IDENTIFYING AS A TEACHER OF READING:

A CASE STUDY OF PRE-SERVICE TEACHERS' BELIEFS ABOUT READING AND THE TEACHING OF READING OVER THE DURATION OF A REQUIRED ELA COURSE

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By

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Abstract

Teacher candidates (TCs) prior understandings and knowledge around reading instruction and reading acquisition emerge through various experiences and have the potential to contradict notions presented in the curriculum and pedagogy of English Language Arts courses. As TCs engage in coursework related to reading pedagogy, tensions and cognitive dissonance may be negotiated. This qualitative study, approached through a social constructivist framework, explored beliefs about the teaching and learning of reading held by elementary TCs. Using case study methodology, this inquiry surfaced initial and negotiated beliefs by reflecting on the following research questions: What patterns and themes in TC backgrounds appear alongside particular beliefs, held early in a required curriculum course in English Language Arts, about the nature of reading and the teaching of reading? What patterns and themes emerge in the post-course reflections of TCs regarding their ideas about reading development and reading instruction. Methods for data collection and analysis included content analysis, attribute and descriptive coding, and thematic analysis of a pre and post-survey and individual interviews. Results of this study demonstrated that early understandings held by TCs were narrow and often misaligned with current understandings of reading development and pedagogy. Post-course reflections, however, indicated negotiated beliefs, adding to previous studies that have suggested methods courses offer opportunities for revised understandings. Implications of this study relate to the importance of required reading pedagogy courses in teacher education programs as one avenue for TCs to surface, examine, and refine their understandings related to reading instruction and development.

Keywords: teacher candidates, pre-service teachers, reading instruction, reading acquisition, evidence-based instruction, self-efficacy, teacher beliefs, teacher education programs

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Dedication

This dissertation is dedicated to the memory of my dad, Harold Fraser. While he was not able to follow me on this journey and see me graduate, I know he would be proud.

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Chapter One: Introduction

You must never feel badly about making mistakes…as long as you take the trouble to learn from them. For you often learn more by being wrong for the right reasons than you do by being right for the wrong reasons.

Norton Juster, *The Phantom Tollbooth*

"Your son can't read". I will never forget these words that were spoken with a New York accent from a fiery, energetic teacher just a few years away from retirement. Only a few weeks into the school year, this veteran teacher recognized that my son was well behind his peers and the state standards for students entering Grade 1. We had just moved from Canada to Dallas, Georgia, and this was our first experience in the American school system. I knew at the time that my son couldn't read English text, but this was not something I was concerned about. He had attended a French Immersion half-time Kindergarten program in Saskatchewan so I knew he would likely be behind his new classmates who had attended a full-time program. What I did not know at the time, but would soon learn, was that my son did struggle with reading. It was not simply that he needed the time to "catch up" to his peers. We were to learn that he required a reading intervention program throughout the year to support the difficulties he had with word level reading. It was a difficult year for him working tirelessly to crack the code of written English, and many nights were spent listening to individual words being sounded out and blended together as he made his way through his home reading books.

Four years later, I found myself standing in front of my classroom of Grade 1 students. Some were excited while others cried; I remember feeling an overwhelming sense of responsibility as we began our journey together. As I took in their fresh haircuts and curious eyes, I wondered how I would support them as readers so that development would not be as

challenging as it had been for my son. Although I was in my ninth year of teaching, I was unsure how to move students from letters and sounds to reading words and connected text, and I recognized that learning to read is one of the most complex skills students will acquire (Liu et al., 2016). The weight of literacy instruction is both burdensome and motivating.

Reading Proficiency Imperative

The promise of literacy instruction is also a key catalyst for research as well as teaching. Reading is an essential skill in today's society (Al Otaiba & Fuchs, 2002), so the stakes are high. The Canadian Language and Literacy Research Network (CLLRN) (2009) reported that 42% of Canadian adults are limited in the literacy skills necessary for success. Literacy skills are foundational for individual success and carry a national impact whereby a literate society is essential for a healthy democracy and a thriving economy (CLLRN, 2009).

Research outlines the profound importance of developing reading proficiency in the primary grades, as catching up in later grades is difficult and chances of doing this are small (Brady et al., 2009). Hernandez (2011) performed a longitudinal study of nearly 4,000 students to identify how reading proficiency and poverty influence high school graduation. His findings were that one in six children who were not reading proficiently by the end of Grade 3 did not graduate on time, with this rising to 26% if the student lived in poverty for at least one year and was not reading proficiently by the end of Grade 3. Vellutino and Scanlon (2001) suggested that the type of literacy instruction in Kindergarten is correlated with reading achievement in Grade 1. Snow et al. (1998) stated that children who are struggling in Grades 1 and 2 are likely to remain poor readers, and Lyon (1998b) suggested that approximately 75% of children who struggle with reading at the end of Grade 3 will continue to have difficulties with reading. Provincial data submitted to Saskatchewan's Ministry of Education (n.d.) demonstrate that in

June 2019, 75% of Grade 3 students were reading at or above provincially developed benchmarks, with First Nations, Inuit, and Métis students reported at 55%. This 20% gap has remained consistent over the six years reported.

The necessity of establishing a strong reading foundation in the early years is evident, with only about 5-10% of children reading proficiently in the primary grades having reading difficulties in the later years, whereas 65-75% of children with difficulties early on continue to read poorly throughout their schooling and beyond (Scarborough, 2001). Scarborough's research recognized that reading abilities, identified as proficient or struggling, remain relatively stable despite intervention efforts. Numerous reports have suggested that more than one in three children have difficulty learning to read (Adams, 1990; Burns et al., 2016; Paige et al., 2018; Scammacca et al., 2016; Shaywitz et al., 1992; Torgesen, 2000; Walsh et al., 2006; Young, 2017) and this is not only an educational problem, but a serious public health concern (Lyon, 1998a, 1998b, 2002; McArthur et al., 2016; Walsh et al., 2006). Children from poverty (Buckingham et al., 2013), students with limited English proficiency, and children from families with low literacy are at risk for reading failure (International Dyslexia Association (IDA), 2018; Lyon, 1998b), as well as children with speech, language, and hearing difficulties (Lyon, 1998b). However, many children with stimulating literacy experiences prior to schooling also have difficulty learning to read (Lyon, 1998b).

Every three years, the Organisation for Economic Co-operation and Development (OECD) reports on the state of education worldwide through the Programme for International Student Assessment (PISA). This assessment is an internationally agreed upon measurement of the knowledge and skills of fifteen-year-old students, and in 2018, the PISA assessment focused on reading (Schleicher, 2019). Canadian results were promising, with 86% of students

performing at or above the baseline level of reading literacy, outlined as "required to take advantage of further learning opportunities and to participate fully in modern society" (p. 11). Saskatchewan's average was below the national average at 83% and reported the fourth highest percentage of students below the baseline of the ten participating provinces (O'Grady et al., 2019).

Quality Instruction and Reading Proficiency

There is no question about the necessity of reading proficiency for school success across subject areas (Buckingham & Meeks, 2019; Lewis & Paik, 2001) and in life (CLLRN, 2009; Lyon, 1998a), but *can* all children learn to read at a proficient level? There is also a growing body of research about the importance of teaching reading and improving the quality of instruction across all grades (Allington & McGill-Franzen, 1989; Snow et al., 2005; Torgesen et al., 2001). At one time, younger grades were seen as "learning to read" while older grades were supported in "reading to learn" but Rosenblatt's (1978) concepts of aesthetic and efferent reading, applied across all age categories, support teachers in conceptualizing reading for pleasure, and reading for information, as skills to advance across all grade levels and even into post-secondary and graduate studies.

A substantial corpus of evidence does demonstrate the positive relationship between effective instruction and student achievement (Al Otaiba et al., 2016; Darling-Hammond, 1996, 2000; Guerriero, 2017; International Literacy Association, 2018; Muñoz et al., 2011; Rivkin et al., 2005; Wright et al., 1997) and the prevention or amelioration of reading difficulties (CCLRN, 2008). Supporting the reading development of all students rests with the classroom teacher, however not all teachers believe they have the knowledge base or the capacity to support all students (Allington, 2011; Cohen et al., 2016; Cunningham et al., 2004; Moats, 1994; Moats

& Foorman, 2003; Nicholson & McIntosh, 2018; Spear-Swerling & Brucker, 2003; Stainthorp, 2004). Teacher education programs are essential in providing the deep knowledge base necessary for reading instruction (Cohen et al., 2016; National Reading Panel, 2000; Snow et al., 1998).

Shifts in My Beliefs

In my recent work as a sessional instructor in a teacher education program, I found myself reflecting on my personal beliefs about reading acquisition and instruction alongside my experiences as an educator. For much of my career as a classroom teacher, reading instruction was guided by directives from school divisions and published reading programs, with some autonomy on implementation. Thinking back on these experiences, I am struck by the feelings of isolation these memories bring forward. With the classroom door closed, it was just the students and me. As an instructional consultant, I work alongside colleagues to examine past and current practices and look to the literature to consider what is believed to be best practices at this time. It is a highly collaborative process, much like my experiences in graduate studies classes, where the dialogue pushes for critical thinking and reflection. Many of the teachers I work with are seeking to advance their practice and engage in learning opportunities in service of their students.

Standing at the front of a classroom I'd once occupied as an undergraduate and graduate student, I began to address literacy instruction with these future teachers. I hoped to create space for my students to surface and explore their own beliefs and experiences and think critically through personal reflection and collaborative dialogue. What struck me about this group of students was their diversity of experiences and perspectives, and how their connections to literacy were markedly different than my own experience as an undergraduate student. While some students had little or no experience working with children in an educational setting, others

had worked as educational assistants in schools. Some loved reading, some read for pleasure, some remembered that learning to read was challenging. Some had children of their own and could share the experiences of being a parent of a child learning to read. For some students, English was not their first language and they could share those experiences of learning to read a new language. Prior beliefs, experiences, and assumptions about reading were rich and varied. However, everyone did not carry the same body of knowledge that reflected current research on reading instruction, or evidence-based practice, defined as the instructional strategies identified through research as having a significant likelihood of producing positive reading outcomes with beginning or struggling readers (Sciuchetti et al., 2016; Stichter et al., 2009).

Part of my professional responsibility with these TCs involved providing them with knowledge about reading instruction and development. I recognized that such content might bump up against their personal beliefs, at times coinciding, but at other times, contradicting. The combination of my early years teaching, the learning journey of my family alongside our son's reading development, and these newer experiences working with TCs, connected in powerful ways to inspire further questions leading to the study at hand. But first, there was one more avenue for exploration—my development as a reader.

My Background as a Reader

I am a reader, an avid reader. I was one of those lucky children where reading was seemingly effortless and thoroughly enjoyable, and memories of reading are vivid and abundant. Long road trips, squished between my siblings in the backseat of the car, were passed making my way through *The Babysitters Club*. Hot summer days would find me folded in the wheel of a tractor with my nose in a book. My sister and I would spend hours arranging our books on the shelf alphabetically by author, and nights lying awake in our beds reading our latest purchases

from the school book club order. As I grew older, I never lost that love of reading. When I became a mom, time spent with my son reading *The Bugliest Bug* (Diggory Shields, 2002), *The Phantom Tollbooth* (Juster, 1961), and *The Red Pyramid* (Riordan, 2010) was about immersing ourselves in playful language, heroes and heroines, and make-believe lands. It was time together, turning the pages of adventures, brave characters, and silly stories, and these favourites became some of the first books I would read each year to the students I taught.

My personal life bumps up against my experiences teaching and parenting, illuminating a continuum of very different reading experiences: my own where reading was acquired easily, and a difficult, challenging start for my son. As a teacher, I recognize this same continuum in the reading lives of the many students I have taught.

My Journey

My knowledge and understanding about reading development and instruction have developed over the course of my career. The experiences I had teaching students with diverse needs in various grade levels were a catalyst for the desire to deepen my knowledge base. This knowledge is foundational to how I see myself as a reading teacher and how I support other teachers in developing their practice. This section describes my journey as a reading teacher throughout my various roles as an educator.

A Reading Teacher

When I started to teach beginning readers I became curious about early reading instruction and recognized I did not have the necessary knowledge to best support reading acquisition. I considered the experience of my practicum placement during my teacher education program. It had been eight years since I was part of that Grade 1 community, but the memories of that experience were vivid at the time of my early years teaching and remain clear today. The

philosophical underpinnings of literacy instruction demonstrated by my mentor teacher rested on the idea of whole language, although I did not understand it as such at that time. In this teacher's classroom approach, the translation of whole language lost some of the elements expressed (e.g., Goodman, 1986) regarding the need for direct teaching in a meaningful context. Individual skills that contribute to reading development were not taught explicitly. Students were immersed in authentic learning experiences, where thematic units integrated content areas and students were encouraged to engage with poetry and high-quality children's literature of their choosing (Goodman, 1986), however the direct skill and strategy teaching implicit in this philosophy were not actualized.

