exchanges and should also be noted.
5. r*esearcher behaviour*—as the researcher is as much a part of the study as the participants, it is critical to consider how researcher presence affects the scene. For example, what thoughts did I have as an observer and facilitator of IR? What did I say and do in the presence of participants?

Preissle and Grant (2004) stress that, "[n]o one gets it all, of course" (p. 180). Therefore, it was important to record field notes that were both highly descriptive and reflective in order to complement the interview and document collection (Merriam & Tisdell, 2016). During observations I also considered the proximity of my physical positioning in relation to participants and adjusted accordingly. As Tite (2010) observes, in qualitative research, individuals may feel that their personal or social spaces are being violated—and this may impact the social interactions, communication, and behaviours being observed.

3.5 Overview of Data Analysis

Given the amount of data and accompanying detail that qualitative research generates, rigorous and trustworthy analysis is a necessary but time-consuming endeavour. Bingham (2023) suggests that researchers, particularly those new to the field, utilize strategies that strike a balance between data organization, theoretical and conceptual concerns, and study purpose—along with the inductive and recursive nature of qualitative research (Creswell &

Guetterman, 2019). Case study analysis, for example, involves the deconstruction of both data and the researcher's impressions, and "... analysis should not be seen as separate from everlasting efforts to make sense of things" (Stake, 1995, p. 72). In other words, researchers must embrace the flexible nature of the qualitative genre and its capacity to generate theory, "while also maintaining focus on organizational practices, research questions, relevant data, and coding schemes" (Bingham, 2023, p. 1).

Qualitative analysis requires researchers to immerse themselves in the data in order to generate categories and themes (Marshall & Rossman, 2006). As Thorne (2000) observes, "unquestionably, data analysis is the most complex and mysterious of all the phases of a qualitative project" (p. 68) and there are no systematic rules for analyzing qualitative data (Houghton et al., 2015). That said, there are some established practices and protocols for the analysis of talk and text, and these are described below. Data analysis for this study involved organizing, scanning, theorizing, and coding the collected data (e.g., interview transcripts, field notes) (Creswell & Guetterman, 2019). Because data collection and analysis processes tend to happen concurrently in qualitative research—with new analytic steps informing additional data collection and vice versa—it was important for me to recognize that qualitative data analysis processes are not entirely distinguishable from the actual data itself (Thorne, 2000).

Considering that the aim of data analysis is to rigorously organize, uncover patterns, and elicit themes from the data collected, Yin (2014) argues that there must be logic behind the analysis and therefore, a framework to guide researchers. Table 6 below summarizes the cognitive processes involved in qualitative research. While Morse (1994) provided an all-encompassing framework for data analysis based on four stages—comprehending, synthesizing, theorizing, and re-contextualizing—the framework alone does not sufficiently detail the practical skills needed for data analysis (Morse, 1994). Strategies outlined by Miles and Huberman (1994) complement Morse's work and allowed me, as a novice researcher, to put the framework into practice when analyzing data from the proposed study on IR (Miles &

Huberman, 1994).

Table 6

Overview of Data Analysis Framework[7]

Stages of Analysis (Morse, 1994)	Analysis Strategies (Miles & Huberman, 1994)	Purpose
Comprehending	Broad Coding	General accounting scheme, not specific to content, but suggests general domains in which codes can be developed through induction.
Synthesizing	Pattern Coding Memoing	Explanatory, inferential codes used to create a more meaningful analysis of data. Described by Miles and Huberman (1994) as sense-making tools.
Theorizing	Distilling and Ordering Testing Executive Summary Statements	Memos connect data into a recognizable group of concepts—i.e., a more integrated understanding of events and interactions in the case study.
Re-Contextualizing	Developing Propositions	*Formalizes and systemizes data into a coherent set of explanations.*

As noted in the preceding section, three sources of data were used in this study—semi-structured interviews, document review, and participant observation (research field notes). The interview transcription process involved audio recording each of the participant interviews, followed by transcribing the conversation into text (Creswell, 2012). Although transcription software programs such as Google Docs Voice Typing and MAXQDA are available (Key & St-Esprit, 2023), I transcribed each interview manually for this case study. Creswell (2012) suggests that it can take up to four hours to transcribe a single one-hour conversation; therefore, I allocated sufficient time for this process. This study involved four participants and interview times ranged from 25 to 45 minutes. When transcribing the interviews, specific formatting guidelines were followed—including the use of detailed headers (containing

[7]*Note:* Adapted from *Qualitative case study data analysis: An example from practice*, by C. Houghton, K. Murphy, D. Shaw, and D. Casey, 2015, p. 8-12. (https://doi.org/10.7748/nr.22.5.8.e1307). Copyright 2015 by The Royal College of Nursing Group.

information about the interview), one-inch margins, and extra space between my comments and my participants' (Brown, 2018; Strong, 2018). The transcriptions detailed each participant's exact spoken words, along with notable pauses, other forms of non-verbal communication (e.g., gestures, affect) (Strong, 2018), and my insight into the tone or meaning of the participant's words (Creswell, 2012). Documents collected during the study (e.g., IR debriefing notes, participant reflections), along with research field notes, were already in written format, meaning that transcription of these was not required.

After interview transcripts, IR documentation, and field notes had been collected, I read through these to gain a *general* sense of the content, noting any key ideas that emerged, how the information could be effectively organized, and whether further data collection was warranted (Brown, 2018; Creswell, 2012; Merriam & Tisdell, 2016). More in-depth analysis included coding—in other words, searching for patterns and broad themes—to help make sense of the data (Creswell, 2012). As patterns began to emerge the text was labeled with words or phrases that described my initial impressions (Bogdan & Biklen, 2003).

Appendix H outlines the protocol that was followed to analyze the data collected in the form of interview transcripts, documentation, and field notes. The intended goal of data analysis was to determine participant representations in respect to the research questions, so it was important to look for consistent themes within the documents (Merriam & Tisdell, 2016). A list of potential themes is also included in Appendix H—aligned with the initial research questions. As I reviewed the documents, I scanned for information related to teacher collaboration, student engagement, changes in teaching practice and self-efficacy—along with other references to IR and what Elmore (2008) refers to as the 'instructional core' (City et al., 2009; Elmore, 2008; Teitel, 2013). I also took note of additional themes as these emerged during data analysis (Stake, 1995). This type of hybrid coding is common in qualitative studies as researchers begin with a set of a priori (deductive) codes and then add new (inductive) codes as they work their way through the data (Swain, 2018).

Computer assisted data analysis can streamline the process for qualitative researchers, enable teams of researchers to collaborate in real-time, and import data from a variety of sources (Cypress, 2019; Lumivero, 2023; Woods et al., 2016). But, given the number and diversity of programs on the market, many novice researchers struggle with how to select software designed to meet their data analysis goals. In effect, qualitative researchers face a decision: is it worthwhile to use software and absorb the costs—in terms of license purchase and the time involved in learning how to use the software—and, if so, which software is best for their project? (Cypress, 2019; Maher et al., 2018). They also need to keep in mind what Tite (2010) stresses: that no computer can replicate the deep and insightful interactions of the 'researcher as instrument,' including knowledge of the conceptual framework, research questions, and relationships with study participants. For this study, I chose to code the data manually, while remaining open to the use of coding software in future research.

3.6 Researcher Positionality—the Researcher as Instrument

Once a researcher has a topic of study in mind, he or she must consider how to go about investigating it. The approach will depend on how the researcher views the problem, how it can be studied, and ultimately, how the findings are credible or useful to others in the field (Creswell & Guetterman, 2019). And because every researcher has established his or her own view of what constitutes truth and knowledge, this guides his or her thinking, beliefs, and assumptions about society, and frames how the researcher perceives the world—or what social scientists term a 'paradigm.' This case study is positioned with a social constructivist paradigm as it reflects a belief that knowledge is both socially constructed and ever-changing (Cohen et al., 2018; Crotty, 1998).

Furthermore, the ontological and epistemological perspective adopted by social constructivist theory supports the view that while reality exists, there is no single or objective truth waiting to be discovered. In fact, multiple and equally valid realities are discoverable through systematic inquiry—and truth, or meaning, lies within human experience as we engage

with the world around us (Crotty, 1998).

Because the constructionist epistemology guiding this case study incorporates elements of subjectivity, a key issue that needed to be addressed in this study was the role of the researcher (Cohen et al., 2018). As the sole researcher in this case study, I recognize that not only did I become part of the world that I was researching, but that I had a vested interest in its outcome. I further acknowledge that my role—along with my relationships and interactions with participants—informed the research perspective (Crotty, 1998).

As qualitative researchers, our understanding of human experience is not a given; therefore, being with others—or being immersed in a particular situation—becomes one of the ways that the 'human-as-instrument' develops a deeper understanding of the people or settings under investigation (Maykut & Morehouse, 1994) and interprets their representations of reality with fidelity and consistency. As Maykut and Morehouse (1994) note, 'indwelling' places a qualitative researcher in a situation long enough to understand things as they unfold and requires that the researcher interpret participant representations of the world in the way that his or her participants intended. Given the underlying premise that reality is complex, dynamic, and socially constructed (social constructivist theory), qualitative research focuses on answering *'how*' and *'why'* questions in order for researchers to build a deeper understanding of particular phenomena (Creswell, 2009) and how meaning is created through participants' lived experiences and interactions with others (Argyris, 1999). It is not arbitrary, but rather based on what is tacitly known of the subject(s) or situation (Maykut & Morehouse, 1994), and underscores the ontological assumption that reality is socially constructed and context dependent (Cohen et al., 2018; Creswell & Guetterman, 2019). Similarly, Eisner (1998) describes the importance of the qualitative researcher as a connoisseur—able to perceive, draw upon prior knowledge, and experience specific qualities as part of a larger 'whole' as he or she moves from observation to interpretation (Eisner, 1998).

Furthermore, each phase of qualitative research conforms to the notion that inquiry is

unavoidably value-laden (Cohen et al., 2018; Creswell & Guetterman, 2019). Scott and Usher (1996) suggest that subject and object of qualitative research cannot be separated and while researchers' subjectivity can lead to bias, it also lends value and credibility to their studies. As such, researchers must strive to remain transparent regarding their own subjectivities, while accepting that these may change over time (Scott & Usher, 1996). In other words, as researchers make meaning from qualitative studies, they must remain cognizant that knowledge creation is dependent on context (or setting) and that their underlying values, beliefs, plus what Gadamer (1975) terms 'pre-understandings,' will influence how they collect and interpret data. In taking on this research, I acknowledged the value-ladenness of qualitative inquiry, embraced the epistemological basis of knowledge as being both socially constructed and context dependent, and recognized the responsibility inherent in the role of a qualitative researcher as interpreter.

This research was designed to explore IR, as a professional development tool, on novice teachers. As I reflected on my personal and professional interests in choosing this topic, I recognized that my own so-called 'pre-understandings' (Gadamer, 1975) came from my almost 20 years as an early childhood educator in both public and independent schools, previous experience as a participant in IR, and coursework on school improvement. The IR protocol engaged novice teachers from School A in the collaborative process of observation, reflection, and inquiry (City et al., 2009). One of the main research goals was to explore how these teacher participants perceived the value of IR regarding self-efficacy. I conducted this case study at my current school, where my role and presence as a researcher proved to be a factor in planning and conducting the research. In addition to choosing sampling strategies and data collection methods (e.g., interviews, questionnaires, observations), I knew that I must carefully consider several interpersonal issues prior to beginning the case study (Creswell & Guetterman, 2019). While I had already built working relationships with those who had informally indicated an interest in professional learning, I do not take this for granted. I was cognizant of the need to

maintain participant trust, cultivate positive professional relationships among participants, and respectfully consider each teacher's perspective throughout the research process (Merriam & Tisdell, 2016).

3.7 Navigating the Challenges of Access

Seeking formal approval from School A, recruiting participants, and acquiring informed consent—while building and maintaining trusted relationships with participants—took considerable time and this ultimately impacted the research timeline (Creswell & Guetterman, 2019). While I was already employed as an early years teacher and mentorship program lead, negotiating entry into the research site still required several levels of approval. I met with the Deputy Head of School A in the summer of 2023 to outline my research proposal and to describe the potential benefits to both novices and preservice teachers who complete their practicum experiences at the school each year. While I began this approval process early in the study, delays in gaining access to research participants, along with target classrooms, created time constraints, particularly as we approached the final term of the 2023/24 academic year. That said, potential challenges with asymmetry were mitigated in this case study (Marshall & Rossman, 2006; Roberts, 2012). Considering that I am one of the more experienced teachers at my campus and had already taken on a mentorship role to several novice and pre-service teachers from the 2022/23 academic year onward, my role as a mentor may have led to power and control issues in the field as I inadvertently took on the role of counselor (LeCompte & Preissle, 1993). With this in mind, I worked hard during the school year to cultivate mutually beneficial relationships with and between stakeholders, and to develop effective communication with school administrators, community partners, faculty, and staff alike (LeCompte & Preissle, 1993; Weerts & Sandmann, 2010)—a concept referred to by LeCompte and Preissle (1993) as boundary spanning.

In terms of access to both participants and resources, I had to navigate the challenges of conducting research on two separate school campuses. While I initially anticipated that

conducting IR at my school's Early Years Centre would be relatively straightforward and in a face-to-face modality, I had to negotiate release time to observe and interview additional participants at the Junior School campus, ten blocks away.

Finally, as Cohen et al. (2018) note, I needed to effectively address the interpersonal, interactional, communicative and emotional aspects of data collection—particularly when conducting interviews and taking field notes. The authors highlight that "the onus is on the interviewer to establish and maintain a good rapport with the interviewee. This concerns being clear, polite, non-threatening, friendly and personable, to the point without being too assertive" (Cohen et al., 2018, p. 518).

3.8 Ethics in Qualitative Research

Ethical considerations are paramount when using research methods that involve human subjects (e.g., obtaining consent), but they take on added significance in genres like case studies, narrative research or ethnographies, where researchers often work closely with participants over time and in face-to-face modalities (Josselson, 2007; Lavrakas, 2008). Researchers in these contexts gather a great deal of highly detailed information on (and from) each participant. Beyond the ethical dilemma associated with drawing interpretations from the data collected, some studies risk inadvertently exposing their participants' identities (Brinkmann & Kvale, 2008; Roller & Lavrakas, 2015). Informed and voluntary consent is critical in qualitative research; researchers conducting any type of data collection (e.g., interviews, observations) must disclose the purpose of their research to participants, emphasize its voluntary component, ensure participant safety, and pay particular attention to vulnerable segments of the population (e.g., children). Researchers must also effectively communicate the confidential nature of the research and ensure participants' right to privacy—which can be particularly challenging with small groups and where participants are known to one another—as was the case in this research (Josselson, 2007; Lavrakas, 2008; Roller & Lavrakas, 2015).