The thematic unit I taught in late October of that year was on bears. We read poems and stories about bears and I set up a small tent in the classroom that became the bear den (Figure 1). The students brought in their teddy bears to live in the den, and throughout the day the children would curl up with a book in the den to read with their teddy bears. To complete this unit, the students worked collaboratively to write about the various aspects of a species of bear and present this information to their peers (Figure 2). I knew, at the time, that many of the students were not developmentally ready in their reading and writing skills to undertake this final project. These were beginning readers, barely into their second month of Grade 1. I expected the students to attend to non-fiction texts to extract specific information. I asked them to read for a purpose, pick relevant information, summarize it in written form, and then present that information to the class.

Figure 1

Bear Den

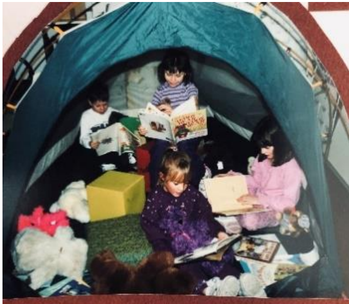
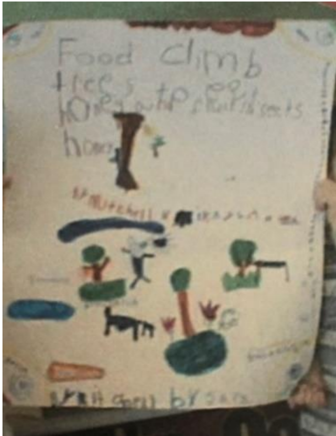


Figure 2

Bear Research



Now as I was preparing to teach beginning readers on my own, I reflected on that experience and considered it alongside the reading experience of my son. He had required an instructional approach that supported his development with decoding; extracting meaning from the text was never an issue. My practicum experience was highly meaning-centered and the learning environment fostered the whole language objective for students to “build strategies, not specifics” (Goodman, 1986, p. 46) as students were encouraged to predict, guess, and use just enough graphic information to make sense of the text. Considering this dichotomy, I spent the

summer before my first year teaching Grade 1 immersed in whatever I could read about reading instruction. I had no idea then where that curiosity and desire to learn would take me.

I believe that, as teachers, we have a moral imperative to do everything we can to support reading acquisition for all students. This is a challenging task as the act of reading is comprised of many complex skills and described by Dr. G. Reid Lyon (2003) as "one of the most complex, unnatural cognitive interactions that brain and environment have to coalesce together to produce" (para. 51). While approximately 40% of students learn to read with relative ease (Hempenstall, 2016; Lyon, 1998b; State Collaborative on Reforming Education, 2020; Young, 2017), many find it considerably difficult. I transitioned to the role of resource teacher because I felt motivated to really focus on addressing the learning needs of students who were having difficulty reading. Teaching children who struggle with reading is hard work, especially when working with older students who have many years of experience struggling with reading and understanding text. But with patience and persistence, there are many rewarding moments: when a mom sends a note saying her son is happier and more confident, when classroom teachers tell you the students you are working with are participating more in class, when a child's eyes light up when they recognize a word. Days are well-spent when they are building up to moments like these.

An Instructional Consultant

My professional life has even more recently transitioned, from supporting readers who struggle, to developing the knowledge and skills of classroom teachers. As a consultant, I am many layers peeled away from direct student impact, so it isn't easy, at times, to feel like my work is making a difference. I am drawn back to the classroom, whether it is with a class of students ready to learn to read or tucked away working with small groups for reading

intervention. But too many students struggle to learn to read at a proficient level, and many of these difficulties could be prevented (Mathes & Torgesen, 1998).

Through additional certifications, graduate studies, and the nature of my current position, I have immersed myself in the research around reading instruction. I know more now than I did working with my beginning readers six years ago. There are past practices I engaged in that would not have supported all of the learners in my classroom, and I can name students who struggled with reading and continued to struggle. I dedicate my current consulting work to supporting teachers who walk similar paths to mine as a beginning teacher. I would love that classroom time back, knowing what I know now, so I could put into practice more effective instruction to support those students. While I cannot go back in time, working as a consultant affords me the opportunity to work with many teachers and administrators and has the potential for systemic change.

My journey as a teacher of reading, whether in the classroom, as an interventionist, or working alongside colleagues, continues to develop nearly two decades into the profession. Beliefs about reading instruction have shifted from a reliance on prior experiences and teaching practices based on comfort to deepening my understanding of converging research evidence, and as I continue to learn about reading pedagogy and reading development, pre-existing beliefs are challenged by new learning.

A Teacher Educator

I have encountered shifts of understanding and the process of cognitive dissonance operating within some of my teaching teams, as teachers' own prior beliefs and existing practices are challenged with new knowledge and understandings. These experiences influenced the way I approached instruction of the undergraduate literacy methods course with which I was involved

in the fall of 2019. TCs had the opportunity to share beliefs about reading instruction and their experiences as readers in an informal reading inventory completed during the first class. Reading these reflections provided me with some context about their learning experiences and beliefs about reading instruction that have accumulated to shape future instructional decisions as they participate in field experiences, their practicum, and begin their career in their classrooms (Gregoire, 2003). These varied experiences and beliefs also surfaced through informal class discussions, particularly when new learning contradicted these prior experiences or what was modelled in their field placement classrooms. Throughout the course, I needed to consider how to honour their pre-existing beliefs and experiences while challenging them to revise some of those beliefs and integrate new knowledge. In surfacing their beliefs, I needed to be mindful of the mental blocks, values, perspectives, and biases that could inadvertently undermine their learning, and provide opportunities for the TCs to open their minds to new approaches (Liu et al., 2016). I also needed to be cognizant of my own potential biases, and preferences for particular modes of instruction in which I believed, whether or not they were reflected in ongoing research puzzles for future enlightenment.

Problem Statement

Proficient reading skills lay the foundation for children's academic success (Whitehurst & Lonigan, 2001) and are critical to overall well-being (Lyon, 1998b) and lifelong development (CLLRN, 2008). Substantial evidence supports the impact of teachers on student learning (Brenna & Chen, 2013; Darling-Hammond, 1996, 2000; Dehaene, 2011; Hanushek, 2011; Muñoz et al., 2011; Rivkin et al., 2005; Wright et al., 1997) specifically around the quality of instruction on literacy achievement (Mathes & Torgesen, 1998; Moats, 2014). Lyon and Weiser (2009) stated that "reading difficulties have, in the past, been attributed to race, ethnicity,

environment, socioeconomic factors, student motivation, parental involvement" (pp. 475-476). While these factors may influence reading achievement, it is widely acknowledged that ineffective instruction certainly plays a part in students' reading failure.

Teacher Effectiveness: Knowledge of Reading Content and Pedagogy

Darling-Hammond (2000) suggested that differences in teacher effectiveness on student learning outweigh differences in class size and heterogeneity, with students having several ineffective teachers in a row demonstrating significantly lower achievement than those assigned to several highly effective teachers. In fact, Clark et al. (2017) posited that having one ineffective teacher for only one year has the potential to negatively impact reading achievement for several years. In a review of the existing literature, Nye et al. (2004) estimated an approximate 20% variation in student achievement based on teacher effectiveness.

Teacher knowledge of reading-related abilities and reading development is critical for reading instruction to be effective (Cohen et al., 2016; Dehaene, 2011; Spear-Swerling et al., 2005). However, evidence indicated that gaps exist in teacher knowledge of foundational reading skills (Bos et al., 2001; McCutchen, Harry, et al., 2002; Moats, 1994). Teachers recognize the wide-range of reading abilities in their classrooms and view this as one of the greatest challenges (Duffy & Atkinson, 2001; Tschannen-Moran & Johnson, 2011). Hence, there is a need for teacher education programs to prepare TCs for teaching students of varying reading abilities (Allington & McGill-Franzen, 1989; Brodeur & Ortmann, 2018; Lyon, 2002; Moats, 2014; Washburn et al., 2011).

Teacher Education Programs

The importance of effective teacher education programs is recognized in research (NRP, 2000; Snow et al., 1998; Sayeski et al., 2017), yet there is considerable criticism around how

well these programs are training teachers (Cohen et al., 2016; Meeks et al., 2016). Reports of insufficient coursework (Moats, 2014; Snow et al., 1998; Walsh et al., 2006) and difficulty transferring acquired knowledge to practice (Cunningham et al., 2009; Snow et al., 1998) are recognized as inadequacies in teacher education programs. An additional criticism suggested that teacher education programs do not explicitly train TCs on the critical components of early reading instruction (Bos et al., 2001; Carlisle et al., 2009; Cheesman et al., 2010; Joshi, Binks, Hougen et al., 2009; Mathes & Torgesen, 1998; Moats, 1994, 2014; Piasta et al., 2009). This criticism includes the structure of the English language, reading development, and reading difficulties (Lyon, 1998a; Lyon, 2003; Moats, 2014). Podhajski et al. (2009) indicated that "despite significant advances in our knowledge about what children need to learn to read, the content of many teacher preparation programs remains disconnected from the knowledge and skills that teachers will need in the classroom" (p. 403). Recommendations outlined by the International Literacy Association and National Council of Teachers of English (ILA & NCTE) (2017) advised that teacher education programs provide a deep conceptual understanding of content and pedagogy, prepare TCs to address the needs of diverse students, draw on cultural and linguistic knowledge, support English Language Learners, and teach in a culturally competent manner. While there is a rich history of debate surrounding effective early reading instruction (Chall, 1983), evidence has advocated that teachers of reading require a deep understanding of phonological awareness, phonics, fluency, vocabulary, and comprehension and how to teach these five components of reading science (National Council on Teacher Quality, 2020; NRP, 2000).

Transferring Knowledge from Methods Courses to Classroom

While there is criticism about the efficacy of teacher education programs, research around how knowledge from methods courses is applied to classroom instruction is mixed. Noll and Lenhart (2013) highlighted that strong teacher education programs provided the training and experiences necessary to support first-year teachers in providing rich, responsive reading instruction. In a longitudinal study by Hoffman et al. (2005), researchers followed 101 graduates into their first three years of teaching. They concluded that participation in high quality teacher education programs, specifically those with an intensive focus on reading instruction, positively influenced transition to classroom teaching and the adoption of effective teaching practices. Similarly, Mulhollen's (2007) case study of one first-year teacher demonstrated that course content was implemented in the classroom. In this case, however, the school context expected implementation of the instructional approach privileged in the methods course, so this teacher was provided additional support through mentorship, materials, professional learning, and professional resources to supplement the knowledge acquired in the teacher education program.

Alternatively, Puk and Haines (1999) and Grossman et al. (2001), determined that context and expectations within the school district, individual school, curriculum materials, and professional development opportunities had a strong influence on the instructional decisions of beginning teachers. Adherence to curriculum materials was highly influential for beginning teachers who were reluctant to question these materials (Valencia et al., 2006). Additionally, Kagan (1992b) stressed the central role of preexisting beliefs held by pre-service and beginning teachers. In her review of studies concerning pre-service and first year or beginning teachers, Kagan concluded that beginning teachers are strongly influenced by their experiences as

learners. Their preexisting beliefs filtered content of course work, remained relatively unchanged, and were translated to classroom practice.

Purpose Statement

There is a call for the close study of the complexity of teaching and learning (Ball & Forzani, 2009; Hoffman & Pearson, 2000; Snow et al., 2005); however, few researchers are asking about the processes teachers go through as they learn to teach reading (Duffy & Atkinson, 2001). The purpose of this study was to investigate the understandings and knowledge of reading acquisition and reading instruction that TCs surface during a required English Language Arts (ELA) methods course. Knowledge bases that underlie teaching can be influenced by prior experiences and related beliefs (Bryan, 2003; Debreli, 2016; Kagan, 1992a; Vieira, 2019; Yoo, 2005). Teacher beliefs shape classroom processes and are considered a determinant of instructional activity and student learning (Bryan, 2003; Richardson et al., 1991; Skott, 2014). As such, "research indicate[s] that teacher beliefs, learning, and practice are relatively inseparable" (Leko & Mundy, 2011, p. 5). While ELA methods courses offer opportunities to learn theoretical perspectives, pedagogy, and curriculum, often overlooked are PSTs' existing beliefs about literacy instruction and content (Ciampa & Gallagher, 2018).

Kagan (1992a) proposed that methods courses do little to change personal beliefs held by PSTs; instead of modifying initial biases, these biases tend to grow, nurtured by doses of increasing confidence. However, more recent studies have demonstrated that methods courses have shifted beliefs of PSTs around supporting struggling readers (Leko & Mundy, 2011; Nierstheimer et al., 2000) and shifts in pedagogical knowledge (Brodeur & Ortmann, 2018; Duffy & Atkinson, 2001). Teacher educators can promote conceptual change by providing opportunities for PSTs to make personal beliefs explicit, help these students confront

inconsistencies within their belief systems, and provide experiences to integrate new knowledge (Kagan, 1992a; Leko & Mundy, 2011; Nierstheimer et al., 2000). By implication, teacher educators must provide space for PSTs to unpack and confront prior held notions and beliefs about teaching and learning from their past experiences (Bryan, 2003; Leko & Mundy, 2011; Roskos et al., 1998; Vieira, 2019).