Furthermore, the path that ethical considerations take regarding a researcher's design

framework is also critical. A skilled researcher will consider how and when to incorporate these standards while, at the same time, striving to maintain the quality and integrity of the data. When conducting case studies for example, researchers are often hesitant to reveal too much information during the recruitment phase for fear of potentially biasing their participant's account. There are options of balancing the moral obligation for informed consent without influencing participant responses. One such solution is by gaining consent twice—before the interview and again at its completion—and by conducting thorough debriefings with each participant (Josselson, 2007; Lavrakas, 2008; Roller & Lavrakas, 2015; The British Psychological Society, 2021). Participants in this case study were thoroughly briefed on the purpose of the research, my role as both researcher and IR facilitator, plus my prior experience as a participant in IR. They each provided written consent for me to gather field notes and artifacts, record one-on-one interviews, conduct debriefings, and share anonymized data in my final report. Other ethical considerations included strategies to protect the anonymity of teacher participants and their students, along with the safeguarding of documents and confidential information related to the study (Marshall & Rossman, 2006).

Participant consent and institutional review board approval included procedures for the collection, use, dissemination, and archiving of written documentation—including field notes and interview transcripts—as these contain contextual information that may be useful in framing the study in a time, place, or population. While some information may be disclosed with minimal additional protections, other documents may provide enough information to allow for participant identification (Phillippi & Lauderdale, 2018). As Appendix F outlines, both the participants and the school itself have been referred to using pseudonyms (e.g., Teacher 1, School A) and quotations used in the narrative have been anonymized. During data analysis, hard copies of research records or other documents with identifying information (e.g., reflections, debrief notes) were kept in a locked file cabinet and only I had access to these. As stipulated by the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS2 2022)

standards, electronic data (including interview recordings) will remain stored on the local hard drive of the researcher's computer and under password protection (Secretariat on Responsible Conduct of Research, 2022). Furthermore, all data—hard copy or electronic—will be retained for a minimum of five years, as required by both the TCPS2 (2022) and Memorial University's policy on Integrity in Scholarly Research.

To ensure the fair and ethical treatment of each of the study's four participants—along with host classroom teachers and students—every reasonable effort was made to guarantee confidentiality and anonymity in the reporting of results. Prior to the recruitment of research participants, a proposal was submitted to and approved by the Interdisciplinary Committee on in Human Research at Memorial University of Newfoundland (see Appendices A-I). At the onset of the study itself, teacher participants provided written consent for interviews to be audio recorded and for their words to be shared in the form of direct quotes, or from written documentation gathered throughout the study. In addition to their written consent, teacher participants provided verbal authorization at the time of their follow up interviews.

3.9 Trustworthiness

To have an appreciable impact on either theory or practice in the field of education, research studies must be conducted with rigor; at the same time, they must provide insights that ring true for readers, practitioners, and fellow researchers (Cohen et al., 2018; Stahl & King, 2020). Therefore, in qualitative studies, researchers are required to articulate evidence of four criteria to ensure the trustworthiness of their findings: transferability, credibility, dependability, and confirmability (Lincoln & Guba, 1985; Stahl & King, 2020).

3.9.1 Transferability

This study was designed to investigate the implementation of IR in the context of teacher self-efficacy in one independent school. Therefore, any general statements or generalizations are limited to the scope of this study. That said, it is my hope that the findings from the proposed study will add to the extant literature on the effects of educational rounds on teaching practices

and overall student learning outcomes and that they may encourage other research (Creswell & Guetterman, 2019) across Vancouver's larger public-school districts, within the city's independent school system, and in local university teacher preparation programs at a future date (Hatch et al., 2016; Philpott & Oates, 2017).

3.9.2 Credibility

As with all qualitative research, this case study must show that any interpretations and conclusions are both reasonable and make sense to readers (Merriam & Tisdell, 2016). There must be clear and transparent evidence of data collection and analysis methods to ensure its credibility and the overall credibility of the research process. As I conducted the evaluative case study at School A, I used the strategies of member checking and triangulation to lend elements of credibility (Cohen et al., 2018; Creswell & Guetterman, 2019). Member checking invites participants to review their interview transcripts for accuracy, to correct factual errors or to add further information—and most importantly, to confirm that the researcher's interpretations are both fair and representative of their intended meaning (Creswell & Guetterman, 2019). The process of triangulation involves the use of multiple sources and methods as the researcher seeks to corroborate evidence and interpretations (Merriam & Tisdell, 2016). As Creswell and Guetterman (2019) note, triangulation can occur in more than one way; the researcher may collect evidence from several participants, use different data collection methods, or collect different types of data. Because there are multiple ways to triangulate a study, the researcher must outline the specifics to readers (Bogden & Biklen, 2007). As noted, I collected data from semi-structured interviews, field notes (observation), and participant documentation. This information was gathered from four teacher participants.

3.9.3 Dependability

A third perspective on trustworthiness offered by Lincoln and Guba (1985) is dependability—what they describe as the 'trust' in trustworthy (Lincoln & Guba, 1985). Dependability is analogous to reliability in quantitative research and can be ensured through

rigorous data collection and analysis techniques. Peer debriefing is a communication habit that creates trust (i.e., dependability) and one that was used in the proposed study on IR. Using another researcher to read and react to field notes, interview transcripts, documents, and other artifacts—with embedded researcher interpretations—is another way to build dependability in qualitative research (Stahl & King, 2020). As a graduate research student, this included my supervising professor at Memorial University of Newfoundland.

3.9.4 Confirmability

A fourth perspective on trustworthiness is confirmability—in other words, getting as close to 'objectivity' as qualitative research can get. Confirmability is assured when data are reviewed throughout data collection and analysis to ensure that findings could be repeated by others. It can be documented through a clear coding scheme, triangulation, and member checking of data—along with unpacking personal biases through bracketing and reflexivity (Stahl & King, 2020). Each of these has been outlined, with respect to the researcher's proposed study, in the above sections on data collection, analysis, and role of the researcher.

3.10 Summary

This chapter provided a comparison of qualitative research methods, overview of the specific research tradition chosen for this study (i.e., case study), descriptions of both the study location and participants, an account of how data would be collected and analyzed, and the role and positionality of the researcher. It also took into account ethical considerations inherent to qualitative research, potential study limitations, and issues regarding trustworthiness. The following chapter provides an in-depth description and analysis of data collected during this case study on the impact of IR on novice teacher self-efficacy.

Chapter 4—Results

This chapter presents the results of data collected during the IR process itself (e.g., participant observation and debriefing notes, teacher reflections) and from the in-depth, semi-structured interviews that followed. The data gathered from participants serve as qualitative data, collected to answer the following guiding questions and supported with examples from the participant teachers:

1. What do novice teachers perceive to be the benefits and challenges of using IR as a collaborative professional learning tool?
2. To what extent do IR engage novice teachers in the collaborative process of observation, reflection, and inquiry?
3. How and to what extent does participating in the practice of IR create shifts in teacher beliefs?
4. How do novice teachers perceive the value of IR (as a professional development tool) on their self-efficacy and student learning outcomes?

4.1 Instructional Rounds at School A—The Four Step Protocol

Before presenting the data analysis and discussion of themes, the following section details the four step IR protocol in action at School A. Because IR require prior preparation (City et al., 2009), the participant group met so that I could describe the protocol, answer questions, address any concerns or wonderings, and outline the plan for the professional learning and research over the days and weeks ahead. Before engaging in dialogue surrounding IR, teacher participants were given time to settle in, engage in casual conversation, and share highlights of their school week with each other. Participants were then shown a slideshow presentation that detailed the four stages of IR—along with its background and use as a professional learning tool. The following points were highlighted to teacher participants:

- that IR is a job-embedded form of professional learning;
- that we would be engaging in a series of classroom observations;

- that IR were developed to address common “problems of practice” in schools or school districts;
- that the protocol focuses on developing classroom instructional and management strategies;
- that IR involve a high degree of collaboration, dialogue, and individual and group reflection; and
- that we would be participating in the spirit of inquiry and learning, meaning that our forthcoming work was not meant to be evaluative of host teachers or students (City et al., 2009; Roberts, 2012; Teitel, 2013).

Subsequently, teachers were given a classroom observation schedule, plus an overview of the work they would be doing together outside of these classrooms. They were also reminded of the case study’s purpose and encouraged to ask questions regarding teacher self-efficacy.

Throughout the slideshow presentation, each of the four teacher participants shared their experiences and asked for clarification of key points, as necessary [e.g., “Who is responsible for coming up with a problem of practice?” (Teacher 4) or “Will our school’s administrators be a part of today’s IR process?” (Teacher 2)]. At the conclusion of the slideshow, Teacher 1 speculated that active engagement in IR might prove more impactful than other professional development models, including online workshops (field notes, May 2024).

4.1.1 Defining the Problem of Practice

During this first step in IR, the network (or group) of novice teacher participants was prompted to draft what is known as a problem of practice, an issue they collectively sought to investigate through classroom observations and follow up dialogue (City et al., 2009). Almost immediately, the four group members began to share ideas, along with their recent classroom experiences and interactions with students. Teacher 1 (Grade 6 homeroom teacher) initiated the conversation by highlighting how students’ social-emotional learning was something she often considered in her day-to-day work. She noted that her students often struggle to solve social

problems independently and as a result, rely heavily on teacher intervention. Following Teacher 1, the remaining three participants shared similar concerns on the topic of social-emotional learning and without any further guidance or support from me, the group began to brainstorm potential instructional challenges (i.e., problems of practice). Each of the four participants shared and elaborated ideas, made suggestions, paraphrased or asked for clarification from others, and used open-ended probes or inquiries [e.g., “Please say more about … .” (Teacher 2) or “I’m interested in … .” (Teacher 4)]. For the next 15-20 minutes, the group members revised their problem of practice until consensus was reached; they did not rush through decision-making without addressing the issues raised by each participant. As they engaged in this productive dialogue, participants also took into consideration School A’s newly unveiled strategic vision and in particular, its emphasis on life skills that include self-awareness, wellness, and problem solving (D. Lavell, personal communication, March 18, 2024). Ultimately, the group decided to focus its investigation on how social-emotional learning impacts children’s problem-solving skills and self-regulation within the classroom setting. The final text version of the problem of practice read: “If the issue that we are seeing more and more is that children are not developing their problem-solving and self-regulation skills, then how can we support that in the classroom?” (field notes, May 2024).

Once the problem of practice had been articulated, participants began to formulate potential solutions and developed a theory of action to be tested. Written as an *if/then* statement, the network predicted that:

> If we devote increased time and resources to develop positive student-teacher relationships over the many years that children spend in our school, then their social-emotional learning will be strengthened, and students will more effectively utilize problem-solving and emotional regulation skills. (field notes, May 2024)

4.1.2 Observation of Practice (Classroom Observation)

Before the teachers engaged in classroom observations, they were reminded of:

- **Observation norms.** According to IR protocol, observing teachers may

ask students questions relating to their learning when it seems appropriate, but they must refrain from interrupting the host teachers' instruction and interaction with students, and they must not talk to each other while in classrooms.

- **Focusing on specific information when taking notes.** Participants in IR are asked to describe what they see. For example, what is the task that students are working on? What are the students saying and doing? They are encouraged to pay attention to the teacher(s), students, and content—while collecting evidence relating to the problem of practice. Observations are not meant to be evaluative; rather, they are intended to gather descriptive data (City et al., 2009; Roberts, 2012).

In each setting, participant teachers circulated throughout the classroom, sitting for periods of time in various sections and recording their observations. They did not remain in their group of four, nor did they interrupt lessons that were already in progress. Each teacher quietly greeted students who approached them directly, but respected the IR guidelines and did not initiate conversations with students or host teachers. As the IR facilitator, I circulated throughout the various classrooms and observed students, host teachers, educational assistants, and study participants—while recording details in my research field notes. Several students approached to greet me and to ask what I was doing; I replied that I was watching their lessons to see what they were learning. Several students explained the independent literacy or math stations to me and carried on with their lessons after our brief interactions. I did not engage with study participants during the classroom observations, other than giving them reminders that we were nearing the end of time in each classroom and would be shortly moving on to the next.

4.1.3 Observation Debrief

After a series of four classroom observations, participant teachers took a short break (15-20 minutes) and we then reconvened in our designated work space. Participants were asked to independently review their observation notes, highlight evidence that seemed most

relevant to the Problem of Practice (and that would likely be important to the subsequent group discussion), select 8-10 pieces from this evidence, and transfer these onto individual sticky notes.

Participants worked quietly and independently for approximately 15 minutes on this task. Then, I quietly prompted teachers to finish their sticky notes and place them on a blank chart paper provided. At this point, the notes were not arranged in a particular order and each group member read her evidence aloud as the others listened attentively. At times, group members asked for clarification or verbally observed similarities between the speaker's notes and their own. For the most part, however, participants refrained from interrupting the speaker and in accordance with IR protocol, provided descriptive written accounts—rather than using evaluative language.

From here, participants were instructed to take a closer look at the sticky notes. They were asked to analyze the descriptive evidence as a group, categorize the notes, and label the groupings however they saw fit. Participants were informed that a sticky note may stand alone or that it may be duplicated if they felt it could belong to more than one category. As they completed this task, they were also asked to consider the following:

- *What patterns do you see?*
- *What groupings help you make sense of what you see on the chart paper?* (City et al., 2009; Roberts, 2012).

Without hesitation, the group began to organize the sticky notes and Teacher 1 commented how the notes reflected the Reggio Emilia approach to teaching and learning, an educational philosophy that is followed in School A's Early Years program. This prompted another participant (Teacher 2) to ask, "What are you thinking for the headings?" Teacher 1 replied by highlighting that many of the notes emphasized the importance of physical classroom spaces, the classroom's emotional 'ecosystem' as she termed it, the child as a researcher—in

other words, playing a central role in his or her own learning—and the teacher as a facilitator of knowledge or co-researcher, supporting children's inquiry and learning.