Significance of the Study

The United Nations Educational, Scientific and Cultural Organisation (UNESCO) identifies literacy as crucial to social and human development in its capacity to transform lives (UNESCO, 2009). Recognized as a human right (Derby, 2018; OHRC, 2019; UNESCO, 2019) and a civil right (The Reading League, 2020), teachers require the knowledge to support reading proficiency for all children. The significance of this study, through the examination of PSTs' negotiated understandings around reading acquisition and instruction, evidences the influence of a required literacy course in the teacher education program. Converging evidence points to the importance of effective teacher education programs (Debreli, 2016; NRP, 2000; Snow et al., 1998). This study has the potential to engage in collective conversations about key features of ELA methods courses, increasing the corpus of research around various topics of teacher education. Required courses are critical in how they might support the growth and development of TCs; this relates to the idea that no other measure of school effectiveness is more valuable than teacher quality (Darling-Hammond, 2000; Hanushek, 2011).

Provincial teacher certification requirements in British Columbia, Alberta, Saskatchewan, and Manitoba each require six credit units of language courses. However, requirements in British Columbia (Government of British Columbia, 2020) and Alberta (Government of Alberta, 2021) specify courses in either French or English relating to literature and composition, and

Manitoba's (Government of Manitoba, 2021) requirements state six credit units in English or French. Saskatchewan (Saskatchewan Professional Teachers Regulatory Board, n.d.) requirements specific to elementary teaching certification require methods coursework in reading and language. While it is promising that TCs graduate from their teacher education programs with required language courses, the scope of these courses across provinces is quite striking and may not, necessarily, reflect the depth and breadth of reading pedagogical knowledge that the ILA and NCTE (2017) outline in their recommendations for teacher education programs.

Brenna and Dunk (2018) investigated, through reflexive inquiry, the changing beliefs and understandings around reading instruction of PSTs, the experiences that serve as catalysts for those shifting beliefs, and how these findings may be applied to future classroom practice for teacher educators. Findings in that study, based on a single survey delivered pre and post within a required ELA course, highlighted the potential importance of surfacing pre-existing beliefs and understandings for both TCs and teacher educators, as teacher educators can then "shift content in and out…circle back to particular concepts and nudge consideration of new understandings" (Brenna & Dunk, 2018, p. 207).

Research has suggested that pre-service and in-service teachers lack the depth of knowledge required to teach reading effectively, particularly to those children at risk for reading difficulties (Bos et al., 2001; CLLRN, 2009; Cheesman et al., 2010; Cohen et al., 2016; Cunningham et al., 2004; Lyon & Weiser, 2009; McCutchen, Harry, et al., 2002; Meeks & Kemp, 2017; Meeks et al., 2016; Moats, 1994, 2009b; Moats & Foorman, 2003; Moore, 2020; Piasta et al., 2009; Stark et al., 2016). Recognizing the importance of ELA methods courses in teacher education programs, this study offers ideas to enhance these courses through presenting rich information related to the perspectives of the students in these courses.

Research Questions

This interpretive case study elicited the participation of PSTs enrolled in required ELA methods courses at a Western Canadian university. As part of the teacher education program, PSTs were required to complete two literacy methods courses. The first required course focused on approaches to reading instruction and assessment and the second course extended the learning with a focus on lesson and unit planning. Learning experiences in both courses reflected the content and pedagogical approaches privileged in the provincial elementary ELA curriculum.

The central research questions address how TCs make sense of reading acquisition and reading instruction. These two research questions are:

What patterns and themes in TC backgrounds appear alongside particular beliefs, held early in a required curriculum course in ELA, about the nature of reading and the teaching of reading?

What patterns and themes emerge in the post-course reflections of TCs regarding their ideas about reading development and reading instruction?

To investigate these research questions, data collection methods included a pre and post-survey and individual interviews. Details of the case, participants, data collection methods, and data analysis are further detailed in Chapter Three.

Definitions

The following terms are utilized in this study and are defined as follows:

1. Teacher candidate: a candidate for a Bachelor of Education degree.
2. Pre-service teacher: used interchangeably with teacher candidate, in this study, in order to fluently include quotations from other researchers who use this terminology as they discuss students enrolled in teacher education programs.

3. Decoding: “is simply efficient word recognition: the ability to rapidly derive a representation from printed input that allows access to the appropriate entry in the mental lexicon, and thus, the retrieval of semantic information at the word level” (Hoover & Gough, 1990, p. 130).
4. Linguistic comprehension: “is the ability to take lexical information (i.e., semantic information at the word level) and derive sentence and discourse interpretations” (Hoover & Gough, 1990, p. 131).
5. Reading comprehension: “is the ability to extract and construct linguistically based meaning, both literal and inferred, from written text” (Tunmer & Hoover, 2019, p. 77).
6. Evidence-based practice: in teaching is to apply relevant information from research findings to classroom practice (CLLRN, 2008).
7. Literacy: “The ability to identify, understand, interpret, create, compute, and communicate using visual, audible, and digital materials across disciplines and in any context” (ILA, 2018, p. 2) and includes all strands of reading, writing, listening, speaking, viewing, and representing.

Summary

Chapter One described the varied experiences and motivations that led to the significance of this study. I outlined reading statistics related to populations of children deemed at-risk for reading failure and highlighted research indicating the relationship between effective instruction and student achievement. The notion was explored that pre-service and in-service teachers lack in-depth knowledge necessary for supporting children, particularly those at risk for reading failure, in developing proficient reading skills. This chapter also drew attention to the idea that the field of literacy instruction is quickly changing along with the perception of what “correct”

knowledge should be prioritized. Lastly, I considered that future teachers bring their prior beliefs and experiences around reading and reading instruction to their teacher education programs, and that understanding these perspectives can support further attention to the content of required reading courses.

Chapter Two: Theoretical Perspective and Literature Review

This discussion builds background and understanding in relation to the focus of this study. The chapter outlines the theoretical orientation of social constructivism in relation to the purpose of this study, followed by a review of the literature in the areas of: (1) philosophies and approaches of reading instruction; (2) evidence-based practice; (3) teacher self-efficacy; and (4) content and instructional knowledge.

Theoretical Orientation

A social constructivist perspective is aligned with the design of this study and its focus on how knowledge is constructed, and recognized the extent to which peers and environment might influence shifts in thinking. This rests on beliefs, inherent to the constructivist paradigm, which attest that knowledge is socially constructed (Mertens, 2015). Through this framework, the intention was to "look for the complexity of views rather than narrow the meanings into a few categories or ideas" (Creswell & Poth, 2018, p. 24) given that human interactions negotiated these meanings. Through the social constructivist lens, it is recognized that we are influenced by those around us and, while creating meaning, the practices that shape us continue to formulate and change (Moll, 2014).

The fundamental ideas of constructivism are attributed to Jean Piaget's work concerning the epistemological and philosophical nature of knowledge (Sjøberg, 2010). Piaget's perspective on the development of knowledge was cross-disciplinary and considered an individual's construction of knowledge (Sjøberg, 2010). Social constructivism widens the lens of constructivism and considers the social and cultural influences on learning, resting on the belief that knowledge is a social construct shaped through interconnectedness between the environment and the individual (Adams, 2006; Azzarito & Ennis, 2003; Olson, 1995; Sjøberg, 2010;

Vygotsky, 1978; Young & Collin, 2004). According to this view, "knowledge is described as socially constructed and negotiated as individuals continuously interact with the world" (Olson, 1995, p. 120) and places an emphasis on the influence of culture (Patton, 2015; Richards et al., 2018; Young & Collin, 2004) and context (Schunk, 2012). Through a social constructivist lens, knowledge creation cannot be separated from the social context (Adams, 2006).

Rooted in the sociocultural theoretical work of Lev Vygotsky (1978), social constructivism encourages opportunities to collaborate, question, and surface multiple viewpoints between peers with the guidance of a mentor (Yost et al., 2000) where learning unfolds as individuals justify beliefs, make ideas explicit, and negotiate alternate perspectives (Richards et al., 2018) recognizing the essential role of groups in the construction of knowledge. Constructing new knowledge through social interactions plays a fundamental role in cognitive development (Vygotsky, 1978) as well as opportunities to challenge thinking and rearrange beliefs (Schunk, 2012). A major tenet of Vygotsky's theory is the "zone of proximal development" (ZPD), whereby cognitive development is negotiated through social interactions and supported by more capable peers or adult guidance (Fani & Ghaemi, 2011; Vygotsky, 1978). While Vygotsky's work centered around the developmental potential in children, application of ZPD has been used in teacher education (Fani & Ghaemi, 2011). In this context, zone of proximal *teacher* development considers what TCs can do independently and the proximal level that may be achieved "through strategically mediated assistance from more capable others (i.e. methods instructor or supervisor)" (Fani & Ghaemi, 2011, p. 1551).

Knowledge constructs are initially formed between people before becoming internalized, suggesting that "learning becomes the development of personal meaning more able to predict socially agreeable interpretations" (Adams, 2006, p. 246). Vygotsky's influence in the field of

education exists today, forwarding preliminary ideas that led to the concept of instructional scaffolding. While not an explicit part of Vygotsky's theory (Schunk, 2012), scaffolding is applied in Bandura's (1986) work around learning experiences.

Tenets of constructivism apply to social constructivism as knowledge construction is considered beyond the individual to the social. Yost et al. (2000) highlighted the importance of changing the existing cognitive structures as constructivism emphasizes moving from reflective thought to reflective change. Citing the work of Dewey (1933), these authors described three attributes of reflective individuals: open-mindedness, responsibility, and wholeheartedness. Individuals who demonstrate these attributes are open to multiple perspectives, actively search for truth, and apply knowledge gained to make meaningful change. Hence, "the goal of constructivism is to induce disequilibrium and cognitive conflict in the learner so that successful accommodation will occur" (Yost et al., 2000, p. 42). As individuals *socially* construct knowledge, new knowledge is filtered through existing knowledge and results in the reconstruction of existing beliefs (Richards et al., 2018) underlining the importance of surfacing and examining pre-existing beliefs and focusing on meaningful, integrated learning (Yost et al., 2000).

Recent studies investigated the knowledge construction of pre-service teachers around reading instruction (Vieira, 2019) and beliefs around teacher effectiveness and effective instruction (Herron Gloria, 2015) through social constructivist/transformative learning and constructivist/interpretivist frameworks, respectively. Findings from these studies highlighted the social nature in which knowledge, understandings, and beliefs are negotiated and constructed. The current study expanded upon the work of Vieira and Herron Gloria as it considered the influence of a required methods course on knowledge construction related to reading pedagogy

and the beliefs TCs brought to this course, specific to reading and the teaching of reading. By studying beliefs and understandings about reading pedagogy through the lens of TCs in their required ELA methods courses, we may begin to explore how new knowledge is assimilated and negotiated with existing knowledge as well as the understandings TCs bring with them from various previous experiences in the field of Education.

Complexity in the Field of Reading Education

Instructional approaches related to the reading process have been so polarizing that the dialogue between opponents has been called "the reading wars." For more than 30 years, the controversy between competing emphasis for beginning reading instruction based on whole language and phonics (Buckingham et al., 2013; Hempenstall, 2013) pitted a meaning-focus against a code-focus for beginning reading instruction (Cunningham & O'Donnell, 2015) and left conflicting messages and recommendations about what to teach (Mathes & Torgesen, 1998).

Whole Language Philosophy

Ken Goodman (1970) characterized reading as a "psycholinguistic guessing game" in which readers use graphic, semantic, and syntactic knowledge to guess the meaning of printed words. This psycholinguistic orientation to reading suggested reading is more a language than a process (Pearson, 2004). As a key proponent of whole language, Goodman (1986) described whole language as a philosophy, not as a collection of activities, where the educational environment is a space supportive in skill development at a child's own pace. The whole language philosophy is characterized by authentic interactions with speech and language, student choice, and an emphasis on the social nature of learning (Goodman, 1986; Snow & Juel, 2007). As well, contextual knowledge is a predictor of proficiency in reading utilizing first guesses based on letter sampling, knowledge of language structure, and experiences (Buckingham et al.,

2013; Snow & Juel, 2007). The whole language philosophy has been linked to suggestions that reading should be *caught*, not *taught* (Mathes & Torgesen, 1998), phonics skills should be discovered and developed by the students (Goodman, 1986), and that oral language skills provide the means to decode and recognize unfamiliar words, even with beginning readers who "begin to sample and draw on syntactic and semantic information almost from the beginning" (Goodman, 1970, p. 267).

Classroom approaches based on whole language philosophy continued to be the conventional practice for reading instruction through the 1990s. Skill and strategy instruction, an emphasis on text structure, and reading in the content areas were deemed by some to be "curricular casualties" (Pearson, 2004, p. 220) of whole language. A shift in ideology of reading research in the late 1990s (Pearson, 2004) led to converging evidence about whether attention to small units in reading instruction is helpful for all, harmful for none, and critical for some (NRP, 2000; Snow & Juel, 2007). While the whole language philosophy suggested that learning to read is natural (Brady et al., 2009; Goodman, 1986; Snow & Juel, 2007), contradictory research concluded that it is not a natural process developed in the same sense as oral language unfolds through interactions or within print-rich environments (Lyon, 1998a; Pellegrini, 2001).

A Code-Focused Approach

Approaches based on whole language were challenged by Jean Chall (1967) in her study of the effectiveness of various approaches to reading. Chall concluded that systematic instruction of phonics tended to result in improved word recognition, spelling, vocabulary, and comprehension in all students, and particularly those from at-risk groups. Instructional practices around the explicit teaching of phonics are central to the debate about reading instruction. Code-emphasis proponents suggest that beginning reading instruction should emphasize mastery of the

alphabetic code while meaning-emphasis proponents advocate that instruction around the meaning of words and text facilitates reading acquisition. In an analysis of research from 1912-1965, Chall (1983) concluded that a code-focused approach to beginning reading instruction produced better results, a conclusion later asserted by Adams (1990) in her analysis of reading research. This view deems that a code emphasis does not underscore the importance of meaning. Reading for meaning is supported through a code-emphasis method in the long term, better than a meaning-emphasis approach, as texts become more complex and meaning is affected by the words children need to recognize (Buckingham et al., 2013; Chall, 1983; Snow & Juel, 2007). Gough (1993) stated that contextual guessing is highly inaccurate; even strong readers guess correctly only one word in four based on context clues. Successful decoding allows for the automatic retrieval of meanings for familiar words as well as creates context-dependent links for unfamiliar words (Perfetti, 2010). Therefore, reading comprehension is affected by decoding skills (the ability to read the word accurately) and vocabulary skills (the depth and breadth to which that word is understood).

Proponents for the code-focused approach rest on the basis that written alphabetic symbols are arbitrary. They represent spoken language elements which are abstract (Lyon, 1998b) and that explicit instruction supports reading acquisition (Chall, 1989). Stanovich (1993) stated:

> that direct instruction in alphabetic coding facilitates early reading acquisition is one of the most well established conclusions in all of behavioral science…The idea that learning to read is just like learning to speak is accepted by no responsible linguist, psychologist, or cognitive scientist in the research community. (pp. 285-286)

This view contradicts the whole language philosophy whereby reading is seen as natural and attained largely through literacy experiences and exposure to books (Moats, 2007).

Balanced Literacy

Balanced literacy emerged as a new term in an attempt to informally reconcile the "meaning versus code" debate, putting forth an instructional approach that combined skill and meaning. However, this approach has left room for interpretation. Early interpretations suggested that balanced literacy implies "a variety of conceptions of balance, from conceptions more heavily favoring skills teaching to those clearly in the whole language camp" (Pressley et al., 2002, p. 1) with later clarification that balanced literacy incorporated an abundance of skill instruction embedded in authentic literacy experiences (Pressley et al., 2002). Spiegel (1998) provided a vague definition of balanced literacy, viewing this approach as a focus on daily instructional decision making that is responsive to the individual needs of each child. This definition, perhaps, aligns more with the instructional programming that has come to exemplify a balanced literacy approach, where students participate in modeled, guided, and independent reading and writing activities.

Contributions from Cognitive Science

The last several decades have generated an abundance of interdisciplinary insights into reading development and acquisition that is recognized under particular nomenclature as the "science of reading". The science of reading considers how the brain develops as one learns to read (Dehaene, 2009; Kilpatrick, 2015; Seidenberg, 2017; State Collaborative on Reforming Education, 2020; Willingham, 2017), the cognitive processes that work collaboratively to gain meaning from text (Hoover & Gough, 1990; Scarborough, 2001; Tunmer & Hoover, 2019), and instructional practices recognized as effective for all children (Canadian Education Statistics

Council, 2009; CLLRNET, 2009; National Council on Teacher Quality, 2020; NRP, 2000; Snow et al., 1998; Ontario Ministry of Education, 2003; Rose, 2006; Rowe, 2005).

Reading provides a foundation for other learning in school (Buckingham & Meeks, 2019) but is not easily acquired for many children. Science of reading proponents suggest that learning to read and write is not natural or easy for many or even most students and requires mastery of a complex set of language skills (Hoover & Gough, 1990; IDA, 2018). Evidence from the scientific perspective concluded that most children deemed at-risk for reading failure can learn to read well (Durlak, 1997; Gersten & Dimino, 2006; Mathes & Torgesen, 1998). At-risk children include those from poverty (IDA, 2018; Lyon, 1998b; Whitehurst & Lonigan, 2001), students with limited English proficiency, and children from families with low literacy (IDA, 2018; Lyon, 1998b), as well as children with speech, language, and auditory difficulties (Lyon, 1998b). The gap between white students and minorities continues to be prevalent (Assari et al., 2021; Mathes & Torgesen, 1998; Saskatchewan Ministry of Education, n.d.); however, functional literacy eludes a significant number of children from all social strata, including those who attend affluent and otherwise successful schools (Lyon, 1998b; Vellutino & Scanlon, 2001).

There is a growing body of research from the fields of cognitive science, neuroscience, and developmental psychology regarding the acquisition of word reading skills, particularly around how the brain learns to read and where and how words are stored (Dehaene, 2009; Kilpatrick, 2015; Seidenberg, 2017). Humans are born with areas in the brain dedicated to oral language development and the ability to process visual images through the visual system in the brain; however, these areas are not connected so pathways need to be built (Dehaene, 2009; Kilpatrick, 2015; Seidenberg, 2017; State Collaborative on Reforming Education, 2020; Willingham, 2017). Pinker (1997) drew attention to this brain physiology, stating:

> children are wired for sound, but print is an optional accessory that must be painstakingly bolted on. This basic fact about human nature should be the starting point for any discussion of how to teach our children to read and write. (p. ix)

Functional magnetic resonance imaging (fMRI) provides a window to the brain where we can now see what is happening when one is engaged in the act of reading. No longer do we have to rely on theories or presumptions. Gabrieli et al. (2010) outlined the two neural routes used when reading. The phonological route is slower and relies on the application of sounding out regular, rare, or novel words that are unknown to the reader. The direct route, which is faster because it bypasses the sound-letter sequence stage, is used when the word has been orthographically mapped and is recognized automatically and accurately by the reader. This route accesses meaning instantly when the word is read, making it more efficient. fMRIs have been used to identify areas in the brain activated when performing various reading tasks and how this differs between adults and children with varying degrees of proficiency. These images clearly demonstrate the different areas activated with developing readers, children who struggle, and proficient readers (Gabrieli et al., 2010) showing undeniably that skilled readers use different pathways than those who struggle (Blevins, 2020; Gabrieli et al., 2010; Raschle et al., 2020). To this end, science of reading proponents suggest that reading instruction that best facilitates the process of building efficient connections between the language system and the visual system should be employed to support students in learning to read.

Perspective in Curriculum

In Canada, each province is responsible for the development of its curricula. In British Columbia, Alberta, Saskatchewan, and Manitoba, there are vast differences in the level of detail within each provincial ELA curriculum. The British Columbia (2016) and Alberta (2000)

curricula outline specific foundational skills, but do not place emphasis on instructional strategies. In contrast, Manitoba's ELA curriculum (2019) details instructional approaches more than specific content outcomes. In Saskatchewan, the ELA curriculum (2010) reflects the expectation that students develop phonics skills demonstrated in both reading and writing and foundational skills that are generalized not through outcomes, but in the Focus on Language section. The Manitoba curriculum specifically articulates that skill instruction should be embedded in meaningful contexts, which seems to reflect a balanced literacy approach. While the Saskatchewan curriculum does not explicitly state this, instructional strategies that appear to align with a balanced literacy approach are identified as supportive strategies for comprehensive reading and writing development. Although Alberta and British Columbia do not outline specific instructional strategies, foundational skills are presented within the context of general outcomes and are not presented in a level of detail that would suggest a systematic approach. These curricula also appear to reflect tenets of a balanced literacy approach to reading instruction.

In Saskatchewan, curriculum renewals seem to be reflective of the historical and continuing shifts in philosophical underpinnings of reading instruction. Past curricula detail a firm system of testing to a core curriculum outlining a systematic scope and sequence for skill instruction (Saskatchewan Ministry of Education, 2015). At present, the current curriculum presents fewer grade-specific outcomes than in years past, with indicators demonstrated through inquiry learning (Saskatchewan Ministry of Education, 2015).

Current Context

Currently, the reading debate continues to center around the method of instruction of phonics. While there might be agreement on the importance of phonics instruction, argument continues to persist around the mode of instruction (Adams, 1990; Blevins, 2020; McLean, 2020;

Snow, 2021). Varying ideas about phonics appear relating to its introduction, delivery of instruction, explicit versus implicit instruction, isolated instruction or within the context of literature, and to what extent it is taught (how many rules are presented and which ones) (Hempenstall, 2013). In a study of Grade 1 students, McDonald Connor et al. (2004) demonstrated that children with initial low decoding scores achieved greater decoding growth in classrooms with direct, explicit instruction on decoding. Similar results were exhibited with vocabulary instruction. As students grew in decoding and vocabulary skills, a shift to implicit, child-managed instruction was found to be appropriate. Results of this study recognized that instructional activities considered high quality for one student may be poor quality for another depending on skill level, and the match between student skills and instructional choices, as well as consideration of classroom practices and characteristics of the children, create a layer of complexity when considering most effective instructional practices. Classroom teaching for literacy development requires a match of proficiency levels with the type of instruction, whether code-oriented or meaning-focused, teacher-directed or student-directed.

Understanding text is the ultimate goal of reading (Language and Reading Research Consortium & Chiu, 2018); however, a strong consensus from some platforms of research suggested that the fundamental reading problem for children who have difficulty learning to read is the development of accurate, fluent word recognition skills (Kilpatrick, 2015; Seidenberg, 2017; Spear-Swerling & Brucker, 2003). These compromised word recognition skills lead to interference in comprehension development (Mathes & Torgesen, 1998). Comprehensive government reviews from the United States (NRP, 2000), the United Kingdom (Rose, 2006), and Australia (Rowe, 2005), as well as smaller scale reports from Canada (e.g., Canadian Education Statistics Council, 2009; Ontario Ministry of Education, 2003) investigated the skills required for

proficient reading and, to some extent, how reading should be taught. However, there continues to be a gap between the research knowledge about learning to read and subsequent understanding in the public and professional arenas (Bursuck et al., 2004; Castles et al., 2018; Kilpatrick, 2015; Seidenberg, 2017).

Evidence-Based Instruction

Evidence-based practice is a term "used to describe instruction and intervention that have led to significant improvement in reading outcomes using strong research designs" (Al Otaiba et al., 2016, p. 28) and stands on the criterion that a program has been tested with the appropriate population and is found to be effective (Hempenstall, 2014, 2017). When considering research in education, it is necessary to have multiple converging studies with converging evidence so the outcomes can be trusted (Hempenstall, 2013; Levin, 2013; Lyon, 2003). However, an evidence-based instructional barrier exists as many teachers do not believe research can inform instruction, think that research is not easily accessible or practical, and suggest that it can be difficult to interpret and comprehend (Hempenstall, 2014, 2017; Levin, 2011; Lyon, 1998b). An additional barrier to research evidence for educators is that:

> everyone has gone to school and feels a level of expertise about the education system that would not be true of most other public services. People may then be less open to research evidence where it conflicts with their prior experience. (Levin, 2013, p. 11)

This research-to-practice gap is preventing the adoption of evidence-based instructional methods and children are not receiving exemplary instruction (Buckingham et al., 2013).

Levin (2013) used the term knowledge mobilization "to refer to efforts to understand and strengthen the relationship between research and practice" (p. 2) and recognized the fluid process between research and practice that is interactive, social, and gradual. Research evidence that is

attended to and implemented depends more on the organization and social relations than it does on individual background or dispositions (Levin, 2013). While there is evidence to suggest that educators have a strong interest in research findings to inform their practice (Levin, 2013) and teacher enthusiasm and participation is key to implementation (Hempenstall, 2006), information from colleagues and individual experiences continues to be more influential in instructional practices than research findings (Buckingham et al., 2013; Levin, 2013).

The Ontario Human Rights Commission (2019) has launched Right to Read, a public inquiry into the nature of reading instruction in Ontario public schools. Stating that learning to read is a human right (OHRC, 2019; UNESCO, 2019), the Ontario Human Rights Commission will assess if school boards are using evidence-based approaches for reading instruction, particularly for students with reading disabilities. These approaches are identified as the systematic, explicit instruction of the five key areas of reading (Bursuck & Damer, 2011). These five key areas of reading (phonological awareness, phonics, fluency, vocabulary, and comprehension) were acknowledged by the National Reading Panel's (2000) report based on a comprehensive analysis of the existing experimental and quasi-experimental research. But while public documents cite evidence-based practices as the preferred approach for decision making, this is not always demonstrated at the classroom level (Hempenstall, 2014). Teaching is often referred to as an art form with an absence of a scientific perspective (Hempenstall, 2006) and instructional practices might accurately be described as experience-based (Hempenstall, 2014, p. 113) instead of evidence-based.