After further discussion and consideration, the teachers reached a consensus and grouped their evidence using the following headings:

- Physical Classroom Environment
- Classroom Emotional 'Ecosystem'
- Child as Researcher
- Teacher as Facilitator or Co-Researcher

Connecting to the Problem of Practice. As noted, the problem of practice read: "If the issue that we are seeing more and more is that children are not developing their problem-solving and self-regulation skills, then how can we support that in the classroom?" (field notes, May 2024).

Participants began to connect their evidence to this statement. Participants 1, 2, and 4, who were teachers of either intermediate students (Grade 6) or multi-age groups, surmised that a heavy emphasis on academic instruction, high student-to-teacher ratios, and timetables that require students to move between classes and teachers several times per day translated to fewer opportunities for explicit social-emotional instruction as students progress through intermediate grade levels. This, in turn, was reflected in older students' problem-solving efforts, particularly when it applied to conflicts with friends or other social challenges (researcher field notes, May 2024). As Teacher 1 reflected:

> Looking at self-regulation and management, do our schools and greater community support the development of future-ready students who are independent and kind learners? Or, are we creating an environment where children are asked to meet specific metrics and move through a points-based system … ?

This led to Step 4 of the IR protocol, the next level of work.

4.1.4 Next Level of Work

As participants reflected on their classroom observations and engaged in dialogue regarding the next level of work, I took notes to allow them to focus on the conversation. Teacher 1 encouraged her peers to consider the importance of developing a clear and comprehensive scope and sequence for Grades K-7 social-emotional learning, while recognizing that this was a long-term proposition. The group referred to the headings they had created to categorize classroom observations and suggested that the following initial steps be enacted during the upcoming 2024/25 academic year:

- Physical Classroom Environment
    - School A's Elementary campus will undergo a planned renovation during the summer of 2024. The redesigned spaces will feature more flexible seating options, natural light and furniture options, and will allow students to access materials independently. The campus will also include a STEAM lab and atelier—designed to encourage student creativity, support science explorations, and promote inquiry-based learning (N. Richards, personal communication, May 2, 2024). Therefore, participants did not suggest specific next steps with regard to the physical classroom space at this time. Instead, they wondered how the newly designed campus would impact student learning. As Teacher 1 voiced, "I'm curious to see how we interact with it."
- Classroom Emotional 'Ecosystem'
    - Integrate social-emotional learning more intentionally into daily routines, particularly at the intermediate grade levels and above (e.g., Second Step SEL Program). This will build a common language around problem solving, help students extend their learning, and provide them with a 'toolkit' of strategies for emotional regulation.

    - Advocate for building stronger connections between the Early Years, Elementary, and Secondary School campuses.
    - Foster a positive school culture through collaboration and relationship-building. For example, advocate for greater administrator visibility in hallways, classrooms, and other learning spaces. This will help build trust and strengthen relationships with teachers, students, and parents.
- Child as Researcher
    - Continue to focus on student-centered learning, including inquiry and project-based approaches.
- Teacher as Facilitator or Co-Researcher
    - Implement an action cycle where teachers can engage in classroom observations, choose a specific strategy to implement in their own teaching practice, and then reflect on its effectiveness.
    - Revise how staff meetings are currently structured and shift the focus away from logistics and toward professional learning. Allocate time for teachers to engage in curriculum development, to differentiate student learning experiences, and to integrate subject areas.
    - Rethink the current mentorship program and designate time for teachers to engage in professional learning. Remove the notion of hierarchy and open the program to anyone who is interested, not just novice teachers.
    - Involve teachers in scheduling to better support student learning and to ensure that transitions and timetables are developmentally appropriate, particularly for the school's youngest students.

4.2 Data Analysis

As described in Chapter 3, data were collected in the form of:

- documents, including researcher field notes, participants' classroom observation focus sheets, observation debrief notes, individual teacher reflections; and
- recorded interviews, translated into text.

A systematic analysis was then conducted to identify patterns, relationships, and overarching themes. Three types of coding (i.e., open, axial, and selective) were applied to the raw data to uncover categories of data (Saldaña, 2021). During the initial stage, open coding was used to break down data and to uncover a wide range of ideas and participant perspectives. I highlighted keywords (e.g., collaboration, relationships, reflection) as I examined participants' detailed descriptions (Creswell, 2012). As I read and re-read the data, line by line, 14 categories emerged. These were further analyzed to determine how they might potentially merge into fewer categories or themes.

The second step in the data analysis process utilized axial coding—a more focused and systematic examination of the data—to reveal connections between and among the various categories identified during the open coding phase. Data were coded manually using visual tools (i.e., diagrams) to help me visualize the connections.

Finally, selective coding was applied, as data were refined and organized into core categories, or central themes. From the original 14 categories identified during the open coding phase, six (6) themes were identified.

4.3 Overarching Themes

In the following sections, I discuss each of the six themes, as supported by exemplars from both case study documents (e.g., field notes, classroom observation focus sheets) and participants' interview transcripts. These themes connect the data to the research questions and provide a framework to organize the results of the study.

4.3.1 Creating a Shared Vision and Goals

As highlighted in the previous chapters, IR provide a platform to build authentic collaboration among teachers. Participants in this case study highlighted several benefits of

IR—along with potential challenges to implementing the practice school-wide—and how their engagement created shifts in beliefs and feelings of self-efficacy.

The level of ownership that teachers felt while participating in IR professional learning greatly influenced how much they invested in the collaborative work. While many organizational models are intended to facilitate collaboration among teachers, there is no guarantee that individuals will come together, effectively exchange ideas, and pursue common purposes. For example, Teacher 1 voiced:

> Sure, there's co-planning time. Sure, you're supposed to be working with another person. But I think a lot of people kind of get stuck in the same realm of 'I'm doing it this way. I've always done it this way … and I'm going to teach it exactly like this.'

With the IR protocol, however, creating a shared vision and goals contributed to a heightened sense of ownership over their learning and facilitated effective collaboration—according to study participants. IR allowed them, as a team, to identify a shared vision that reflected the importance of both students themselves and student learning outcomes, set goals related to their vision, discuss how their work can support identified goals, and assess progress. According to Teacher 2:

> [F]iguring out what problem of practice we have and seeing who shares that and finding the bond in that. This is something we care about. Our values align in this. I found that really impactful but, then I liked going into the classroom and seeing what other teachers were doing … .

These sentiments were echoed by Teacher 3, as she talked through defining the problem of practice and engaging in classroom observations:

> I think it was interesting to define the problem of practice, to try to figure out collectively what is something we think the school should work on … . [O]nce we knew what the problem was, to observe something very specific … I liked that because it gave me something concrete and specific to hone in on.

Likewise, Teacher 4 shared how defining the problem of practice and the subsequent IR steps had a positive influence in terms of her own perception of self-efficacy: "Gosh, that was so validating and exciting to actually be asked what *we* [emphasis added] think is most important … . I feel like there's agency in that."

Hargreaves and Fullan (2012) observe that professional judgment (vs. top-down

agendas) is an important element of building professional capital. The data from this research suggest that teachers' personal stances regarding whether they want to, versus have to, participate in professional development are an important aspect of successful collaboration and in fostering a sense of ownership over learning. During the initial IR briefing, for example, Teacher 1 shared how she appreciated being part of professional learning that was driven by the teachers themselves, focused on an issue *they* identified, and that teachers' participation was completely voluntary (researcher field notes, May 2024).

4.3.2 The Value of Classroom Observation

As the network of novice teachers progressed through their professional learning journey, they engaged in a series of classroom observations. Because the goal of the classroom observation was to gather descriptive data—rather than to evaluate the host teacher or students—participants came to realize that this stage of IR was intended to be free from judgment or appraisal. This allowed them to focus on learning vicariously through the successes and failures of their host teachers, and later to reflect on their classroom visits with the following questions in mind:

- *As a result of my experience and observations today, which aspects of my own teaching do I feel were validated?*
- *As a result of my experience today, what instructional, classroom management, or differentiation strategies can I now confidently implement in my own classroom?*

As articulated by all four participants during their follow up interviews, Step 3 (classroom observation) was a strength of the IR model. Novice teachers expressed that they were able to experience the learning environments and classroom cultures being cultivated across two grade levels at School A, and they felt that the classroom visits allowed them to document (and later discuss) a range of student-teacher, student-student, and student-environment interactions. During the observational debrief, participants noted that in each of the classrooms they visited, teachers appeared to have a strong understanding of their students' strengths and areas for growth, and they modeled collaborative, respectful relationships—not only with students, but with each other. They also commented that host teachers used positive reinforcement when

working with students, spoke calmly, and provided scaffolding when necessary, including the repetition of instructions (researcher field notes, May 2024; participant observation focus sheets, May 2024). As Teacher 3 explained during her follow up interview:

> I find it interesting to see how the teachers were communicating with the students and usually in a very calm, calm voice and not easily upset by things and taking the time to explain to a student … . All students had something that they were engaged with. They didn't need teacher instruction all the time to kind of figure it out … they knew strategies to problem solve on their own. So, without a teacher, they had clearly been taught problem-solving strategies … .

Developing a common language about instructional practice is also important to improving classroom instruction. Participants documented in their observation notes that host teachers and students seemed to use a shared vocabulary when solving problems—reflective of the classrooms' use of either the Second Step or PeaceWorks social-emotional learning programs—and that perhaps, teachers could find ways to build on what students have already practised in lower grade levels.

Following the series of classroom observations, Teacher 3 expressed her impression of the value of IR as a means of modeling instructional practice:

> [I]t gave me a picture of what was going on so I can see what they're doing already, without having to do things myself. So, I was really able to observe … and then, kind of appreciate the methods they use and how they engage with the students and what techniques they're using and even the language they use to communicate with students.

Participants further noted how classroom observations can help teachers identify and document high-leverage instructional practices that can be translated into their own classrooms. They described high levels of active student engagement and emotional regulation as host teachers provided students with a choice of activities, prompted them with open-ended questions, and encouraged children to reflect on their learning (participant observation focus sheets, May 2024). Furthermore, they documented how the use of small group learning stations in two of the kindergarten classrooms provided opportunities for enrichment, mediation, assessment, and the pre-teaching of content. In their observation notes, several participants also noted how the small group approach appeared to increase student participation and teacher monitoring while, at the same time, effectively supported inquiry-based learning that

stemmed from children's interests (researcher field notes, May 2024). As Teacher 1 shared during her interview:

> I'd already had the pleasure of teaching with one of the teachers who had brought in more of a centres-based teaching approach than I had been previously been taught in my teacher education and that was very helpful for me, from an early childhood perspective. After the instructional rounds, a part of me started asking myself why I don't do this in my own classroom.

Finally, walkthrough observations in the IR model are intended to provide descriptive, rather than evaluative evidence (City et al., 2009) and with this in mind, the four teacher participants highlighted another potential benefit to the practice—that it can provide a feedback loop for teachers. Teachers 3 and 4 offered the following thoughts, respectively:

> I was involved in mentorship a bit. To co-teach, that was super helpful. I'm thinking, too, if you're not in a situation where you're co-teaching, and you're on your own … [t]hen you'd have an opportunity to just try different things and get different types of feedback.

> I'd love to be observed. But it would be so nice if it was built into the actual program. Wouldn't that be nice? Yeah, that would be great for mentorship. … I would love to hear feedback from four different people.

As they concluded their debrief and drafted the next level of work, participants emphasized the importance of establishing peer observation as a form of collaborative professional learning (researcher field notes, May 2024).

4.3.3 Providing Safe and Supportive Learning Environments

This case study took place in a school where the Early Years program follows a Reggio Emilia-inspired approach. Central to the Reggio approach is the significance of the environment as 'the third teacher,' or context in which learning takes place. Valued for its power to promote relationships and educate both children and teachers, the classroom environment is intended to mirror the ideas, values, attitudes, and cultures of those who use the space. Perhaps more importantly, it is believed to communicate a powerful message to learners and shape the actions that are taken within it (Ontario Ministry of Education, 2014). In this study, teacher participants recognized that they had been provided with a quiet space to engage in

professional learning, mostly free from interruption. Furthermore, they had been welcomed voluntarily into host classrooms and expressed how receiving feedback from peers was a means of fostering a culture of mutual accountability and collaboration (researcher field notes, May 2024).

At its core, collaborative learning is relational. Getting to know colleagues, taking the time to connect on a personal level, and building mutual respect takes time and commitment. Because this network of novice teachers was part of the school's mentoring program—and in some cases, either co-taught students or coached extracurricular sports together—they had already established working relationships. This was reflected in each step of their IR group work. Participants appeared to be fully present and engaged, recognized individual contributions, and confidently shared knowledge (researcher field notes, May 2024). As Teacher 1 shared during her interview:

> [T]he other participants in the study have all been colleagues at some point in time, so I felt like I had a very positive relationship with them, which allowed me … to just be very comfortable and say what I was thinking as I was thinking it, versus going through several filters … . So, I would say it was a very collegial environment and I was able to put out what I wanted to put out.

In referring to their participation in IR—and specifically, to how relationships are critical to collaborative learning—the other teachers concurred. As Teacher 2 articulated, "[T]his experience of [instructional rounds], it just opened my eyes to different possibilities of PD and really learning how much wealth of information and strategies we have … . It just strengthens those relationships, those working relationships." Likewise, Teacher 4 noted that:

> [T]he group of people that we were, we were listening to each other and we already know we work well together. … I don't know if making your own groups would be helpful, but having a facilitator thoughtfully choose groups with that in mind and thinking about who you're putting together would spark different ideas.

Participants noted additional benefits of small group learning during their observations of students, including how the format seems to help students support each other, and how it might build self-confidence by giving each child a voice and platform to share ideas (researcher field

notes, May 2024; participant observation focus sheets, May 2024). They also highlighted the small group format as a strength of the IR protocol, especially in terms of supporting their own learning, autonomy, and efficacy as professionals:

> I've always been very afraid to speak up … . But, in the instructional rounds, it felt like because there was that safe space to do that and the [participants] know me so well that they were kind of like, 'Okay, just do your thing.' … I usually step aside … because I never want to be the loudest voice in the room. (Teacher 1)

> I think a lot of the professional learning that we've done in the past has felt very one-sided and not collaborative. It's just giving information and not having the space to authentically connect and share in a safe setting because it feels like such a diverse group of people, people that I may not ever have worked with. …. So, with rounds, having a smaller group just feels a lot safer to try new things. (Teacher 2)

> I think having one person as the facilitator and a small group of four was really, really awesome and something we don't necessarily do at other Pro-D's [professional development days]. It's nice to have a facilitator in the group, for sure. And a small group. (Teacher 4)

4.3.4 Engaging in Critical Reflection

Engaging teachers in critical reflection of practice is a key element of the IR protocol (City et al., 2009). Throughout this case study, participants spoke about the importance of keeping the questions of "for what' and 'what next' at the forefront of their work, to promote student learning and to bring about more effective teaching. Teacher 3 commented that:

> I would need more observations and more conversations to keep it [the problem of practice] at the forefront and to try things and then have someone to debrief about how it went. And, if it's not working, why? Is it something that I'm doing? … So, I think it would take ongoing conversation.