Teacher Self-Efficacy

The International Reading Association (IRA) (2007) outlined the content knowledge necessary for new teachers, including conceptual understandings about the foundations of

language development, proficiency with formal and informal assessment tools to identify strengths and weaknesses, and the capacity to implement instructional strategies and materials that support readers of diverse backgrounds and abilities. Teacher effectiveness is a strong determinant in student learning (Reschly et al., 2009; Wright et al., 1997), and domain specific knowledge along with knowledge of how to teach the subject area are essential (Darling-Hammond, 2000). One aspect of effective literacy instruction relates to teacher confidence in knowledge and ability (Tschannen-Moran & Johnson, 2011).

The construct of self-efficacy has theoretical roots stemming from Bandura (1977) and application to teacher efficacy is rooted in Bandura's (1986) social cognitive theory. Social cognitive theory explores the influence and reciprocal interaction of cognitive processes, such as beliefs and behavior, with the environment (Bandura, 1997). Self-efficacy relating to knowledge and instruction is contextualized through the expectancy about one's ability to influence student achievement and an individual's aptitude to perform professional tasks (Ciampa & Gallagher, 2018; Clark, 2016; Kagan, 1992a) as well as a willingness to try new methods and persevere with students who are struggling (Ciampa & Gallagher, 2018). Bandura (1982, 1997) proposed four influences on self-efficacy beliefs: vicarious experiences, verbal persuasion, physiological arousal, and mastery experiences. Vicarious experiences, modeled by the teacher educator and mentor teachers, are shown to positively influence self-efficacy for literacy instruction for pre-service teachers (Helfrich & Clark, 2016; ILA & NCTE, 2017; Johnson, 2010).

Pre-service Teachers and Self-Efficacy

Teacher self-efficacy has been related to student achievement and can affect the effort put into meeting the needs of individual students and adopting new instructional practices (Gibson & Dembo, 1984; Gusky, 1988; Johnson, 2010; Woolfolk Hoy & Burke Spero, 2005) and is defined

as “teachers’ judgements about their abilities to promote students’ learning” (Woolfolk Hoy & Burke Spero, 2005, p. 343). An often overlooked area within teacher education programs involves beliefs about literacy instruction and content knowledge held by pre-service teachers (Brousseau et al., 1988; Ciampa & Gallagher, 2018). Teacher beliefs are defined as “individual, subjectively true, value-laden mental constructs that are the relatively stable results of substantial social experiences and that have significant impact on one’s interpretations of and contributions to classroom practice” (Skott, 2014, p. 19).

Methods courses and field placements offer a critical period for the development of self-efficacy considering self-efficacy is domain and context specific (Johnson, 2010; Wheatley, 2002) and research suggests that personal efficacy for teaching increases during those experiences (Housego, 1990; Hoy & Woolfolk, 1990). In a review of teacher education, Clift and Brady (2005) examined the impact of methods courses and field experiences on beliefs and practices and highlighted the positive influence of these opportunities on reading teacher beliefs. An increase of self-efficacy for literacy instruction has been demonstrated after engaging in one or two literacy methods courses (Clark, 2016) and field experiences (Duffy & Atkinson, 2001; Haverback & Parault, 2008, 2011; ILA & NCTE, 2017; Leader-Janssen & Rankin-Erickson, 2013).

Ciampa and Gallagher (2018) explored the self-efficacy beliefs of pre-service teachers from one Canadian and one American university. While the results of this study demonstrated that there was not a significant shift in literacy teaching self-efficacy beliefs over the course of one semester methods course and field experience, efficacy beliefs related to oral reading did increase over the term. Results also demonstrated that more field experiences correlated to higher self-efficacy related to engaging students and differentiating for diverse needs. The findings in

this study affirmed those of Tschannen-Moran and Johnson (2011) in that teachers who believed they had effective pre-service education in literacy instruction had high self-efficacy.

Conclusions presented by Wheatley (2002) challenged the frequent assumptions that low teacher self-efficacy is problematic. When examining teacher efficacy beliefs, Wheatley suggested that efficacious doubts are beneficial as this uncertainty has the potential to lead to seeking out learning opportunities, an increased responsiveness to diversity, collaboration with colleagues, and a motivation to change. Similarly, Haverback and Parault (2008) believed that pre-service teachers entering the profession with low self-efficacy might have a more realistic consideration of what they can accomplish.

Pre-service Teacher Beliefs

Pre-service teachers carry preconceptions and personal beliefs that are the subjective truth of the individual (Skott, 2014) and may be resistant to change (Kagan, 1992a). Personal beliefs may be shaped by the hours individuals have spent in the classroom as students where they have internalized models of teaching (Kagan, 1992a) and beliefs about subject matter (Gregoire, 2003) that may or may not be supportive of the evidence-base reflective of the current corpus of research on reading acquisition and reading instruction. Similarly, field placements during teacher education programs might not provide role models of teachers who reflect practices congruent with the learning that is taking place in the university courses (Johnson, 2010; Roskos et al., 1998). Pre-existing beliefs are obstinate, even when challenged with contradictory evidence (Gregoire, 2003; Kagan, 1992a) and can act as a barrier to new or conflicting beliefs (Risko et al., 2008). Findings in a recent study with pre-service teachers affirmed this assertion whereby prior beliefs served as filters to either accept or reject knowledge presented in the reading methods course (Vieira, 2019). The possibility exists that pre-service

teachers will seek to espouse knowledge that aligns with their pre-existing beliefs about content instead of revising those pre-existing beliefs with learned knowledge (Gregoire, 2003). This finding was recognized by Vieira (2019) whereby her participants, "actively focused on the content that helped to contextualize some of their experiences as having academic merit" (p. 188).

Once teachers' efficacy beliefs are established, they are difficult to change (Bandura, 1997; Ciampa & Gallagher, 2018; Skott, 2014); however, beliefs are found to be more susceptible to change early in the teaching career (Bandura, 1997; Woolfolk Hoy & Burke Spero, 2005) or early in learning experiences (Bandura, 1986) highlighting the importance of surfacing and reconstructing those beliefs for professional growth (Kagan, 1992b) in teacher education programs. Intentional opportunities to make beliefs explicit can serve as a catalyst for change in beliefs, providing pre-service teachers with the opportunity to affirm some and discard others (Risko et al., 2008). Beliefs have the potential to change through engagement in relevant social practices from personal experiences, teacher education programs, and collaboration with colleagues (Skott, 2014). Considering a teacher's sense of ability to affect student learning is related to student achievement (Hoy & Woolfolk, 1990), beliefs that are challenged rebound when student achievement is apparent (Tschannen-Moran & Johnson, 2011).

Knowledge Calibration

Teacher self-efficacy is the belief that one can influence student achievement; perceptions around knowledge and ability, however, may not be accurate (Clark, 2016; Cunningham et al., 2004). Cunningham et al. (2004) described this knowledge in terms of calibration, where one is highly calibrated if they know what they know and do not know. If teachers do not know what they do not know, they might not seek opportunities to improve in

these areas. Buckingham et al. (2013) described this as the "Peter effect"— drawing from a biblical passage wherein Peter's response to a beggar asking for money is that one cannot give what one doesn't have. In education, the Peter effect is that one cannot teach what one does not know. Knowledge calibration is important as it reflects the likelihood of engagement in learning opportunities and implementation of alternative instructional methods (Cunningham et al., 2004; Nicholson & McIntosh, 2018; Spear-Swerling et al., 2005) which are influential in educational improvement (Ghaith & Yaghi, 1997).

Studies demonstrate the influence of preparation on perceived self-efficacy (Spear-Swerling et al., 2005), confirming the need for intensive pre-service teacher education programs and ongoing professional development related to reading (IRA, 2003; NRP, 2000; Snow et al., 1998). For teacher educators, recognition of pre-service teachers' prior beliefs can be used to design positive learning experiences (Ciampa & Gallagher, 2018).

Developing Content Knowledge and Instructional Knowledge

Teacher education programs need to prepare pre-service teachers to develop an understanding of foundational knowledge of evidence-based practices (Cunningham et al., 2004; ILA, 2018; National Council on Teacher Quality, 2020) and the CLLRN (2009) called for the need to improve teacher education programs in the area of reading development and instruction. A critique of teacher education programs is that they offer too much theory and not enough practical advice (Murray et al., 2008); however, Brenna and Chen (2013) suggested a balance between the two as synthesized from the perspectives of classroom teachers. Another critique is that these programs provide little formal instruction in reading development and disorders (Lyon & Weiser, 2009) and Bos et al. (2001) proposed that teacher education programs should be fostering content and pedagogical expertise. Research on building teacher knowledge supports

that teacher education programs and professional development opportunities have an impact on developing increased pedagogical and domain specific knowledge (McCutchen, Harry, et al., 2002; Moats & Foorman, 2003; Spear-Swerling & Brucker, 2004). The challenge is that "evidence regarding the best ways to teach teachers of reading is much less robust than the evidence base for teaching reading itself" (Moats, 2009a, p. 393). There is recognition of the need for preparing future literacy teachers in a way that is responsive to the needs of all students (ILA, 2018).

Content Knowledge

Research recognizes the relationship between disciplinary knowledge and literacy achievement (McCutchen, Abbott, et al., 2002; Moats & Foorman, 2003; O'Connor, 1999). Teachers' literacy ability does not translate to explicit knowledge of language and print structures (McCutchen, Harry, et al., 2002) and pre-service teachers come to the teaching of reading with a limited knowledge base around the principles behind reading development and instruction (CLLRN, 2009; Lyon, 2003). Knowledge of the foundational processes required for skilled reading needs to be re-established with pre-service teachers and requires instruction and opportunity in teacher education programs in order to consolidate such awareness (Stainthorp, 2004).

Instructional Knowledge

Content knowledge is essential to good teaching; however instructional knowledge is necessary and teacher education programs provide opportunities to develop this knowledge (Darling-Hammond, 2000). Research suggests that high quality instruction can substantially offset disadvantages associated with poverty (Rivkin et al., 2005) and conversely, children who come to school prepared to learn may fail to do so because of ineffective literacy instruction

(CLLRN, 2009). However, the gap between research and classroom persists as "advances in knowledge about reading instruction appear to have not yet had a substantial impact on educator knowledge, despite increased emphasis in the literature" (Bos et al., 2001, p. 116). Piasta et al. (2009) suggested that "teaching reading effectively may not be as intuitive or based on common sense as has been generally accepted" (p. 225) and is not inherent to literate adults (Spear-Swerling & Brucker, 2004).

Resisting Knowledge

Researchers have investigated how pre-service teachers negotiated new understandings and concepts introduced in methods courses that may conflict with their personal beliefs. Massey (2010) highlighted areas where new knowledge was resisted or not applied in her study of participants in an elementary reading methods course. In Massey's study, students were often resistant to new thinking about instruction, specifically in the areas of comprehension and word identification, as participants believed they had an understanding of these areas, as well as prior beliefs and experiences that contradicted other course content. While the study concluded that students took away some learning and that students could articulate understanding with their peers, students were unable to internalize this knowledge or demonstrate its application in lesson planning or reflections. Massey's findings reaffirmed those established by Clift and Brady (2005) in their review of research of methods courses and field experiences. Clift and Brady found that, in some studies, pre-service teachers began to modify beliefs they initially resisted. However, other studies suggested that even when field experiences modelled and reinforced learning from methods courses, pre-service teachers resisted ideas that contradicted their views.

Another area of tension was that students were hesitant to incorporate and apply new learning in their field experiences if it contradicted what was current practice in the classroom.

Massey's findings support the benefit of deep, concentrated instruction and the necessity to surface prior knowledge and beliefs to provide opportunities to add to or change existing knowledge. Findings in this study were similar to a previous study by Duffy and Atkinson (2001) where the ability to articulate how new knowledge might inform reading instruction might not translate into teaching ability, and that some participants discarded research and theory when it was in conflict with classroom practice. Duffy and Atkinson also suggested the importance of providing pre-service teachers with opportunities to address misunderstandings about reading and reading instruction.

Summary

Chapter Two reviewed the literature that framed the present study. It began with a description of the theoretical framework: social constructivism. The next section explored the philosophies and approaches that have influenced, and continue to influence, reading instruction. Next, came an exploration of what is meant by evidence-based instruction and the gap that appears to exist between research and classroom practice. The following section discussed the literature around self-efficacy and research evidence to support the surfacing and examination of beliefs in teacher education programs. Lastly, this chapter examined the research pertaining to the development of content and pedagogical knowledge in teacher education programs and how pre-service teachers may resist new pedagogical or content knowledge when it conflicts with prior beliefs and understandings.

Chapter Three: Methodology

If there were only one truth, you couldn't paint a hundred canvases on the same theme.