And as Teacher 1 noted:

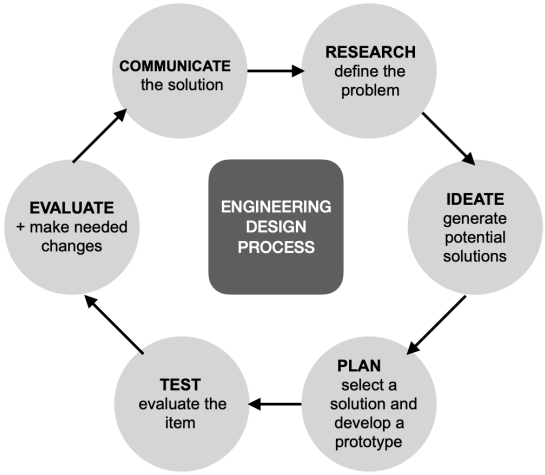
> [S]omething that I very much got out of that group discussion was, am I providing a classroom space that is calming for them; that they feel is an extension of who they are as a whole group? Is there a sense of community … where I'm able to make mistakes? Because, from a regulatory standpoint, that can be very challenging for kids.

Teacher 1 went on to compare the IR protocol with the engineering design model (see Figure 3), particularly noting how it promotes ongoing reflection and improvement:

> [I]t put everything from the problem of practice and the classroom observations into something that was understandable, but also evoked this requirement for deeper learning and deeper questioning. And that, I think, was what allowed us to identify the next step of work … . It's something that is constantly evolving and so if we were to look at this as part of the engineering design model … then we're constantly going to be working in this space of 'Well, what works for this person? What works for this person? And then okay, wait. What works for *me* [emphasis added]?'

Figure 3

The Engineering Design Cycle[8]



4.3.5 Challenges to Implementing Instructional Rounds

While the four teacher participants declared that their experience with IR had many positive outcomes, they also acknowledged several potential obstacles to implementing the protocol long term and schoolwide. They noted that time constraints and scheduling are often issues that make it difficult for teachers to engage in ongoing professional learning. For example, when prompted to consider the challenges of IR, Teacher 2 stated:

> Scheduling! Covering lessons. … I feel like the time was short. I feel like I would have liked more rounds on the same topic, in different times of the day and different lesson times and kind of get a better grasp on it.

[8]*Note:* The engineering design cycle is a series of steps that engineers follow in order to create functional products and processes. Like IR, the process is highly iterative and involves defining a problem, analyzing and interpreting information, critically reflecting on the design's effectiveness, and making improvements (as necessary). Adapted from *Curriculum resources: Science and engineering design processes,* by The Government of Ontario. (https.www.dcp.edu.gov.on.ca/en/curriculum/science-technology/context/ processes). Copyright 2022 by King's Printer for Ontario.

Likewise, Teacher 4 noted, “I think it’s very time consuming. … So, something would have to go. That would probably be the hardest part. I don’t know. Other challenges? Maybe onboarding … .”

Another roadblock to the successful implementation of IR speaks to a culture of teacher isolation and fear of judgment by colleagues. As Teacher 1 observed:

> I would be very interested in doing something like this [instructional rounds] in the future but, I think … that could be very intimidating for teachers who like to have their doors closed … . I would love to invite people into my classroom but, I think that a lot of people … may be very cautious about doing that, about opening their doors to visitors.

4.3.6 Shifts in Teacher Beliefs

Each step in IR prompted teachers to collaborate, engage in critical reflection, and consider potential adjustments to their own teaching instruction. Rather than eliciting defensiveness from participants, the IR process seemed to evoke reflections on their growth as teachers and provided participants with validation of what they were already doing in their own classrooms. There was also a sense that, regardless of their teaching experience, there would always be opportunities to change, to identify areas for improvement, and to embrace the challenges of the teaching profession.

Many participant comments—expressed during the professional learning itself and during follow up interviews—suggested that their professional learning was both worthwhile and beneficial to their classroom practice. In fact, several teachers shared feelings of increased confidence in themselves as teachers as a result of their participation in IR:

> [S]eeing so many different classrooms was cool. I think the variety of approaches that achieved the same thing was cool. That improves my confidence in knowing that I can do it because obviously, I’m a different person. I’m going to do it differently. (Teacher 4)
> It allowed me to step away feeling like I had a voice that mattered … . We were all lifting each other up, in a sense. And so, I walked away feeling a little bit more confident in my job and myself as an educator, but then also walked away with some different lenses to look at things myself in the future. (Teacher 1)

Teacher 1 also touched on the notion of collective efficacy as she emphasized the

impact of IR on the group as a whole:

> [T]he bond we formed was one of 'Hey, why don't we do something? Why does it always have to be somebody who has that 20 years of experience? Why can't it be somebody who's only in their third year?' Because, we have the most recent education … . Why can't *we* [emphasis added] step up? And I think that's how I would describe that whole scenario. It became the 'why not us?' Versus 'no, we can't do that.'

Furthermore, teacher participants elaborated on how IR had increased their enthusiasm for professional learning in general, and shared their hopes that participation in IR and other forms of collaborative learning could continue as they move into the 2024/25 academic year (researcher field notes, May 2024). For example,

> I found that so refreshing to hear how we would want to implement things and move forward. Just bouncing those ideas off of each other. I really liked that and that felt like a meaningful PD [professional development]. Like action that we all care about and get excited about. (Teacher 2)

4.4 Summary

Following the implementation of IR at School A, data were collected in the form of documents (e.g., researcher field notes, classroom observation focus sheets) and participant interviews. Throughout the four stages of IR—and during follow-up interviews—participants shared their input, provided insight into their learning, and represented how their participation in the IR process influenced their perceptions of self-confidence.

The importance of collaboration was suggested by all four participants as playing a critical role in their professional learning, increasing their feelings of confidence, and strengthening working relationships. Specifically, teachers valued being able to:

- create a shared vision and goals;
- engage in classroom observation;
- work in a safe and supportive learning environment; and
- practice critical thinking and reflection.

At the same time, participants identified potential barriers to implementing IR long term and schoolwide. They recognized that to fully reap the benefits of IR, they would require ongoing practice with the protocol and acknowledged that time constraints and scheduling conflicts may hinder school wide adoption of IR. Additionally, participants theorized that the tendency for many teachers to work in isolation—along with the possibility that host teachers could feel judged—may prevent some colleagues from taking part in IR.

Chapter 5 will present a more in-depth discussion of these results, including interpretations and implications of the findings, limitations of the study, and recommendations for practical implementation and future research.

Chapter 5—Discussion and Conclusions

This study took place at a small, independent school in greater Vancouver and began with the premise that IR could be an important mode of professional learning and provide a process to strengthen teacher self-efficacy, foster collaboration and growth, and contribute positively to teaching and learning. Given that teacher attrition is highest within the first three to five years (Gunn & McRae, 2021), retention has emerged as an important goal of schools and school districts. Research on forms of professional learning that might contribute to early career teacher effectiveness is, therefore, vital to system-level productivity and success.

The purpose of this qualitative study was to explore the impact of IR, as a professional learning tool, on novice teacher self-efficacy. Data were gathered in the form of research field notes, written artifacts (e.g., teachers' classroom observation and debrief notes), plus interview transcripts.

A discussion of the findings from the study is provided in this final chapter. As noted, six main themes emerged from the data collection (creating a shared vision and goals; the value of classroom observation; providing a safe and supporting learning environment; engaging in critical reflection; challenges to implementing IR; shifts in teacher beliefs) and these provided an organizational framework for the discussion and analysis of data. An overview of the findings is also presented—specifically, as they relate to current research and best practices in professional learning—along with implications, limitations of the current study, and recommendations for implementation. Chapter 5 concludes with suggestions for future research.

5.1 Discussion of Key Findings

In this section, I draw connections between the research findings on the application of IR as a professional learning model and (1) Bandura's self-efficacy theory of motivation, (2) the role of self-efficacy in teaching practice, (3) the utilization of components of high-quality professional learning, and (4) the importance of double-loop learning in school improvement.

5.1.1 IR and Bandura's Self-Efficacy Theory of Motivation

Self-efficacy refers to an educator's judgment of his or her ability to promote active learning and engagement in students (Tschannen-Moran & Hoy, 2007). The notion of teacher self-efficacy has become an important consideration in education research because of its implications for teaching effectiveness, a teacher's willingness to engage in innovative teaching approaches, and his or her ability to influence student academic achievement (Barni et al., 2019). The analysis of data collected through this case study offers further evidence that high quality, collaborative professional learning plays a role in improving teacher self-efficacy; it also contributes insight into how administrators can engage teachers in activities that promote professional growth at the school and district levels.

As noted in Chapter 2, teachers' perception of self-efficacy is a dynamic and cyclical construct (Tschannen-Moran & McMaster, 2009). Bandura (1977) asserted that it is through the interplay of mastery experiences, vicarious experiences, social persuasion, and emotional states that individuals develop strong beliefs (or conversely, disbeliefs) in their abilities. In the field of education, self-efficacy plays a key role in determining the types of learning experiences that teachers provide to students, the extent to which their students are engaged in learning, and how well students meet learning outcomes—all measures of teaching effectiveness (Barni et al., 2019; Gümüş & Bellibaş, 2023).

Among the four sources of teacher self-efficacy, mastery experiences are postulated to be the most potent (Bandura, 1997; Tschannen-Moran & McMaster, 2009). In this study, however, evidence was gathered from a *novice* teacher cohort. Because these teachers had fewer opportunities to gain mastery experiences so early in their careers, it was anticipated that the other three sources of self-efficacy would play a more prominent role in how they represent their self-efficacy. As expected, contextual factors—particularly classroom observations, positive peer feedback and encouragement, and an emotionally safe and supportive learning environment—were found to be more important in the self-efficacy beliefs of novice teachers as

they relate to the sources of vicarious experience, social persuasion, and emotional states, accordingly. While very few studies have explored the impact of IR on teacher self-efficacy—and more specifically, on novice teacher self-efficacy—findings of this case study align with the earlier work of Tschannen-Moran and Hoy (2007) on the differential precursors of self-efficacy beliefs in both novice and experienced teachers. Their work highlighted how "inputs such as verbal persuasion, vicarious experiences, and emotional arousal may well be most salient for preservice teachers who lack significant mastery experiences" (Tschannen-Moran & Hoy, 2007, p. 954). Considering results from this research and from earlier studies on self-efficacy, it would behoove school administrators to focus on how to develop stronger self-efficacy beliefs in preservice and novice teachers and especially on the types of professional learning activities and other support required to develop these perceptions.

5.1.2 IR and Self-Efficacy in Teaching Practice

Self-efficacy and professional learning are often linked to teacher performance and, consequently, to the achievement of student learning outcomes (Gümüş & Bellibaş, 2023). Professional learning activities for teachers are standard elements of school improvement initiatives and can impact teachers' beliefs, instructional practices, and student learning (Anderson & Sivasubramaniam, 2017). There is, however, a need to critically examine which forms of professional learning that can best contribute to teacher self-efficacy, and how exactly they do so (Gümüş & Bellibaş, 2023).

The findings from this study contribute to the research on teacher self-efficacy and the migration from theory toward real-world practice. While a great deal of teacher professional development continues to focus on the so-called 'up-skilling' of individual teachers, through workshops or short-term training initiatives (e.g., online certification) (Gümüş & Bellibaş, 2023; Beauchamp et al., 2014), this IR case study highlights how job-embedded professional learning can foster a collaborative culture of learning and, therefore, boost teachers' self-efficacy. Improved self-efficacy, in turn, influences classroom practice, preparation for teaching (Klassen

& Tze, 2014), and overall job satisfaction (An & Tao, 2024). And, given that teachers show the most significant growth in their formative years (Akiri & Dori, 2022), the findings presented here offer further evidence that collaborative professional learning opportunities—and in particular, IR—may be effective in providing novice teachers with a means to help mitigate the early challenges of classroom teaching, experiment with instructional strategies that meet the individual needs of their students, and refine their classroom management techniques.

Arguably, one of the most valuable components of IR for this network of teachers was the opportunity to learn from observation in authentic classroom settings. While a commonly cited challenge of learning through observation is knowing exactly *what* to look for and *how* to interpret what is observed (Werner & Kessenich, 2018), the participants in this study voiced that having a clear focus, as defined through their problem of practice, along with the time to debrief and analyze patterns, was beneficial. Each of the case study participants described positive perceptions of classroom observation and how viewing their colleagues contributed to a shift in their beliefs, notably as they voiced feelings of validation and confidence. Several highlighted moments of self-realization as they watched peers use similar pedagogical strategies (e.g., small group learning centres) or ones that could be readily adapted to their own teaching practice. Furthermore, teachers shared positively shifting opinions and confidence as their experience with IR continued. Some suggested that the non-evaluative nature of IR observation could engender more informal versions (e.g., learning walks, collegial classroom visits) and if more teachers were afforded the opportunity to take part in IR, “that collaboration would ripple out into the community” (Teacher 2). Feelings of teaching in isolation also diminished as participants voiced a willingness and excitement to host observations themselves. For example, while Teacher 2 initially shared that “I do feel most of the time I’m an island,” she later voiced that “it would be nice to have that ongoing dialogue where there's someone seeing what you're doing and just having a little bit of validation in that. … I would love to offer that.”

5.1.3 Utilizing Components of High-Quality Professional Learning

When interacting with teacher participants throughout this case study, I intentionally used the term professional learning to encapsulate a wide variety of both formal and informal opportunities for enhancing teaching practice—and to differentiate between this practice and more traditional forms of 'professional development.' Professional development has often been associated with single, 'one-size-fits-all' workshops, seminars, or lectures; in most schools or districts, professional development days are set aside in yearlong school calendars and teachers are expected to attend these as part of their contractual obligations (Bradley et al., 2023; Beauchamp et al., 2014; Jones & Charteris, 2017). In contrast, professional learning is typically interactive, collaborative, and ongoing as it encourages teachers to take ownership of their learning and translate what they have learned into their own teaching contexts (Bradley et al., 2023; Darling-Hammond et al., 2017).