Pablo Picasso, 1966

This chapter outlines the research design employed in this qualitative case study. The methodology and methods were guided by the central research questions: What patterns and themes in TC backgrounds appear alongside particular beliefs, held early in a required curriculum course in ELA, about the nature of reading and the teaching of reading? What patterns and themes emerge in the post-course reflections of TCs regarding their ideas about reading development and reading instruction?

The intent of this inquiry was to surface the beliefs and understandings about reading held by PSTs before and after a required methods course. A qualitative lens, and case study methodology, was the best match for the research questions I posed and provided a framework for me to capture the interpreted understandings held by participating pre-service teachers. The depth and breadth of understanding obtained through case study methods was apt for this study as "case study research changes the focus of teacher education program investigations from a 'macro' level encompassing broad issues of content, standards, and other program components to a 'micro' level for a close, in-depth look at issues that affect learning" (Maloch et al., 2003, p. 434). This study considered participant perspectives specific to reading and how these views were negotiated as they engaged in their literacy methods courses. This chapter provides details of the methodology that guided this study and is described in eight sections: (a) description of qualitative research; (b) philosophical assumptions and beliefs; (c) positionality of the researcher; (d) description of case study design; (e) description of this specific case study framework including an overview of my pilot study and then details of the inquiry; (f)

description of data collection measures and materials, and data analysis; (g) description of issues relating to the quality and evaluation of qualitative research; and (h) ethical considerations adhered to in the study.

Qualitative Research

This study used qualitative methods (Creswell & Poth, 2018; Denzin & Lincoln, 2018; Patton, 2015) through a social constructivist perspective (Creswell & Poth, 2018; Mertens, 2015) to explore pre-service teachers' beliefs about reading acquisition and reading pedagogy that are surfaced over the period of an ELA methods course. According to Lincoln et al. (2018), constructivist inquiry, an umbrella term for social constructivism (Au, 1998), aims to "gain understanding by interpreting subject perceptions" (p. 114) and also provides a theoretical foundation for examining experiences and knowledge-construction processes (Richards et al., 2018).

Qualitative research places an emphasis on multiple truths (Denzin & Lincoln, 2018; Schunk, 2012) and "is a situated activity that locates the observer in the world" (Denzin & Lincoln, 2018, p. 10). These truths, or subjective human realities, reflect individual understandings of reality through one's perspective (Erlingsson & Brysiewicz, 2013) and are created through the interaction of individuals and groups as they attempt to make sense of their environment (Lincoln & Guba, 1985). Qualitative research presents the opportunity to share the reality presented, situated in time and context, rather than seeking to discover an objective existing reality (LeCompte et al., 1992).

Merriam (2009) used the terms "emic" and "etic" to describe the perspectives, or lens, through which a researcher views a culture. Kenneth Pike, a linguistic theoretician, coined the terms in the 1950s and applied them to the study of human behaviour from outside (etic) or

inside (emic) a particular system (Olive, 2014). A decade later, anthropologist Marvin Harris adjusted the definition and application of the terms to shift the focus from the potential meanings of the emic perspective to the material roots that influence those meanings and beliefs (Olive, 2014). In qualitative research, Merriam (2009) highlighted the importance of delineating the process of meaning-making on the part of the researcher through the emic (participant's perspective) rather than the etic (researcher's perspective), although "a solely emic perspective is impossible to achieve" (Olive, 2014, p. 5) as researcher subjectivity will be present within the study (Barone, 2004; Creswell & Poth, 2018; Merriam, 1988, 2009; Olive, 2014). In the next section, I outline my beliefs as I position myself within the context of this study.

Positionality of the Researcher

I came to this research with lived experiences, both personally and professionally, that differ from the experiences of others, as do all researchers. In the context of this study, I considered how learning to read came very easily for me and was an activity I chose to engage in willingly; however, I did not naively think that this was how it was for everyone. For students with reading difficulties or disabilities, as well as those at-risk, an effective teacher is imperative to their success. Teacher education programs are critical in providing the knowledge, opportunities, and experiences for beginning teachers to be proficient in their practice. Reading is a complex skill to teach and requires an in-depth knowledge of content and pedagogy, as well as understanding reading development and acquisition to support children through all phases of learning. These personal beliefs have shaped my research interests in improving literacy methods courses and supporting pre-service teachers to become teachers of reading. In fact, my whole journey as a teacher and a parent is what brought me to graduate studies and the focus of this study.

As a researcher, positioning myself within the context of the study engages the concept of reflexivity (Creswell & Poth, 2018). The dual strands of reflexivity include situating your experiences with the case being explored and describing how these experiences shape interpretation (Creswell & Poth, 2018). As a qualitative researcher, I was not meant to maintain an objective distance from the participants (Lincoln et al., 1986). Rather, my role was that of a co-constructor of knowledge, interpreting the meaning of lived experiences (Lincoln et al., 2018). To this end, within a social constructivist framework, truth emerges from a consensus of the constructors (the participants along with the researcher) and is not proposed as an objective reality (Adams, 2006; Patton, 2015).

Qualitative research is creative and interpretive (Denzin & Lincoln, 2018) and interpretations were constructed through the insights and perspectives that I, as the researcher, carried forward to the study. However, participants are at the center of this inquiry, a positioning encouraged by Richards et al. (2018), and it was imperative that I listened without judgement and remained open to contrary findings (Yin, 2009). Use of open-ended questions on the survey and during the interviews privileged participant voice and acknowledged their varied perspectives as contributors to this study, illuminating individual journeys in literacy. This qualitative study recognizes knowledge as relative and contextual and is constructed upon the experiences of the participants (Lincoln et al., 2018). Through thick description I sought to give voice to the participants and their experiences; however tension exists in sharing understandings as the direction of knowledge is altered by my decisions regarding participant selection (Norum, 2008) and methodology (Creswell & Poth, 2018).

As I considered the purpose of engaging in this inquiry, Merriam's (1988) suggestion resonated with me: that "research focused on discovery, insight, and understanding from the

perspectives of those being studied offers the greatest promise of making significant contributions to the knowledge base and practice of education" (p. 3). By sharing the insights from the PSTs who participated, my hope is that this study will contribute to existing research around reading, PST knowledge, and teacher education programs.

Philosophical Assumptions and Beliefs

A qualitative researcher approaches the inquiry with a set of ideas and a framework that specifies a set of questions which are examined in specific ways (Denzin & Lincoln, 2018). A social constructivist framework was appropriate for this study as pre-service teachers navigated their own understandings while constructing knowledge through lived experiences and interactions with others (Lincoln et al., 2018). As discussed in Chapter 2, a constructivist approach is concerned with how individuals make meaning and develop knowledge, and is "centered on the personal, subjective nature of knowledge construction" (Au, 1998, p. 299). Social constructivism is a form of constructivism, widening the lens of the construction of knowledge from the individual to the social group and includes the role of the mentor in mediating learning (Adams, 2006; Au, 1998; Hill, 2012). Throughout this dissertation, at times I refer to constructivist principles as they are overarching to a social constructivist framework (Creswell & Poth, 2018). While this study relies on social constructivism specifically in the way of how interactions with others (i.e., the environment, peers, mentor) influence the learning process, and in the construction of knowledge through interaction with participants and the analysis of their subjective experiences (Creswell & Poth, 2018), important foundational elements of constructivism are present. The constructivist paradigm adopts relativist ontology, subjectivist epistemology, a naturalistic set of methodological procedures (Denzin & Lincoln,

2018) and axiological beliefs that honour individual values (Creswell & Poth, 2018). The philosophical stance, as follows, identifies how these aspects of the study connect to the whole.

As a qualitative researcher, the realities I brought to this work shaped the nature of this study. These philosophical assumptions, relating to ontology, epistemology, methodology, and axiology, provided context and direction for the decisions around the inquiry, theoretical framework, study design, and methods for data collection and analysis. This qualitative study was guided by the philosophical beliefs, outlined by Creswell and Poth (2018), that multiple realities are constructed through our lived experiences and interactions with others (ontology), that knowledge is co-constructed and shaped by individual experiences (epistemology), meanings and interpretations are induced through multiple forms of data (related to methodological considerations of varied data sources), and individual values are honoured and negotiated between individuals (axiology).

Ontological Beliefs

Engaging in qualitative research supports the position that individuals bring forth multiple realities (Creswell & Poth, 2018; Lincoln et al., 1986). Schunk (2012) contended that knowledge is based on beliefs and experiences, highlighting individual *truths*. This ontological belief aligns with the social constructivist paradigm in that truth is not informed by an objective reality (Patton, 2015; Schunk, 2012) but that multiple realities are shaped through experiences and interactions (Creswell & Poth, 2018; Tuli, 2010). Yilmaz (2013) described the cultural influence on knowledge construction:

> Qualitative research design assumes that knowledge is not independent of the knower, but socially constructed and that reality is neither static nor fixed. Since there are multiple realities that different cultural groups construct on the basis of their world views or value

systems, there are multiple interpretations or perspectives on any event or situation. (p. 316)

Interpretive researchers seek to investigate, interpret, and describe the varied realities of the participants (Tuli, 2010) within the context of the interactive processes and the environment of the lived experiences (Creswell & Creswell, 2018; Lincoln et al., 1986). In this study, I recognized, however, that I also brought my own reality to the research. The "hand of the researcher" (Lawrence-Lightfoot, 2005, p. 11) is everywhere in qualitative inquiry. It is recognized that the researcher as instrument (Creswell & Poth, 2018; Norum, 2008) carries views, values, beliefs, and assumptions to the research. Through this lens, the researcher chooses the topic and makes decisions around who will be asked to participate (Lawrence-Lightfoot, 2005; Norum, 2008), designs data collection instruments, collects, and analyzes the data (Creswell & Poth, 2018; Norum, 2008), and determines how the results will be presented (Norum, 2008). While researcher biases, dispositions, and assumptions are situated within the research, qualitative research recognizes the importance of credibility (Barone, 2004) and measures are taken to ensure the findings of the study are congruent with reality (Merriam, 1988, 2009). The issue of credibility is discussed more fully later in this chapter.

Crotty (1998) outlined ontology as the "study of being" (p. 10) as it pertains to reality. He merged ontology with epistemology, suggesting that meaning exists only when conscious beings attribute meaning and make sense of it. Ontology and epistemology sit alongside one another to inform the theoretical perspective, "for each theoretical perspective embodies a certain way of understanding what is (ontology) as well as a certain way of understanding what it means to know (epistemology)" (Crotty, 1998, p. 10). A social constructivist perspective contends that construction of knowledge is derived from and preceded by social relationships and that

individuals integrate knowledge through assimilation or accommodation to fit the environment (Young & Collin, 2004).

Epistemological Beliefs

Crotty (1998) stated that "epistemology is concerned with providing a philosophical grounding for deciding what kinds of knowledge are possible and how we can ensure that they are both adequate and legitimate" (p. 8). A social constructivist framework acknowledges that knowledge is a social construct shaped by the interconnectedness between the individual and the environment (Richards et al., 2018) and is historically and culturally specific (Creswell & Poth, 2018; Young & Collin, 2004). Guerriero (2017) contended that "knowledge is dynamic; it is changed and shaped by learning, experience and various other processes" (p. 38) and is therefore subjective. It is through the subjective experiences of the participants (Creswell & Poth, 2018) that multiple realities are surfaced and shared.

Creswell and Poth (2018) characterized epistemological assumptions as getting close to participants within their setting so that the study shares their experiences firsthand. To convey the multiple realities shared by the participants, it is necessary to provide thick descriptions including the time and context within the natural setting (LeCompte et al., 1992; Lincoln et al., 1986) and highlight the unique experiences of the individuals (Patton, 2015). This study utilized surveys and semi-structured individual interviews to gain insight into the lived experiences of some of the participants. Direct quotes are used to accurately reflect the multiple perspectives, as well as shared understandings, of the case that was studied. Epistemological beliefs recognize that meaning is subjective and findings are co-created through the interactions between the researcher and the participants and shaped through our individual lived experiences (Lincoln et al., 2018). In this way, findings are context-specific rather than generalizable, as will be discussed later in this chapter.

Methodological Beliefs

The methodological underpinnings of qualitative research are defined as "inductive, emerging, and shaped by the researcher's experience in collecting and analyzing the data" (Creswell & Poth, 2018, p. 21). An inductive approach to research calls for flexibility and responsiveness during the research process, as research questions could change during a study to reflect understandings (Creswell & Poth, 2018) of various social interactions—among the participants, between the participants and their experiences during the ELA methods courses, between the participants and the researcher. Throughout the research process, I was aware that my own perceptions of the emerging data and their meanings may be readjusted as further data were collected and analyzed. Qualitative research draws on a variety of methods and interpretive practices including interviews, conversations, field notes, observations, artifacts, and focus groups (Barone, 2004; Merriam, 2009; Stake, 1995). The interpretive lens brought to each practice calls for individual understanding (Denzin & Lincoln, 2018) and recognizes researcher influence as well as the theoretical perspective brought to the study.