Effective professional learning enables educators to learn and refine the instructional strategies needed to teach so-called '21st century skills'—competencies that include critical thinking, complex problem solving, a deeper mastery of challenging content, effective communication, and collaboration with others (Darling-Hammond et al., 2017; Flórez Petour & Rozas Assael, 2020). According to Tschannen-Moran and McMaster (2009), a growing body of research supports Bandura's (1977) theory that teacher self-efficacy is linked to the effort teachers invest in teaching, their willingness to refine and implement instructional change, and their resilience in the face of setbacks. This case study set out to explore the impact of IR on novice teachers' self-efficacy and as a result, their willingness to learn from and refine their instructional practices. While not all professional learning initiatives appear effective in supporting changes in teachers' practices and student learning (Beauchamp et al., 2014), the findings from this study suggest that IR align with current best practices and research in teacher professional learning.

One important finding that emerged from this research is that teacher self-efficacy can be nurtured through professional learning opportunities that provide teachers with time to meet and discuss student learning, in safe and supportive spaces that promote reflection and conversation. In the context of School A, the IR protocol required that participants respect norms of observation and collaboration, while following a multi-step protocol. This allowed the novice teachers involved in the study to experience a sense of security in planning, organizing, and carrying out teaching activities, which seems to have had a positive influence on their perceptions of self-confidence. Furthermore, participant teachers noted that IR allowed them to engage in the deep conversations that are vital to improving teaching practice and student learning outcomes. When drafting their problem of practice, for example, participant teachers engaged in lengthy dialogue on the topics of teacher mental health and burnout, stages of child development, and 'funds of knowledge'—with a particular focus on understanding how these constructs mediate students' social-emotional learning in the classroom setting.

Throughout the study, the four participants emphasized additional characteristics that support high quality professional learning and, in turn, impact teachers' motivation and performance. These were revealed in their interview responses and in the ways they planned and drafted their next level of work. Participants in the study expressed the view that professional learning is most effective when it evolves from their needs and self-identified goals, reflects the context and needs of individual schools, and provides a sense of teacher ownership over teaching and learning. At the same time, they advocated for the following next steps:

- building a common language around teaching and (social-emotional) learning;
- fostering a positive school culture through greater administrator visibility;
- giving teachers a voice in school-based decisions, including school improvement and professional development initiatives;
- strengthening collegial relationships among administrators, teachers, and staff, along with greater professional relationships with students and parents, and;

- allocating time for job-embedded collaboration, including classroom observation, differentiation of student learning experiences, and integration of subject areas.

5.1.4 The Importance of Double-Loop Learning in School Improvement

As Elmore (2008) notes, collaboration can be a powerful tool if it enables the teacher to teach more effectively and if it provides a greater degree of engagement for students. Yet, many professional learning initiatives are unsuccessful because teachers and facilitators fail to address their mistakes. In other words, while educational leaders and teachers are typically open to learning new methods or techniques that support their present practices, they do not address causality when correcting a mistake or a problem—a concept Argyris (1999) terms single-loop learning. Double-loop learning, on the other hand, challenges individuals to reflect on the assumptions and values that underlie their current practices, identify causality, and then take action to fix a problem (Figure 4). Essentially, Argyris (1999) encourages organizations (e.g., schools) to utilize creative approaches to problem solving, where workers embrace problems or mistakes as learning opportunities, critically reflect on their practice, and implement changes that are both effective and sustainable. Considering that IR involved an iterative process—requiring study participants to identify problems of practice, compare their own instructional strategies with peers', and engage in a high degree of critical reflection—this study demonstrated that, as a professional learning tool, IR hold the potential to move organizations from single to double-loop learning and as a result, cultivate innovation and creativity.

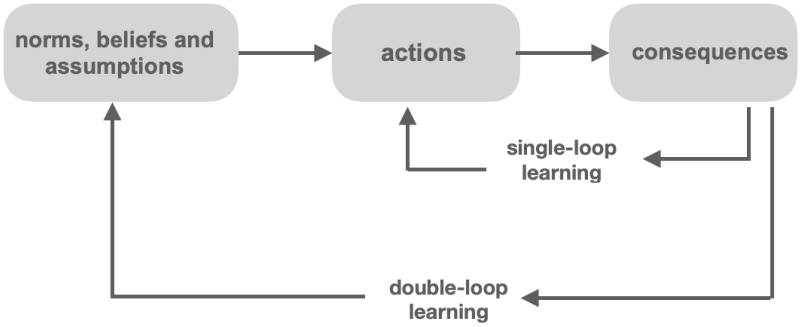
Throughout the study, the four teacher participants underscored the importance of collaboration, teamwork, interpersonal relationships, and increasing student engagement—constructs that were woven throughout each step of the IR protocol. Teachers used these terms repeatedly in their conversations with each other and with me and included them in their classroom observation sheets and debrief notes. They also highlighted the value of pausing, critically reflecting on practice, and being present in the moment—whether engaging with students in the classroom or during professional learning with colleagues. During her follow up

interview, for example, Teacher 2 recounted the value of pausing to contemplate the most appropriate response, rather than reacting to students immediately without considered thought. This speaks to the role of double-loop learning where teams—like the network of teachers in this study—are required to continuously reflect not only on how they do their work, but *why* they do things in a particular way.

Teachers 1 and 2 took this notion a step further when asked to consider potential challenges of teaching and professional learning, in general. They speculated that instead of questioning the existing system, teachers often accept that certain aspects are difficult to change. As a result, they focus their efforts on more straightforward improvement goals and teaching practices become defined by familiar structures, procedures, and norms. Teacher 1, for example, commented on how easy it is for teachers to revert to established routines "[where] I'm doing it this way, I've always done it this way … and I'm going to teach it exactly like this," as opposed to looking at the bigger organizational picture and digging deeper to uncover the root cause of problems of practice. She also observed that professional growth requires "navigating … school in a way where you're not totally stirring the pot, but … challenging the status quo." By embracing forward thinking like this, teachers also came to recognize that mistakes are an integral part of learning and can be approached as growth opportunities. They were more likely to test new ideas and strategies in ongoing practice, reflect on their effectiveness, and as a result, experience feelings of greater competence—as Teacher 1 suggested when she compared IR to the engineering design model (Figure 3).

Figure 4

Single vs. Double-Loop Learning[9]



5.2 Implications for Theory and Practice

Chapter 2 included discussions of social constructivism, along with Wenger's communities of practice theory. How IR aligns with these models is discussed in the following sections. Connections to Bandura's self-efficacy theory of motivation have been discussed earlier in this chapter.

5.2.1 Social Constructivism

Social constructivist theory posits that learning is a social activity, directly associated with—and often deeply influenced by—individuals' connections with others; in other words, learning takes place in social settings. The theory also suggests that individuals remain active participants in the creation of their own knowledge and emphasizes the collaborative nature of learning under the guidance of a facilitator or in cooperation with other students (Pritchard & Woollard, 2010; Vygotsky et al., 1999). As learners in this professional development activity, participant teachers used a structured, four-step protocol that involved conversation, interaction, and group applications to engage in reflection of practice, build their collective knowledge base

[9]*Note:* In single-loop learning, a new strategy is tried without questioning the beliefs and assumptions that guide an individual's choice. Double-loop learning involves questioning the values and beliefs that ultimately guide an individual's actions and is particularly important when individuals (or organizations) repeatedly fail to achieve desired outcomes. Adapted from *Why individuals and organizations have difficulty in double-loop learning* by C. Argyris (1999). Copyright 1999 by Blackwell Business.

and as a result, boost their overall feelings of self-efficacy. Furthermore, the protocol was guided by me—in the role of facilitator—to scaffold participant learning, model teaching practices, and eventually transfer agency to the network of novice participant teachers.

5.2.2 Wenger's Communities of Practice

As Wenger (1998) states, "[l]earning is, first and foremost, the ability to negotiate new meanings" (p. 226) and his communities of practice theory is based on the premise that learning occurs organically through social participation and reification. Notably, Wenger's model involves the interplay of three interrelated components: the domain, the community, and the practice (Wenger, 1998; Wenger et al., 2002). The professional learning model used in this study (i.e., IR) is also centered around the idea that educators must take a collaborative approach to learning to improve the quality of instruction and to bring about lasting school improvement (City et al., 2009; Marzano, 2011).

The Domain. In Wenger's theory, the domain refers to a shared purpose, or the reason underlying a group's learning. Essentially, it guides questions and helps group members organize their knowledge more succinctly (Wenger, 1998). In the IR protocol, the domain is reflected through the 'instructional core'—the interaction between the teacher, students, and content (City et al., 2009; Elmore, 2008). As Wenger et al. (2002) suggested, participants' connection to the domain is necessary for communities of practice to be successful and is where a collective sense of accountability resides.

A key finding from the analysis of field notes and transcribed interviews in this case study demonstrated that buy-in from teachers was strong as they engaged with the instructional core. Voluntary participation in the study, along with the teacher-led and collaborative nature of IR, was described by novice teachers as both exciting and refreshing. Furthermore, interest in the approach was evidenced through their next level of work, where they argued in favour of continuing the IR protocol (or a modified version of IR) as part of their professional learning, implementing an action cycle of observation, transfer to practice and reflection, plus continued

collaboration with colleagues. Their next steps were driven by a strong desire to improve student learning outcomes.

The community. In this practice, community is defined by a group of people who interact with each other as they learn about the domain. Group members must have a shared interest in the domain itself, yet bring their individual perspectives to the table as they work together to generate new understandings (Wenger, 1998). As Wenger et al. (2002) note, "[m]embers use each other as sounding boards, build on each other's ideas, and provide a filtering mechanism to deal with knowledge overload" (p. 34). Under this definition, a successful community can create an open and trusting environment (Wenger et al., 2002).

Again, the teachers in this study emphasized the importance of IR being voluntary and felt that it was a key factor in launching the model at School A. The structured approach to IR was also important to participants, in that the activity was supported by a facilitator, utilized protocols, and was undertaken in a non-judgmental environment. Follow-up interviews with participant teachers uncovered the perception that IR did, in fact, provide a safe space to talk about teaching and learning, created perceptions of confidence, and highlighted the value that participants placed on their strong and established interpersonal relationships. Because communities of practice must interact regularly to learn collaboratively, build relationships, and negotiate new meanings (Wenger, 1998), participants underscored the need for continuity.

The practice. In Wenger's theory, practice is defined by the specific knowledge a community develops (Wenger, 1998). The practice can take the form of concrete objects—including tools, resources, or documents—or through more abstract notions like behaviours, perspectives, and problem-solving strategies. Wenger et al. (2002) argue that effective practice is developed naturally over time, without being forced, and that "each community has a specific way of making its practice visible" (p. 39). Basically, the practice provides evidence that a community is working effectively.

In this case study, the practice included tangible elements—teacher observation forms, debrief documents, and the four-step IR protocol itself—while intangible components of the practice comprised teachers' experiences, behaviours, feelings, and attitudes about their professional learning. The data collected from this case study, particularly teachers' interview comments, suggested that IR created a culture of mutual respect, trust, and collaboration among participants which, in turn, strengthened their feelings of confidence about their practice. Moreover, their next level of work included steps to continue their work together—providing further evidence that the use of IR was a trigger for collaborative professional learning.

5.3 Challenges to Implementing IR as a Form of Collaborative Professional Learning

As noted earlier, the IR protocol was designed as a way for both teachers and administrators to observe and analyze teaching in their efforts to improve the quality of instruction for students (City et al., 2009; Elmore, 2008). That said, any form of professional learning that is geared toward large-scale instructional improvement requires an understanding of the broader implementation challenges that tend to arise in most school systems (Duke, 2019; Elmore, 2008; Mehta & Datnow, 2020)—as participants touched upon when considering potential drawbacks of the IR protocol.

While the concept of IR may seem straightforward at first glance, it often proves challenging for participants to execute. Both Elmore (2008) and City et al. (2009) urge administrators and teachers to develop a universal culture of instruction—expressed through a common set of understandings about practice and consistent language in describing what goes on in classrooms. To do this, they stress that *collaboration* is key and that we must create a strong, visible and transparent culture of instructional practice, one where individual classrooms and instruction are not siloed—and that we learn from each other (City et al., 2009; Elmore, 2008).

5.3.1 Finding the Time and Resources to Practice

IR require a great deal of practice, along with clear guidelines for observing host

teachers and for debriefing using classroom observation data (City et al., 2009; Roberts, 2012; Teitel, 2013). Yet, as several participants observed, regular and ongoing collaboration is difficult to design in the busy schedules of schools. Collaborative teaching groups require access to designated spaces that enable them to focus on their learning, free from interruption. The use of IR as a means of professional learning also requires supplies, substitute teaching coverage, and a host of other necessities. The challenges of time and frequency were also apparent when negotiating approval for the research, where a lack of substitute teacher coverage, in particular, caused multiple scheduling delays.

That said, there is no evidence suggesting that IR must be implemented exactly the same way in each school setting to prove effective (City et al., 2009; Roberts, 2012). Roberts (2012) followed a public school district in the United States through its adoption of the IR protocol and found that some teachers modified the IR protocol to address the issues of time and frequency. They did so by volunteering several periods of their preparation time each semester for classroom observation, meaning they could participate in IR without requiring substitute teacher coverage. While this modified plan required the participating teachers to meet as a group after school to debrief and discuss next steps, it also created opportunities for more teachers to engage in classroom observations (Roberts, 2012). Considering that time constraints were noted as one of the main roadblocks to successful schoolwide IR implementation in this study, participants suggested building time into regular faculty meetings for collaboration (e.g., drafting problems of practice), maximizing classroom observation within the school's current mentorship program, and increasing administrator visibility to build interpersonal relationships and provide ongoing feedback.

5.3.2 Culture of Teacher Isolation

Another challenge of IR is that participants—including observers, facilitators, and classroom hosts—must be comfortable with peer observation (Hanover Research, 2022). While many teachers can be uneasy with this practice, the network of educators in this case study

appreciated the benefits of observation, particularly since one goal of IR is to provide (and receive) usable feedback from others (City et al., 2009; Roberts, 2012) and speaks to the roles of vicarious experience and social persuasion in developing self-efficacy beliefs.

Furthermore, growth-oriented learning and critical reflection are all important when it comes to both organizational and personal improvement. Fullan et al. (2015) argue that implementing new measures to promote deeper learning for both teachers and students does not have to be a monumental task, nor does it have to be done alone. “Collaborative cultures where a growth-oriented assessment and feedback are a regular practice of teachers and leaders offer a more effective and sustainable solution to the improvement of the teaching profession” (Fullan et al., 2015, p. 10). They further suggest that creating high quality, sustainable professional learning communities—like the one explored in this study—is one such strategy. Yet almost five decades after Lortie (1975) described teacher isolation as one of the main impediments to improved instruction and student learning, in many schools both the physical and psychological isolation of teachers persist. One participant in this study made the point that while schools themselves operate as a whole, individual teachers tend to operate in isolation. She surmised that this is partly because of how physical classroom spaces and schedules continue to be structured, but is also the result of teachers’ feeling territorial over student reporting and perhaps intimidated by the scope of their roles.

5.4 Implications for Educational Practice

The results of this research point to IR as a professional learning approach that holds high promise for teachers and administrators in search of effective ways to create strong communities of practice and engender self-efficacy, especially among novice teachers. The study also underscores the importance of school culture and working environment when implementing IR and demonstrates how IR has the potential to provide context-specific experiences for participant teachers that positively affect their perceptions and emotions.

Participants highlighted several characteristics of IR that may promote successful professional learning. Consistent with research on other forms of professional learning, one key finding is that teachers' feelings of self-efficacy were fostered in spaces that promote communication and collaboration, particularly within small groups (Beauchamp et al., 2014; Klassen & Tze, 2014). Furthermore, collaborative professional learning begins with teachers' self-identified goals and needs. As teachers share their goals and brainstorm with colleagues how these goals might be addressed, they exhibit greater ownership of their teaching and learning. For example, when asked to share her thoughts on professional learning opportunities—and then on IR, specifically—Teacher 1 emphasized:

> It [instructional rounds] was, by far, a better professional development opportunity than the ones that I've been offered, for a multitude of reasons. One, I immediately had a stake in it … and my voice was valued. Two, it didn't feel out of reach. It felt very doable. … And a big part of that comes down to sitting collaboratively, with a small group of people, identifying something that *we* [emphasis added] want to work on and solving a problem together and that's why this was a perfect situation for me … .

Because school administrators play a pivotal role in supporting teachers' collaborative professional learning—in terms of enhancing social capital, establishing 'norms' of collaboration, and building community—it is crucial for them to set aside time for collaborative professional learning in the school's schedule (Garmston & Wellman, 2016) and participants advocated strongly for this when drafting their next steps, or next level of work. At the same time, teachers themselves must engage these learning opportunities. Based on the results of this case study, what might future professional learning look like? School administrators could begin with restructuring their timetables to allocate time for IR and/or other forms of collaborative professional learning (e.g., instructional coaching, peer observations), while continuing any existing mentorship programs. At the same time, administrators might consider providing:

- autonomy and choice to teachers with regard to professional learning opportunities, with the goal of improving self-efficacy and collective efficacy;

- explicit time and designated spaces for collaborative learning;
- opportunities for small group learning, as this helps draw people out and gives each group member a voice to share ideas;
- tailored professional learning for different teaching cohorts (e.g., novices may have different professional learning needs or goals in comparison to experienced teachers); and
- professional learning opportunities built around research-informed teaching practices.

By the same token, teacher education programs at the university level could also ensure that pre-service teachers are provided with ample opportunity to observe practising teachers in a variety of subject areas and grade levels to more effectively prepare pre-service teachers for independent classroom instruction (Beck & Kosnik, 2002; Kosnik & Beck, 2011). As the participants in this study concluded, there is value in observing multiple classrooms and receiving feedback from colleagues, along with identifying and then enacting essential elements of teaching practice.

Additionally, school policy itself can encourage genuine collaboration among teachers by establishing leadership development strategies and by allocating the resources needed for professional learning and leadership development opportunities (e.g., substitute teacher coverage, funding). In fact, a growing body of research from around the globe has renewed its focus on teacher professionalism as a key to school improvement initiatives and suggests that when policy makers and administrators provide effective learning opportunities for teachers, it improves the educational outcomes for students (Schleicher, 2018). While professionalizing teaching remains a work in progress, IR provide teachers with autonomy over their learning, opportunities for skill development, observation and feedback, and contribute to a culture of student-centered learning. Moreover, IR are rooted in the same principles of adult learning that have successfully professionalized the medical field through the practice of interdisciplinary

bedside (grand) rounds (Ratelle et al., 2022).

Finally, positive outcomes for students rest upon the assurance of a well-supported teaching force, one that remains motivated and invested in teaching and learning. While teacher self-efficacy typically evolves in pre-service programs (through theoretical understandings and practicum experiences), ongoing research demonstrates high rates of burnout and attrition among Canadian teachers, particularly within the first three to five years of practice (Gunn & McRae, 2021; Miller et al., 2017). Often, those leaving the profession cite feelings of low self-efficacy as they confront a growing list of demands in the field (Gunn & McRae, 2021; Agyapong et al., 2024). Therefore, the current study provides further evidence that increasing novice teacher self-efficacy, through the implementation of professional learning initiatives like IR, can positively impact teacher retention.

5.5 Limitations of the Study

Since this research study utilized a qualitative approach (evaluative case study), it is subject to several limitations inherent to this design. When interpreting the results, the following were taken into consideration.

5.5.1 Transferability

Although the findings of this case study suggest that novice teacher self-efficacy was improved because of their participation in IR, it is impossible to clearly extrapolate these findings to broader contexts or to draw wider conclusions. Thus, the current research may be valid only in the context of School A. Since qualitative research is specific to a single setting (in this case, a small, independent school in Vancouver), it is not generalizable to wider populations and any recommendations from the findings should be considered in this context. The participants in his study were a small and homogeneous group (i.e., novice, elementary years) and as such, the findings cannot be transferable to other groups of teachers (Creswell & Guetterman, 2019; Lincoln & Guba, 1985). That said, I was able to reach a saturation of ideas through the collection and analysis of multiple forms of data, along with individual interviews that allowed

participants to transparently share their thoughts outside of the group setting and hope that this case study will be instructive for a broader audience of teacher educators and researchers.

5.5.2 Reflexivity and Validity

Reflexive practice can prove challenging to many researchers. Therefore, another limitation to qualitative studies is that most often, findings and conclusions depend on the researcher's individual judgments and are heavily dependent on his or her interpretations (Creswell & Guetterman, 2019; Mitchell & Clark, 2018). While I sought to interpret data as objectively as possible, my analyses and interpretations were influenced by previous participation in IR, along with recent graduate coursework in both educational leadership and school improvement initiatives. Furthermore, there is always a risk when the researcher analyzes qualitative data using an established theoretical framework (in this case social cognitive theory) this may limit what is uncovered from the data. Furthermore, my position as an insider in School A, having established working relationships with study participants, may have influenced the interpretation of the data (Berger, 2015; Gadamer, 1975). As Berger (2015) notes, reflexivity involves a "turning of the researcher lens back onto oneself to recognize and take responsibility for one's own situatedness within the research and the effect that it may have on the setting and people being studied, questions being asked, data being collected and its interpretation" (p. 220). As systematically as I tried, the study reflects my inferences of what the case study data might have meant.

5.5.3 Reliability

As noted in Chapter 3, qualitative research studies are dependent on researcher knowledge, insight, and interpretation, and therefore, this method also presents issues relating to reliability—defined as the ability to reproduce a study with consistent results. It is possible that another researcher (or group of researchers) might not replicate the qualitative details of this case study on IR and achieve identical results, even when using the same sample population. Other researchers might reach different interpretations or conclusions, structure

interview questions differently, or alter the research design during the study (based on their perceptions of participants' needs). Such variations can have an impact on a study's results or render the results inconsistent, even when subsequent studies attempt to engage a similar design (Creswell & Guetterman, 2019; Lincoln & Guba, 1985).

5.6 Suggestions for Future Research

According to Tschannen-Moran and Hoy (2007), teacher self-efficacy is an important predictor of teacher well-being, effective instructional practice, and student engagement. Considering its overall importance in academic settings, future research on IR and teacher self-efficacy seems warranted.

Literature reviews have identified a lack of longitudinal studies when examining the relationship between professional learning and teacher self-efficacy. As previously noted, Beauchamp et al. (2014) connected the role of professional development to teachers' beliefs and practices and consequently, to student engagement and learning. Their longitudinal study, along with several others, reported a positive correlation between teachers' participation in either instructional coaching or mentoring, and self-efficacy (Beauchamp et al., 2014; Bruce et al., 2010; Yoo, 2016). However, to date, there has been very limited research on the impact of IR, specifically on teacher self-efficacy and subsequently, on improving student learning outcomes. Although this case study was limited in scope, focusing on exploring IR as a means of enhancing novice teacher self-efficacy over a relatively short period of time, it generated useful jumping off points for further research. Additional research on the relationship of IR to professional learning, and the changing roles that each of Bandura's four sources play over time—using a longitudinal methodology (i.e., at least one year)—would prove helpful in mapping the growth of novice teacher efficacy over time.

Earlier in this chapter, I highlighted that the IR protocol could be adapted or modified to address some of the implementation challenges, including finding time in the instructional day—yet very few studies have explored the impact(s) of modified IR or of IR, in general. While there

is some research that attempts to uncover how modified IR impacts teachers' social and emotional wellbeing (Castelluber, 2023), there is a need for further investigation on this issue—along with additional studies on the impact of modified IR on preservice and novice teacher self-efficacy.

Considering that the participants in the case study were a relatively homogeneous group, further research might also be directed toward including a more diverse sample of teachers working in and across different contexts and settings, specifically exploring the extent to which enhanced self-efficacy and professional learning are expressed in instructional practices. This limitation also raises questions regarding aspects of teacher intersectionality that were not addressed in this study—including how teachers and administrators might develop a deeper understanding of complex identities (e.g., gender, cultural or language backgrounds, socioeconomic status) and the influence these have on teaching practice and feelings of attachment or belonging within the culture of a school. It is plausible that teachers from traditionally marginalized backgrounds—Indigenous or immigrant educators, for example—may experience IR differently from those who participated in this research.

Finally, making professional learning more collaborative holds promise to improve novice teacher self-efficacy, reduce faculty turnover, and support student learning outcomes (Beauchamp et al., 2014). Building on the work of this study, other areas of research that could be considered include studies that explore:

- how specific collaborative practices (e.g. IR, instructional coaching) drive changes in teaching skills and/or classroom management practices;
- whether and the extent to which fostering teacher collaboration through IR influences overall school climate and students' social and emotional competencies;
- whether and the extent to which IR supports teachers as they work with neurodiverse students or students who are struggling academically or socially;

- pragmatic ways that teachers and administrators can create or allocate physical and/or scheduling spaces for teachers to work together productively using the IR protocol, and;
- resource impact of implementing IR as a form of collaborative professional learning (e.g., financial costs, substitute teacher coverage, the potential savings of reduced faculty turnover, etc.).

5.7 Conclusions

In a high stake, high-cost enterprise like education, it is understandable that collaborative efforts are often directed toward making measurable improvements in student outcomes and, by association, in the areas of curriculum, assessment, and pedagogy. That said, school administrators must also provide teachers with the time and flexibility to engage in critical lines of inquiry that promote professional collaboration, a sense of purpose, and meaningful approaches to teaching and learning (Anderson et al., 2012; Mehta, 2015). As Fullan et al. (2015) assert, “constantly improving and refining instructional practice so that students can engage in deep learning tasks is perhaps the single most important responsibility of the teaching profession” (p. 4) and crucial to continuous school improvement.

Based on the representations of the participants involved in this case study, IR appear to provide an effective vehicle for professional learning and, in particular, for building novice educators’ confidence and self-efficacy. The IR model offers more flexibility and choice to teachers than traditional professional development activities (e.g., workshops, lectures). At each stage of the IR protocol, teachers remained in charge of their own learning—from defining their problem of practice and accompanying theory of action, to debriefing their observations of practice and drafting the next level of work. Participants also appeared to be more focused, as a team, on engaging with others in a small group setting, making meaningful changes, and celebrating their overall successes. Moreover, the support of their colleagues empowered them to share ideas and tackle future challenges; this not only enhanced feelings of self-confidence

and excitement for learning, but also solidified the teachers' beliefs in their collective abilities.

The findings of this case study support a growing body of literature on the positive impacts of collaborative professional learning on teacher self-efficacy, student engagement, and learning outcomes (Beauchamp et al., 2014; Kim & Seo, 2018; Klassen & Tze, 2014). They also align with Bandura's self-efficacy theory of motivation, the role of self-efficacy in teaching practice, the utilization of components of high-quality professional learning, and the importance of double-loop learning in school improvement.

In their book, entitled *Visible Learning Insights*, Hattie and Zierer (2019) suggest that perhaps the most significant impact on student learning occurs when teachers themselves become learners. High quality professional learning, including the use of IR, holds the potential to improve both teaching instruction and overall perceptions of self-efficacy. It is, therefore, vital that schools provide opportunities for novice teachers to engage in the learning process themselves, to work cooperatively with colleagues, and to take active roles in constructing their own knowledge. While all of this requires time, resources, and emotional investment, IR provide a platform for authentic collaboration and may be just the innovation schools need to finally establish teaching as a true profession and to retain those enthusiastic early career teachers who so often choose to leave the field.

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Appendix A: Letter of Deputy Head of School Requesting

Permission to Recruit Study Participants

Dear _____,

As you know, I am a Master's Degree student working under the supervision of Dr. Gerald Galway in the Faculty of Education at Memorial University of Newfoundland. As part of this graduate degree program, I plan to conduct a qualitative research study on the impact of Instructional (Educational) Rounds on novice and pre-service teacher self-efficacy. Given your current role as Deputy Head of School, I request your permission to distribute recruitment letters to several potential study participants.

For the purpose of this study, 'novice' is defined as having less than five years of teaching experience in total—or less than five years of experience in teaching a particular curriculum (e.g., British Columbia Kindergarten curriculum) or using a particular approach to teaching and learning (e.g., Reggio Emilia Approach).