This study sought to explore a rich understanding of the topic being studied. When I presented the study to recruit participants, I established rapport by "convey[ing] to them that their knowledge, experiences, attitudes, and feelings are important" (Patton, 2015, p. 457) and crucial to the study. The need to establish rapport (Fontana & Frey, 2000; Gill et al., 2008) was critical for those responding to the survey as well as those participating in interviews to facilitate feelings of openness and trust. It was important that participants felt the content they shared would be free of judgement and that what was communicated held significance because of who was saying it (Patton, 2015). As my study aimed to surface the beliefs and understandings

negotiated by the participants, it was necessary that they felt their responses could be open and honest.

A flexible, emergent design (Merriam, 2009; Patton, 2015) supported my objective to focus on participant perspectives. Due to conducting this study during our pandemic era, individual interviews were conducted virtually. Several considerations were adhered to when conducting the virtual interviews. Following the recommendations of Santana et al. (2021), it was important to consider the platform for conducting the interview. WebEx was chosen as this was the learning platform the participants were familiar with and included a recording feature. Additionally, I ensured that I was familiar with the platform prior to the interviews. I conducted the interviews in a private space, free of interruptions and distractions, to maintain participant anonymity and to establish a relationship of trust and empathy. Lastly, I was mindful of 'zoom fatigue' (Santana et al., 2021), and recognized that participants were just completing a semester of remote classes with synchronous lectures. With this in mind, I provided participants with choice for the day and time within a given week for a one hour interview.

Aligned with respecting my interviewees (rapport) and being open to the content that is shared without judgement (neutrality), I made a concerted effort to listen and avoid interrupting (Savenye & Robinson, 2005; Seidman, 2006), seek to understand without judgement (Patton, 2015), and explore the descriptions shared by the interviewee (Kvale & Brinkmann, 2009; Seidman, 2006) to increase the richness and depth of those responses (Patton, 2015). Despite the interviews being conducted virtually, tenets of conducting good interviews remained applicable. Close listening required that the interviewer concentrated on what the participant said and considered what was left unsaid, which led to further questions (Hermanowicz, 2002). Probing is a way to uncover meaning or get to the details of what someone is saying, and was accomplished

through asking sub-questions, re-stating or re-phrasing questions, or by remaining silent and offering the space for the interviewee to open up and speak freely (Hermanowicz, 2002). It is recognized that a power asymmetry existed in that I, as the interviewer, set the stage for the interview, determined the topic, created and posed the questions, and concluded the interview; however, the knowledge constructed through the interview process was derived from my interactions with the participants as they shared their lived experiences from their point of view (Kvale & Brinkmann, 2009).

Axiological Beliefs

Axiological assumptions, inherent within qualitative research, recognize that the researcher brings values to a study (Creswell & Poth, 2018; Lincoln et al., 1986) and these values are made explicit when positionality is identified within the context and setting of the inquiry (Creswell & Poth, 2018). Aspects that reflect researcher values and biases include social position, personal experiences, and professional beliefs (Creswell & Poth, 2018) and influence the lens through which the study is conducted and data is analyzed. This axiom also recognizes the mutual influence between the researcher and participants and rejects the notion of an objective distance (Lincoln et al., 1986).

Case Study Design

Crotty (1998) suggested that a methodology reflects the design of the study and underlies the particular methods used to gather and analyze data. Case study is often referred to as a methodology (Baxter & Jack, 2008; Merriam, 1988, 2009; Schwandt & Gates, 2018) while others define it as a method (Crotty, 1998), the ‘what’ that is to be studied (Stake, 1995, 2000), or a research process (Yin, 2009). As a research design, case study is used to contribute to our knowledge and understanding of complex social phenomena (Yin, 2009). In making this choice,

I sought to explore, over a period of time that overlaps the length of a required ELA course, the responses of pre-service teachers to questions about reading acquisition and instruction.

Interpretive Case Study

An interpretive case study design (Merriam, 1988) was appropriate for this study as it directly addressed the specific research questions I was posing. This design is used to "illustrate, support, or challenge theoretical assumptions held prior to the data gathering" (p. 28). The theoretical assumptions that guided this study were situated within a social constructivist paradigm, suggesting that knowledge is constructed and reconstructed through interactions (Lincoln & Guba, 1985; Merriam, 2009; Olson, 1995; Richards et al., 2018). Denzin and Lincoln (2018) noted that "all research is interpretive: guided by a set of beliefs and feelings about the world and how it should be understood and studied" (p. 19). Interpretivist research situates reality as socially constructed and influenced by the historical and cultural norms of individuals (Creswell & Creswell, 2018; Merriam, 2009) and the role of the researcher is not to find knowledge, but rather to construct knowledge (Merriam, 2009).

This study relied on participants' interpretations of their beliefs and experiences as they engaged in constructing and reconstructing knowledge around reading acquisition and instruction. A social constructivist paradigm emphasizes the importance of individual perspectives; hence case study was suited to this framework because this design adopted data collection methods aligned with capturing individual perceptions, such as in-depth interviews (Blatter, 2008). Both Stake and Merriam contended that the epistemological beliefs that orient qualitative research are constructivist and represent the multiple perspectives of the case (Yazin, 2015).

Overview of the Study

Miles and Huberman (1994) delineated the idea of "case" as a "phenomenon of some sort occurring in a bounded context. The case, is, in effect, your unit of analysis" (p. 25). Defining the boundaries of the case is critical for focusing and framing the data collection and analysis (Creswell & Poth, 2018; Hancock & Algozzine, 2017; Merriam, 1988, 2009). A bounded system is specific in establishing the parameters of the case in regard to participants, time, place, and activity (Creswell & Poth, 2018; Merriam, 2009; Stake, 1995, 2000). A case study approach permits the researcher to study the experience in depth, and this process matches well with the intent of this study based in the context of ELA methods courses bounded by instructor, participants, site, activity, and time.

The setting for this study was at an accredited university in Western Canada, and the participants were TCs enrolled in ELA methods courses offered through their College of Education. These courses are a requirement in the elementary program at this site. Participants registered in this program will have an interest in teaching students ranging from Pre-Kindergarten through Grade 8, or specific grades in this range.

Prior to engaging in this study, I conducted a pilot study that informed the delivery of research methods in a context similar to the study site. An overview of the pilot study follows here prior to offering the specific details regarding the selected case. The pilot study informed particular aspects of the study at hand as well as supported consideration of specific themes within an otherwise open coding system. A detailed description of the data analysis process for the current study, guided by Lune and Berg's (2017) content analysis and Braun and Clarke's (2006) thematic analysis phases, is outlined later in this chapter.

Overview of Pilot Study

In a process similar to the one described for this dissertation, I received instructor permission and then conducted the online survey with five pre-service teachers in the fall of 2020, following up with a WebEx interview with one of them. I was able to test out my survey questions and interview delivery and assess the data for interesting patterns as well as evaluate the study design itself.

Survey and Interview Process

As a result of the pilot, I was able to reflect specifically on the survey questions and the interview questions and process. From the survey, I noted that participants responded to the open-ended questions as well as questions that prompted them to supply an answer and then justify their response. I was encouraged by the thoughtfulness and transparency shared by the respondents and was confident that responses reflected my research focus: the beliefs and understandings around reading surfaced by pre-service teachers. When considering the nature of the current study, three additional questions were added to the post-survey as a result of the pilot. One question identified the specific literacy course that was completed as participants were recruited from two required courses. Another asked the respondents to note if they had completed the pre-survey which would offer an opportunity to analyze data across individuals. A third question was added to consider self-efficacy for literacy instruction after the completion of a required methods course.

In the pilot study, one participant interview was conducted. The interview with Elizabeth Marie (pseudonym chosen by the participant) was conducted virtually using the same platform as was used in the current study, providing an opportunity to familiarize myself with the platform and its features. When I read through the pre-surveys, I noted that participants used specific terminology relating to language and literacy that I interpreted the meaning of (Denzin &

Lincoln, 2018; Merriam, 1988; Yin, 2009) based on the context of the questions and their responses. I was reminded of my role in the research: I was the primary instrument in analyzing data (Merriam, 2009) where my own reality was brought to bear. During the course of the interview, I was aware of terminology specific to reading pedagogy which both Elizabeth Marie and I used, prompting clarification. What I realized was that I may be using terminology that I have become very familiar with through years of experience in the classroom and in deepening my understanding of reading related skills and pedagogical practices. Similarly, I recognized the need to prompt Elizabeth Marie to explain terms and concepts she used, so I was not left to make assumptions about her understandings but rather had an accurate portrayal of her insights. This need to consider language was important as each of us used domain specific vocabulary and I wanted to ensure both she and I understood the contextual nature of specific referents (Fontana & Frey, 2000). The opportunity to clarify language during the interview enhanced understanding of Elizabeth Marie's meaning-making process, but guided by an interpretivist paradigm, my role was nonetheless a co-constructor of knowledge when interpreting data.

Prior to the interview, I was concerned with how I would build rapport with Elizabeth Marie "through a screen". I wanted her to feel comfortable in our interaction (Morgan & Guevara, 2008) so she would feel this was a safe space for her to share openly and honestly. Although I was nervous, I relied on the experiences of connecting with colleagues virtually that I had accumulated over the course of the pandemic. As with meeting new colleagues, the interview required me to build rapport through establishing a relationship of trust in a short period of time (Morgan & Guevara, 2008). At the onset of the interview with Elizabeth Marie, I thanked her for her participation and willingness to contribute to the study. I reminded her of the research and described the procedures for the interview (Morgan & Guevara, 2008) and

reaffirmed ethical principles such as anonymity (Gill et al., 2008) and that I would be recording the interview, to which I had received prior consent. Elizabeth Marie shared her desire to be of value to the study and the ease at which the conversation flowed from there was noticeable. I realized that there was no need for me to be nervous. Elizabeth Marie was gifting me her time to explore her perceived experiences, views, and beliefs at a deeper level than the survey (Gill et al., 2008).

Questions on the interview protocol were revised as a result of the pilot. One question relating to preparedness was similar to what was asked on the survey, so seemed redundant. This question was reworded to elicit insight into how completion of the methods course may have shifted feelings of preparedness to teach reading. Several questions were added to interrogate how participation in the methods course may or may not have shifted beliefs and understandings about reading. Additional questions were added to explore participants' thoughts around the instructional and learning experiences for reading development they would provide for diverse groups of students. One question was added to prompt a deeper understanding of the term "reading strategies" as this was prevalent in the pilot survey responses and I wanted to know how individuals understood this term. As well, a theme about reading levels, explored in more detail in the following section, prompted the addition of a question around the understanding of reading levels, where they are placed in the context of reading instruction, and how they might be privileged.

Findings

Survey data from the pilot study, collected at the onset of the first of two required literacy courses, were analyzed using Braun and Clarke's (2006) phases of thematic analysis. Themes were recognized as important aspects that presented as patterned responses across the coded data

(Braun & Clarke, 2006). Although the data were limited to a small number of participants, one striking finding related to the idea of levels. The notion of levels permeated throughout the surveys as an indication of reading development, an assessment and progress monitoring tool, and as reading material. I was intrigued by the emphasis on levels and felt it was an important theme to interrogate in the current study. An additional finding highlighted the disconnect between the person (reader) and the process (reading) that surfaced in participants' definitions of reading and good readers. The act of reading was viewed as one dimensional: a demonstration of either decoding or gaining meaning. However, good readers were defined as exhibiting dispositional characteristics: someone who challenges him or herself, who persists, and who enjoys reading. How these definitions translated to how participants perceived their role as a reading teacher was something I wanted to investigate, as well, as I moved forward with the current study.

The pilot study unfolded as a result of the COVID-19 pandemic and became instrumental in guiding the current study. While it had not been part of my initial research plan, the pilot study afforded me the opening to test and refine survey and interview questions, as well as prepare me for the interview and analysis process. As a novice researcher, the ability to reflect on my interview techniques and go through the process of transcription prepared me for subsequent interviews. The pilot also presented the opportunity to engage in Braun and Clarke's (2006) thematic analysis phases to interpret themes based on the pre-survey data. The pilot study became an important part of my journey as a researcher as I moved to conduct the current study.

Details of the Selected Case

Participants for this inquiry were PSTs enrolled in one of two literacy methods courses required as part of their teacher education program at a university in Western Canada. With

ethics approval from the university, I contacted the instructor of a literacy methods courses prior to the start of the winter term (Appendix A). The instructor signed consent (Appendix B) and was provided the recruitment poster (Appendix C) to post to the learning platform. Students were assured, through information on the recruitment poster, that participation was voluntary, data would be recorded under a pseudonym, and that the course instructor would not be aware of which students participated. I was invited to speak to the students virtually during one of their online classes. During this time, I shared information regarding the study (Appendix D) and invited voluntary participation. Again, it was reiterated that the course instructor would not be privy to information regarding which students were participating in any part of the study. A link to the survey was available to students on the recruitment poster, as well as sent via email to the instructor to forward to students. Consent for participation (Appendix E) was embedded in the online survey and participants were informed that completion of the survey implied consent.