Research participants will be asked to participate on a voluntary basis and their individual participation will consist of the following:

- engagement in several rounds of classroom observation, followed by self-reflection and small group debrief
- a one-on-one semi-structured interview that will take approximately 30-35 minutes of their time. During the interview, participants will be asked questions such as: *As a result of today's classroom observation(s) and small group debrief, what instructional or classroom management strategies are you more willing to try in your own practice? To what were you engaged in the collaborative process of observation, reflection, and inquiry?* With their permission, I would like to audio-record the interview to ensure accurate transcription and analysis.

This study has been reviewed by a Research Ethics Board at Memorial University of Newfoundland and as a result, received ethics clearance.

Please read the attached information letter (Study Participation and Interview Consent) for more details regarding what participation will involve. If you would like additional information regarding this study, please do not hesitate to contact me at rmeneghetti@mun.ca. You may also contact my supervisor: ggalway@mun.ca.

The proposal for this research has been reviewed by the Interdisciplinary Committee on Ethics in Human Research and found to be in compliance with Memorial University's ethics policy. If you have ethical concerns about the research, such as your rights as a participant, you may contact the Chairperson of the ICEHR at icehr.chair@mun.ca or by telephone at 709-864-2861.

Sincerely,

Rachelle Meneghetti

Appendix B: Recruitment Letter to Potential Participants

Dear Teachers,

My name is Rachelle Meneghetti. I am a Master's Degree student working under the supervision of Dr. Gerald Galway in the Faculty of Education at Memorial University. As part of my graduate degree program, I am conducting a qualitative research study on the impact of Instructional (Educational) Rounds on novice and pre-service teacher self-efficacy. For the purpose of this study, 'novice' is defined as having less than five years of total teaching experience in total or less than five years experience in teaching a particular curriculum (e.g., British Columbia Kindergarten curriculum).

If you decide to volunteer for this study, you can expect your group and individual participation to involve the following actions, to be undertaken over a period of 3-4 months:

1. engagement in the four-step process of Instructional Rounds (two times):
    a. meeting as group to develop a *'problem of practice'*, an area or topic that the group seeks to understand more deeply (30-60 minutes);
    b. a series of consecutive *classroom observations* (typically 4 classroom visits of approximately 20-25 minutes each) with observation focus sheets provided for notetaking in each session;
    c. Instructional Rounds *debrief*—consisting of self-reflection (10 minutes), small group dialogue (20 minutes), and small group reflection (10 minutes)
    d. *next level of work*—brainstorming next steps and transfer of learning to practice (20 minutes)

2. a one-on-one semi-structured *interview* that will take approximately 30-35 minutes of your time. During the interview you will be asked questions that relate to your experiences participating in the Instructional Rounds process, including questions about (1) the value of classroom observations and small group debriefs, (2) what you learned about instructional strategies and classroom engagement and how you might apply these learnings in your own practice, and (3) the extent of your engagement in the collaborative process of observation, reflection, and inquiry.

    Interviews will take place in the researcher's classroom (in the absence of students and faculty/staff) to ensure privacy and confidentiality. With your permission, I will audio record the interview to ensure accurate transcription and analysis.

    Group work, including debriefs and discussions of next steps, will take place in the researcher's classroom (or an alternate vacant classroom) in the absence of students or other faculty members. Group discussions and debriefs will not be recorded. Rather, I will collect data through field notes (e.g., documentation of events, conversations, actions and reflections from the Instructional Rounds

sessions. Artifacts (e.g., sticky notes from the Instructional Rounds debriefs, observation focus sheets completed by participants) will also be gathered.

The proposal for this research has been reviewed by the Interdisciplinary Committee on Ethics in Human Research and found to be in compliance with Memorial University's ethics policy. If you have ethical concerns about the research, such as your rights as a participant, you may contact the Chairperson of the ICEHR at icehr.chair@mun.ca or by telephone at 709-864-2861.

Please read the attached information letter (Study Participation and Interview Consent) for more details regarding what participation will involve. If you would like to participate, or you require additional information to assist you in reaching a decision about participation, please do not hesitate to contact me at rmeneghetti@mun.ca. You may also contact my supervisor: ggalway@mun.ca.

Please note that participation in this study is completely voluntary and is ***not*** a requirement of the host school/employer. Whether you choose to participate in this study or not, it will not impact your future relationship with the researcher and/or host school.

Sincerely,

Rachelle Meneghetti

Appendix C: Recruitment Letter to Potential Host Classroom Teachers

Dear Teachers,

My name is Rachelle Meneghetti. I am a Master's Degree student working under the supervision of Dr. Gerald Galway in the Faculty of Education at Memorial University. As part of my program, I am conducting a qualitative research study on the impact of Instructional (Educational) Rounds on novice and pre-service teacher self-efficacy. Given your current role as either a homeroom or specialist teacher, I would like to invite you to participate in this study as a host teacher.

If you decide to volunteer to be a host teacher, your participation will involve opening up your classroom for 1 or 2 classroom observation sessions (20-25 minutes) each, to be conducted over the next 3-4 months by a small group of novice teachers.

The goal of the classroom observations is not to evaluate teaching, but to better understand how teaching and learning takes place in classroom environments. Your role will involve allowing participants to observe your class by serving as "host" teacher. Teacher observers will not interact with students or the host teacher; they will observe and take notes, gathering descriptive data on such things as instruction (and instructional strategies) classroom engagement, transitional techniques and teacher modeling. While conducting their observations, the observation group will complete a focus sheet, where they are asked to:

- describe what they observed in each classroom.
- analyze patterns that many have emerged.
- predict the kind of learning they would expect from their observations.
- be prepared to discuss their observations in a subsequent group session.

Following the classroom observations, observers will be prompted to reflect on their visits by considering and responding to questions such as: *As a result of my experience and observations today, which aspects of my own teaching do I feel were validated? What did I learn that will help me improve my own teaching? What instructional, classroom engagement, or other strategies can I now confidently implement in my own classroom?*

No additional preparation is required of you to host classroom visits and you should conduct lessons as you normally would. During classroom sessions, observing teachers will stay in the periphery and will not interrupt instruction or distract students.

The proposal for this research has been reviewed by the Interdisciplinary Committee on Ethics in Human Research and found to be in compliance with Memorial University's ethics policy. If you have ethical concerns about the research, such as your rights as a participant, you may contact the Chairperson of the ICEHR at icehr.chair@mun.ca or by telephone at 709-864-2861.

Please read the attached information letter (Study Participation and Interview Consent) for more details regarding what participation will involve—for both yourself and for other study participants (i.e., novice teacher group). If you would like to participate, or you require additional information to assist you in reaching a decision about participation, please do not hesitate to contact me at rmeneghetti@mun.ca. You may also contact my supervisor: ggalway@mun.ca.

Please note that participation in this study is completely voluntary and is ***not*** a requirement of the host school/employer. Whether you choose to participate in this study or not, it will not impact your future relationship with the researcher and/or host school.

Sincerely,

Rachelle Meneghetti

Appendix D: Instructional Rounds Classroom Observation Focus Sheet

Date: _____ Grade Level: _____ Location: _____

Start Time: _____ End Time: _____ Observer: _____

Y - Yes (observed or present) N - No (not observed or no occasion to be observed)

Classroom Management / Instruction		**Descriptive Evidence**
When waiting for assistance from the teacher, students are occupied with [subject] related activities provided by the teacher.	**Y N**	
The teacher uses a variety of instructional modes.	**Y N**	
Transitions between whole group and small group are brief and orderly.	**Y N**	
Classroom teacher has a [subject] block schedule posted in the room.	**Y N**	
Students are engaged and on task.	**Y N**	
Student-Directed Groups / Independent Work		**Descriptive Evidence**

Teacher interacts with students in instructional capacity (e.g., explaining, checking, giving feedback).	**Y N**	
Teacher interacts with students to manage (e.g., reinforcing rules, procedures)	**Y N**	
Teacher encourages students to help each other with their work.	**Y N**	
Teacher Directed Whole Class / Teacher Directed Small Group		**Descriptive Evidence**
Teacher clearly states the lesson topic, theme, and objectives. (Objective is linked to Big Ideas, Learning Standards, Core Competencies)	**Y N**	
Teacher uses modeling, demonstration, and graphics.	**Y N**	
Teacher explains concepts/lesson directly and thoroughly.	**Y N**	
Teacher provides prompts or cues to students.	**Y N**	
Teacher reviews content/lesson with questioning.	**Y N**	
Teacher-Student Interactions		**Descriptive Evidence**

Teacher reteaches following questioning.	**Y N**	
Teacher uses open-ended questions and encourages collaboration.	**Y N**	
Teacher encourages peer interactions.	**Y N**	
Teacher encourages students to paraphrase, summarize, make connections to self or the world.	**Y N**	
Teacher encourages students to check their own understanding(s).	**Y N**	
Teacher encourages students to speak in complete sentences.	**Y N**	

Observational Statistics (mark all that apply)		**Descriptive Evidence**
Observer present when lesson began	**Y N**	

Observer present when lesson ended	**Y N**	
Observer present for whole lesson	**Y N**	
Number of students		
Educational Assistant(s) present	**Y N**	
If EA present, please make note of activity.		

Adapted from Neuhaus Education Center (n.d.)

Appendix E: Instructional Rounds Debrief Protocol

Independent Observation Reflection (10 minutes)

- Review and clarify observation notes. [Describe what you saw using specific, non-judgmental language and pay attention to the 'instructional core' (teacher, students, content) and evidence related to the problem of practice].
- Highlight the observations that seem most relevant to the instructional goal.
- Select 8-10 pieces of data / write these on individual sticky notes.

Small Group Dialogue (20 minutes)

- Share out points from each classroom observation (sticky notes).
- Group the evidence in a logical manner / develop categories or groupings.
- Discuss and identify patterns across classrooms.
- Discuss and identify anomalies across classrooms.

Small Group Reflection (10 minutes)

- Reflect on specific focus questions. In addition, consider the following:
    - among the students, who seemed engaged, bored, lost, discouraged, disinterested…
    - specifically, what commonalities did you notice that promote student engagement?

Next Level of Work (10 minutes)

- Based on classroom observations, what structures or supports could encourage growth in student engagement?

Transfer to Practice (10 minutes)

- In what ways do you (the individual member of the team) intend to refine your own practice as a result of this experience?

_____

_____

- As a result of what you experienced today (during classroom observations and debrief),

  which aspects of your own teaching do you feel were validated?

_____

_____

- As a result of today's classroom observations and debrief, what instructional or classroom management strategies are you more willing to try in your own practice?

_____

_____

- What is one practice that you want to focus on to support student engagement and learning outcomes?

_____

_____

Appendix F: Study Participation and Interview Consent

Informed Consent Form

Title: The Impact of Instructional Rounds on Novice Teacher Self-Efficacy

Researcher: Rachelle Meneghetti, Faculty of Education Graduate Studies (Educational Leadership), Memorial University of Newfoundland, rmeneghetti@mun.ca

Supervisor: Dr. Gerald Galway, Faculty of Education, Graduate Studies, ggalway@mun.ca

You are invited to take part in a research project entitled "The Impact of Instructional Rounds on Novice Teacher Self-Efficacy."

This form is part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. It also describes your right to withdraw from the study. In order to decide whether you wish to participate in this research study, you should understand enough about its risks and benefits to be able to make an informed decision. This is the informed consent process. Take time to read this carefully and to understand the information given to you. Please contact the researcher, Rachelle Meneghetti at rmeneghetti@mun.ca if you have any questions about the study or would like more information before you consent.

It is entirely up to you to decide whether to take part in this research. If you choose not to take part in this research or if you decide to withdraw from the research once it has started, there will be no negative consequences for you, now or in the future.

Introduction:

My name is Rachelle Meneghetti. I am a Master's Degree student working under the supervision of Dr. Gerald Galway in the Faculty of Education at Memorial University of Newfoundland. As part of this graduate degree program, I am conducting a qualitative research study on the impact of Instructional (Educational) Rounds on novice and pre-service teacher self-efficacy. Given your current role as either a homeroom or specialist teacher, I feel that you are well suited to provide insight into this topic and I would like to invite you to participate in this study. For the purpose of this study, 'novice' is defined as having less than five years of teaching experience in total—or less than five years of experience in teaching a particular curriculum (e.g., British Columbia Kindergarten curriculum) or using a particular approach to teaching and learning (e.g., Reggio Emilia Approach).

Purpose of Study:

The purpose of this study is to explore the impact of IR, as a professional development tool, on new teacher self-efficacy and student learning outcomes. Training in IR or previous experience

as a participant in IR is not a requirement for eligibility to participate in this study. The researcher will lead a core group of participants through the various steps of the IR and facilitate classroom observations. The core group will consist of both experienced teachers (classroom hosts) and those new to the teaching profession, acting as observers; teachers will be recruited to participate in the study on a voluntary basis (Hatten, 2019; City et al., 2009).

What You Will Do in this Study:

New Teachers (Classroom Observers)

If you consent to be a part of this study, you will engage in two to three sessions of IR (involving classroom observations, small group debrief, and individual reflection of practice)—followed by a one-on-one interview to discuss your experience with this form of professional development and how you feel it impacted your growth as a teacher.

More specifically, your group and individual participation will consist of the following steps (conducted over a period of 3-4 months):

1. engagement in the four-step process of IR (2-3 times):
    a. meeting as group to develop a 'problem of practice', an area or topic that the group seeks to understand more deeply (30-60 minutes)
    b. a series of consecutive classroom observations (typically 4 classroom visits of approximately 20 minutes each) with observation focus sheets provided for notetaking in each
    c. Instructional Rounds debrief—consisting of self-reflection (10 minutes), small group dialogue (20 minutes), and small group reflection (10 minutes)
    d. next level of work—brainstorming next steps and transfer of learning to practice (20 minutes)

    Focus group work, including debriefs and discussions of next steps, will take place in the researcher's classroom (or an alternate classroom) in the absence of students or other faculty members/staff.

2. a one-on-one semi-structured interview that will take approximately 30-35 minutes of your time.

    During the interview you will be asked questions such as: As a result of your classroom observations and small group debriefs, what instructional or classroom management strategies are you more willing to try in your own practice? To what extent were you engaged in the collaborative process of observation, reflection, and inquiry?

    With your permission, I will audio record the interview to ensure accurate transcription and analysis. Interviews will take place in the researcher's classroom (in the absence of students and faculty/staff) to ensure privacy and confidentiality.

Host Teachers

If you consent to be a part of this study, your participation will consist of the following:

- opening up your classroom for 1-2 classroom observations (20-25 minutes each) by a group of novice teachers. These observations will take place over the next 3-4 months.

During visits to your classroom, observing teachers will be asked to avoid disrupting instruction or distracting students. Therefore, no additional preparation is required of you to host classroom visits and you are asked to conduct lessons as you normally would.

Length of Time:

Each session of Instructional Rounds requires that observing teachers visit a number of classrooms (typically four), observing for approximately 20-25 minutes in each. A subsequent group debrief, plus discussion of the Next Level of Work/Transfer to Practice, will require approximately 60-90 minutes of participants' time. Following participation in Instructional Rounds, new teachers will be asked to engage in a one-on-one interview—lasting 30-35 minutes. The proposed timeline for this study is 3-4 months.

Withdrawal from the Study:

Taking part in this research study is completely voluntary and you are under no obligation to participate. If you decide to take part, please note that you are free to withdraw your participation at any time during the data collection and without consequence. Once the study has begun, data collected up to the point of your withdrawal will not be used in the study. If you withdraw your participation during or after completion of the Instructional Rounds four step protocol as outlined in the previous section, your data (e.g., observation sheets) will be destroyed/deleted. Likewise, if you withdraw during or after the individual follow up interview, your interview data will be removed from the study and destroyed/deleted. Please note that data cannot be withdrawn after data analysis has commenced; this will occur two weeks after you are provided with a transcript of the interview for review. If you would like to withdraw your participation from the study within the timeline stipulated, please contact the primary researcher at rmeneghetti@mun.ca and data from your interview will be removed and destroyed.

Possible Benefits:

There is no guarantee that you will benefit directly from participating in this study. However, the IR process and interview will provide you with the opportunity to voice your opinion(s) on your experiences and hopefully, you will be able to use the information and strategies you gain from participation to support your own teaching practice. I intend to share the results of my study with the school's administrators—along with my university program supervisor(s)—in an effort to improve and complement current structures of professional development within schools and teacher education programs. Additionally, my supervisor and I plan to disseminate the results of this study through publication in an educational journal and through conference presentations.

Possible Risks:

I do not anticipate any risks to you as you participate in this study—other than those you would encounter during your typical school day in the classroom.

Confidentiality:

The ethical duty of confidentiality includes safeguarding participant identities, personal information, and data from unauthorized access/use/disclosure.

Your interview answers and comments will be kept confidential and the records of this study will be kept private. When gathering documents and reporting research findings, I will not include any information that makes it possible to identify you. For example, participants and the school will be referred to by pseudonyms (e.g., Teacher 1, School A); any quotes will be anonymized and will not be attributed to specific individuals.

Please note that the host school has indicated that it will require access to data and results prior to the study's publication as part of its published guidelines on external research. If requested, access to anonymized data will be provided to the administration (i.e., the Head of School and Deputy Head of School) for a limited time and with no identifying information. Anonymized data and study results will also be shared with the researcher's supervising professor at Memorial University of Newfoundland. Consent forms will be stored separately from additional materials used (e.g., participants' observation forms, debriefing notes), so that it will not be possible for anyone—other than the primary researcher—to associate a particular name with any given set of responses. Please do not put your name or other identifying information on the materials used during this study.

Although the researcher will safeguard the confidentiality of the discussion to the best of her ability, the nature of focus groups (i.e., small group debrief) prevents the researcher from guaranteeing that other members of the group will do so. Please respect the confidentiality of the other members of the group by not repeating what is said in the focus group to others, and be aware that other members of the group may not respect your confidentiality.

Because the participants for this research project have been selected from a small group of people, all of whom are known to each other, it is possible that you may be identifiable to informed readers in the published results—on the basis of what you have said (particularly in direct quotes) and due to the school setting.

Anonymity:

Data obtained from your participation in this study will be reported without identifying characteristics (e.g., name, description of physical appearance) and every reasonable effort will be made to ensure your anonymity. You will not be identified in publications without your explicit permission.

Although I will report direct quotations from the one-on-one interview, you will be given a pseudonym, and all identifying information (e.g., the school name, your position) will be removed from my final report.

Recording of Data:

I will record the one-on-one participant interview using the Voice Memo app and will delete the recording after it has been transcribed and reviewed by you (the participant) for accuracy—which I anticipate will be within one month of the interview date. Please note that during the interview itself, you may skip any question(s) you do not wish to answer.

While individual interviews will be audio recorded, focus group discussions and debriefs will not be. Rather, the primary researcher will collect data through field notes—including written documentation of events and conversations, and the researcher's reflections on these. Artifacts (e.g., observation focus sheets completed by participants, sticky notes used during Instructional Rounds debriefs, photographs of sticky notes/chart paper) will also be collected.

Use, Access, Ownership, and Storage of Data:

Hard copies of research records and other documents (e.g., teacher reflections, debrief notes, interview transcripts) will be kept in a locked file and only the researcher will have access to these. Consent forms (hard copy) will be stored separately from data collected. Electronic data will be kept on the local hard drive of the researcher's computer—which is password protected. Because I will record the interview using the Voice Memo app, I will delete the recording after it has been transcribed and reviewed by you (participant) for accuracy.

Data will be kept for a minimum of five years, as required by Memorial University's policy on Integrity in Scholarly Research. Archived data will be anonymized. After the five year period, hard copies of data will be shredded and electronic data deleted from the researcher's hard drive.

Reporting of Results:

Upon completion, my thesis will be available at Memorial University's Queen Elizabeth II library, and can be accessed online at: http://collections.mun.ca/cdm/search/collection/theses.

As noted, direct quotations may be reported from the one-on-one interview. In this case, you will be given a pseudonym, and all identifying information (e.g., the school name, your position) will be removed from my final report.

Data from this research project will be published in the researcher's final thesis, the data will be reported in aggregate form so that it will not be possible to identify individuals.

Sharing of Results with Participants:

Information and/or feedback on the study will be available to participants after the project is complete—through the sharing of the final report.

Questions:

You are welcome to ask questions before, during, or after your participation in this research. If you would like more information about this study, please contact: Rachelle Meneghetti rmeneghetti@mun.ca or Dr. Gerald Galway ggalway@mun.ca

The proposal for this research has been reviewed by the Interdisciplinary Committee on Ethics in Human Research and found to be in compliance with Memorial University's ethics policy. If you have ethical concerns about the research, such as the way you have been treated or your rights as a participant, you may contact the Chairperson of the ICEHR at icehr@mun.ca or by telephone at 709-864-2861.

Conflicts of Interest:

The researcher does not have any known conflicts of interest with regard to this study.

Statement of Participant Consent:

Your signature on this form means that:

- You have read the information about the research.
- You have been able to ask questions about this study.
- You are satisfied with the answers to all your questions.
- You understand what the study is about and what you will be doing.
- You understand that you are free to withdraw participation in the study without having to give a reason, and that doing so will not affect you now or in the future.

Regarding withdrawal during data collection:

You understand that if you choose to end your participation during data collection (including during the Instructional Rounds four-step protocol or during the follow up individual interview), any data collected from you up to that point will not be used/retained by the researcher, unless you indicate otherwise.

Regarding withdrawal after data collection:

You understand that your data cannot be withdrawn after data analysis has begun.

I agree to be audio recorded. ☐ Yes ☐ No

I agree to the use of direct quotations. ☐ Yes ☐ No

I allow my name to be identified in any publications resulting from this study. ☐ Yes ☐ No

By signing this form, you do not give up your legal rights and do not release the researchers from their professional responsibilities.

Your Signature Confirms:

☐ I have read what this study is about and understood the risks and benefits.

☐ I have had adequate time to think about this and had the opportunity to ask questions and my questions have been answered.

☐ I agree to participate in the research project understanding the risks and contributions of my participation, that my participation is voluntary, and that I may end my participation.

☐ A copy of this Informed Consent Form has been given to me for my records.

_____ _____

Signature of Participant Date

Researcher's Signature:

☐ I have explained this study to the best of my ability. I invited questions and gave answers. I believe that the participant fully understands what is involved in being in the study, any potential risks of the study and that he or she has freely chosen to be in the study.

_____ _____

Signature of Principal Investigator Date

Appendix G: Interview Protocol

The Impact of IR on Pre-Service/Novice Teacher Self-Efficacy:

A Qualitative Case Study

Date: _____ Time: _____ Location: _____

Teacher Participant:

☐ Early Years (Pre-K/K) ☐ Elementary (Gr. 1-7) ☐ Specialist Teacher

Introduction Script: *(to be read by researcher)*

"Thank you for volunteering to tell me about your personal experiences with Instructional Rounds. The purpose of this research study is to learn how IR impacts teacher learning. I am interviewing teachers from the school's Early Years and Elementary campuses, including specialist teachers—as well as looking at documents such as Instructional Rounds debriefs and individual teacher reflections. The transcription of this interview will be shared with you to ensure that I have captured your comments accurately. While transcripts will be viewed by myself and my supervising professor (and may be viewed by the host school's administrators), the data collected will remain confidential and every reasonable effort will be taken to ensure your anonymity. I will not use your real name or the name of the school in any documents (e.g., transcription) or in the final written report. Instead, I will use pseudonyms such as 'Teacher 1' and 'School A.' What questions might you have about confidentiality?

This interview should take approximately 30-35 minutes after we begin. I have prepared questions ahead of time, but I want the interview to sound and feel like a conversation. I may add some follow up questions, depending on what you would like to talk about or to clarify information. Please note that during the course of the interview, you may skip any question(s) that you do not wish to answer. I will audio record our conversation using Voice Memo and take some brief notes while we talk. This is to make sure that I accurately capture what you say. After the interview, I will transcribe the interview into text (verbatim) and share the final transcript with you to confirm that I have captured your comments accurately. You signed a consent form for me to record our conversation. Is this still okay with you? Thank you. Let's begin."

Turn on the audio recording device and test it.

Interview Questions:

1. Please describe your participation in Instructional Rounds at your school. (Probe: Tell me more. How often, with whom…which classrooms/grade levels have you observed?)

2. In what ways has participating in Instructional Rounds impacted your collaboration or relationships with colleagues? (Probe: Tell me more/what more can you tell me?)

3. How has using Instructional Rounds as a professional development tool impacted your school overall? (Probe: How does this compare to other professional development you have received?)

4. What aspects of Instructional Rounds do you feel had the greatest impact on your teaching practice? (e.g., observation, reflection, group debrief) To what extent were you engaged in the collaborative process of observation, reflection, and inquiry?

5. What do you think are the benefits of Instructional Rounds? What are the challenges, or obstacles?

6. After participating in Instructional Rounds, how prepared do you feel to influence student learning—in terms of their educational experiences and learning outcomes?

7. What instructional strategies/classroom management techniques did you observe that you will implement in your own teaching? How did observing other teachers influence your confidence in using these strategies?

8. What else would you like to share with me regarding your experience with Instructional Rounds?

Appendix H: Document Review Protocol

Date: _____ Time: _____ Location: _____

Grade Level:

☐ Early Years (Pre-K/K) ☐ Elementary (Gr. 1-7) ☐ Specialist

Document Format:

☐ IR Debrief + Sticky Notes ☐ Individual Teacher Reflection

☐ Interview Transcript ☐ Field Notes (Observations)

Document Review / Coding:

When reviewing each document collected, the following categories will be used as a starting point and search for emerging patterns. Categories/themes will be noted in the margins of the document—and additional categories may be created during data analysis.

The information in this document relates to:

☐ relationships with colleagues

☐ collaboration

☐ language referring to the Instructional Core (i.e., teacher, student, content)

☐ a change in instructional practice

☐ a change in teacher self-efficacy

☐ student engagement

☐ problem of practice

Additional Notes:

Adapted from Beauchamp et al. (2014); City et al. (2009); Creswell & Guetterman (2019); Elmore (2008).

Appendix I: ICEHR Approval Letter

MEMORIAL UNIVERSITY

Interdisciplinary Committee on Ethics in Human Research (ICEHR)

St. John's, NL Canada A1C 5S7
Tel: 709 864-2561 icehr@mun.ca
www.mun.ca/research/ethics/humans/icehr

ICEHR Number:	**20241054-ED**
Approval Period:	January 23, 2024 – January 31, 2025
Funding Source:	
Responsible Faculty:	Dr. Gerald Galway Faculty of Education
Title of Project:	*The Use of Instructional Rounds in Promoting New Teacher Self-Efficacy*

January 23, 2024

Ms. Rachelle Meneghetti
Faculty of Education
Memorial University

Dear Ms. Meneghetti:

Thank you for your correspondence addressing the issues raised by the Interdisciplinary Committee on Ethics in Human Research (ICEHR) for the above-named research project. ICEHR has re-examined the proposal with the clarifications and revisions submitted, and is satisfied that the concerns raised by the Committee have been adequately addressed. In accordance with the *Tri-Council Policy Statement on Ethical Conduct for Research Involving Humans (TCPS2)*, the project has been granted *full ethics clearance* for **one year**. ICEHR approval applies to the ethical acceptability of the research, as per Article 6.3 of the *TCPS2*. Researchers are responsible for adherence to any other relevant University policies and/or funded or non-funded agreements that may be associated with the project. If funding is obtained subsequent to ethics approval, you must submit a Funding and/or Partner Change Request to ICEHR so that this ethics clearance can be linked to your award.

The *TCPS2* **requires** that you **strictly adhere to the protocol and documents as last reviewed** by ICEHR. If you need to make additions and/or modifications, you must submit an Amendment Request with a description of these changes, for the Committee's review of potential ethical concerns, before they may be implemented. Submit a Personnel Change Form to add or remove project team members and/or research staff. Also, to inform ICEHR of any unanticipated occurrences, an Adverse Event Report must be submitted with an indication of how the unexpected event may affect the continuation of the project.

The *TCPS2* **requires** that you submit an Annual Update to ICEHR before **January 31, 2025**. If you plan to continue the project, you need to request renewal of your ethics clearance and include a brief summary on the progress of your research. When the project no longer involves contact with human participants, is completed and/or terminated, you are required to provide an annual update with a brief final summary and your file will be closed. All post-approval ICEHR event forms noted above must be submitted by selecting the ***Applications: Post-Review*** link on your Researcher Portal homepage. We wish you success with your research.

Yours sincerely,

Alyson Byrne

Alyson Byrne, Ph.D.
Vice-Chair, Interdisciplinary Committee on
Ethics in Human Research

AB/bc

cc: Supervisor – Dr. Gerald Galway, Faculty of Education