Students registered in their first required literacy course were recruited to participate in the pre-survey. Their responses would elicit early understandings of reading instruction and development prior to engaging in a methods course. Of the 36 students registered in the first required course, 11 completed the pre-survey. Students from both required literacy methods courses were recruited for participation in the post-survey and interviews, to be completed at the end of the semester. This selection of participants would provide data around the understandings of reading development and pedagogy after course engagement. Of the 76 total students enrolled in these two courses, six completed the post-survey. An opt-in for individual interviews was included on the survey and at the completion of the course, I contacted all those who showed interest via email with an invitation for an interview (Appendix F). Three participants gave consent prior to the interviews (Appendix G) which were conducted virtually. Table 1 outlines

the data collected from each participant. Names used throughout the study are pseudonyms chosen by the participants.

Table 1

Participants: Contributed Data Sources

Participant *gender identity not specified under pseudonym	Data
Rao	pre-survey, post-survey, interview
Minerva	pre-survey
Noah	pre-survey
Luna	pre-survey
Nicole	pre-survey
Bree	pre-survey
Freddie	pre-survey
Lauren	pre-survey
Zephyr	pre-survey
Jeff	pre-survey
Joseah	pre-survey
John	post-survey
Corgi	post-survey
Steve Rogers	post-survey
Antonina	post-survey, interview
Shelby	post-survey, interview

Merriam (2009) stated that "purposeful sampling is based on the assumption that the investigator wants to discover, understand, and gain insight and therefore must select a sample from which the most can be learned" (p. 77). The criterion for inclusion used to achieve purposeful sampling here was that participants were enrolled in a required literacy course. All students enrolled in the courses were invited to participate in the pre and post-surveys as this population would provide rich information about how the required literacy courses influenced pre-service teachers' understandings about reading acquisition and instruction. An additional sampling of participants were invited to participate in individual semi-structured interview. These interviews provided a more robust, in-depth understanding of the process of how the pre-

service teachers negotiated beliefs and understandings of reading acquisition and reading development throughout the methods course.

Participant numbers in this study reflect a small sample size. This may be due to the impact of COVID-19 and the additional stressors faced by students. PSTs may have been reluctant to participate completing an online survey and online interview, after engaging in online courses for several semesters.

Reports have indicated an increase in physical, behavioral, and mental health difficulties for many people (Peper et al., 2021). The shift to synchronous learning required students to engage through screens for hours resulting in "zoom fatigue", a concept applied to all platforms used for synchronous online teaching and learning. Peper et al. (2021) noted a reduction in interaction and participation during synchronous learning. These authors indicated an increase of time spent sitting that contributed to passive engagement, as well as eye strain from focusing on the screen. Students also reported feelings of social isolation, difficulty with maintaining focus during online classes, and disruptions to learning due to technical issues (Peper et al., 2021).

While this study has a small sample size, in the context of qualitative inquiry "an adequate sample size permits (by virtue of not being too large) a deep, case-oriented analysis that results in a richly textured understanding of experience" (Sandelowski, 1995, p. 183). Founded on the results of the pilot study, I was confident that data collection methods used in the current study would provide rich, detailed data. PSTs who participated in the study offered diversity in backgrounds, experiences, and grade level interests, as indicated in Table 2, and contributed data that was, in fact, rich and detailed.

Table 2

Participants: Demographic and Background Information

Participant *gender identity not specified under pseudonym	Age Group	Previous Post-Secondary Degree or Certificate	Previous Experience With Children Learning to Read	Grade Level Interest
Rao	31-40	Bachelor of Arts	Parent and Educational Assistant	3-5
Minerva	24 or under	Bachelor of Arts	None	4-5
Noah	31-40	Bachelor of Arts	Parent	5
Luna	24 or under	Bachelor of Arts	Educational Assistant	3
Nicole	25-30	N/A	Educational Assistant	2
Bree	24 or under	N/A	None	1
Freddie	24 or under	N/A	None	3-5
Lauren	24 or under	N/A	Field Experience	2
Zephyr	24 or under	N/A	Voluntary Hours in Grade 2 Classroom	3
Jeff	24 or under	N/A	Some (Unspecified)	8
Joseah	24 or under	N/A	Yes (Unspecified)	2
John	25-30	Bachelor of Science	None	7
Corgi	24 or under	N/A	None	1
Steve Rogers	25-30	N/A	None	7
Antonina	24 or under	N/A	Field Experience	5-8
Shelby	31-40	N/A	Parent, Parent Volunteer, School Community Coordinator	3-5

Data Collection

A strength of case study research is the use of multiple sources of data (Baxter & Jack, 2008; Hancock & Algozzine, 2017; Merriam, 1988; Miles, 2015; Stake, 2000; Yin, 2009) collected to provide a descriptive, in-depth representation of the case (Lincoln et al., 1986; Merriam, 1988; Schwandt & Gates, 2018). Yin (2009) stated that a thoroughly conducted case study is supported by multiple sources of evidence and ensures the robustness of the study. The use of multiple sources of data allowed for the convergence of understanding, adding "strength to the findings as the various strands of data are braided together to promote a greater understanding of the case" (Baxter & Jack, 2008, p. 554). Miles et al. (2014) noted that "qualitative data, with their emphasis on people's lived experiences, are fundamentally well suited for locating the *meanings* people place on the events, processes, and structures of their lives and for connecting these meanings to the *social world* around them" (p. 11). This view is congruent with the epistemic beliefs that knowledge is socially constructed (Lincoln et al., 2018).

Although case study research does not claim specific methods for data collection (Merriam, 2009), commonly used sources of data include interviews (Baxter & Jack, 2008; Merriam, 1988; Miles, 2015; Yin, 2009) and can include evidence from surveys that provide categorical instead of numerical responses (Merriam, 1988; Miles, 2015; Yin, 2009).

Data collection for this study occurred in two phases over the course of four months. Phase one included the collection of pre-survey data and was gathered at the beginning of the winter semester. The intent of the pre-survey was to elicit responses from the PSTs prior to their engagement and instruction around reading pedagogy through their methods course. Phase two occurred at the conclusion of the course. During this time, post-surveys were completed. Interviews were conducted approximately three weeks after the last scheduled class of the course

to ensure participants were done all assignments and final exams. The purpose of the post-survey and interviews was to inquire into shifts and evolved understandings related to reading.

The use of pre and post-surveys, as well as interviews, elicited participant perspectives and the meanings they ascribed to their experiences during their ELA methods courses. In case study, it is important to converge sources of data to ensure comprehensive findings reflective of the participants' understandings. Multiple sources of data were used as a lever to uncover additional depths of information, thereby "create[ing] a full and deep examination of the case" (Lune & Berg, 2017, p. 161). Characterized by rich, detailed, and in-depth data (Baxter & Jack, 2008; Lune & Berg, 2017; Seidman, 2006), this case study sought to identify the nuances and patterns presented by the participating PSTs. The strength of the case study design rests in its ability to delve deeper into the subject matter and provide an in-depth description of the experience, specifically the beliefs and understandings of PSTs, and how this case may be compared across cases of similar context.

Survey

Use of surveys (Merriam, 1988; Miles, 2015; Yin, 2009), also at times referred to in the literature as questionnaires (Johnson & Christensen, 2013), may be used for data collection in qualitative studies. Both terms have been used to identify data collection methods in quantitative studies (see Brinkmann & Kvale, 2005; Chesebro & Borisoff, 2007); however, scholars of case study methodology, including Merriam (1988) and Yin (2009), use the term survey as a data collection method, citing that surveys are said to involve categorical rather than numerical responses (Yin, 2009) and thus the "survey" tool was selected as a key method. The use of surveys for data collection adds to a holistic understanding of the case (Baxter & Jack, 2008) by producing qualitative data as part of the evidence (Merriam, 1988). Open-ended questions on the

survey were used to elicit narrative responses (Julien, 2008) that provided details about understandings, opinions, experiences, and beliefs of the participants (Jansen, 2010; Julien, 2008). Closed questions provided response categories that were consistent across the participants (Julien, 2008) and numbers were used to count frequencies and search for categories in the data (Jansen, 2010; Savenye & Robinson, 2005). Although numbers were used to interpret data from the survey, I was aware that behind every number "lies a qualitative source" (Merriam, 1998, p. 68). While the survey provided data around frequencies, this numeric data was analyzed and interpreted through a qualitative lens and extended, in the case of three participants, through follow-up interviews.

The pre and post-survey (Appendix H) utilized in this study was adapted from an original instrument created to track teacher beliefs related to literacy teaching (Gove, 1983; Vacca et al., 1991) and used in subsequent studies by Brenna and Dunk (2018, 2019)**.** This survey was used to collect data on participant accounts of knowledge building throughout their engagement in ELA methods courses. The pre and post-surveys provided data that were analyzed separately and as a collective group. Including demographic questions in the survey provided the opportunity for participants to share some information about themselves (Johnson & Christensen, 2013). Attribute coding of the demographic information included in the survey, alongside participant responses, was used to address the first research question: What patterns and themes in TC backgrounds appear alongside particular beliefs, held early in a required curriculum course in ELA, about the nature of reading and the teaching of reading? The pre and post-surveys took approximately 30 minutes to complete, were administered and collected by the researcher, and each participant was asked to choose a pseudonym and use the same pseudonym on each survey.

Interviews

The use of interviews in qualitative research, "attempts to understand the world from the subjects' points of view, to unfold the meaning of their experiences, to uncover their lived world prior to scientific explanations" (Kvale & Brinkmann, 2009, p. 1) and are considered essential sources of information (Yin, 2009). The collaborative process between researcher and participant during an interview enables the individual to share their stories (Baxter & Jack, 2008) and opens the door to multiple realities (Stake, 1995). The stories of the participants are "a way of knowing" (Seidman, 2006, p. 7) and the multiple voices of the individuals are described in detail and compared to provide a depth of insight reflective of the case (Savenye & Robinson, 2005).

The use of semi-structured interviews was guided by predetermined questions used flexibly to gain an in-depth understanding of personal perspectives (Hancock & Algozzine, 2017; Merriam, 2009) on issues deemed important for the research study (Brinkmann, 2018; Gill et al., 2008). These interview questions (Appendix I) were used to gain an understanding of the learning processes and shifting beliefs experienced by pre-service teachers. The interview protocol was revised after the initial trial of the questions during the pilot study to further interrogate negotiated understandings as well as consider noteworthy themes identified in the pilot. Questions were open-ended and sought descriptions of how the participants experience the world (Brinkmann, 2018; Yin, 2009) and provided opportunities for information to surface that may not have been otherwise considered by the researcher (Gill et al., 2008; Kvale & Brinkmann, 2009).

In this study, participants were invited to opt-in on the survey for subsequent in-depth interviews. Interviews were conducted via WebEx, recorded, and later transcribed and coded for interpreted themes. Each interview was approximately one hour in length. Member checking occurred when participants had the opportunity to review and edit interview transcripts, which

ensured their perspectives were not misrepresented and provided an opportunity for them to exclude data. It is recognized that the interview process demonstrated an inherent power asymmetry as the interviewer, or researcher, began the interview, determined the topic, asked the questions, and concluded the interview. Thus, it was important to build rapport with the participants (Fontana & Frey, 2000; Gill et al., 2008). My confidence in establishing this relationship of trust was enhanced through my experience in conducting the interview during the pilot study. Additionally, interviewees chose the day and time within the interview window to ensure that the interview was conducive to their schedules. As well, while I was informed by the prepared interview questions, I remained flexible and responsive to the context of the interview and the shared responses of each participant by adapting questions and seeking clarification to better understand their perspective. Use of the semi-structured interviews privileged the participant perspective (Patton, 2015), recognizing that knowledge is produced through conversation (Kvale & Brinkmann, 2009) and reflected the social constructivist orientation that provided a framework for this study.

When comparing participant perspectives, I searched for connections and emerging themes while being cautious that narratives which present as contradictory with others cannot be dismissed (Seidman, 2006). By rejecting passages that seem inconsistent, the researcher could be using only information that supports their own opinions or beliefs (Seidman, 2006). Interviews provided the opportunity for participants to share how they interpreted their experiences (Merriam, 2009; Yin, 2009) without being influenced by the perceptions of others.

Data Analysis

Case study research that focuses on the particularities of what is studied is descriptive and heuristic (Merriam, 2009; Stake, 1995). Writing rich, thick descriptions to capture participants'

point of view contributed to the depth and particularity of this inquiry, creating space for what this case might represent to the reader. As well, the case has the potential to provide vicarious experiences for the reader that merge with what is known (Merriam, 2009). Fundamental to case study research is an in-depth analysis, with participants studied in the natural context, and with a view to gain understanding and meaning from the perspective of the participants (Hancock & Algozzine, 2017; Merriam, 2009; Stake, 1995). Analysis of data involved a coding process that was dynamic and considered the multiple perspectives of individuals (Benaquisto, 2008) and the relationships and patterns amongst them.

The design of qualitative research requires the researcher to be flexible and responsive (Merriam, 2009; Patton, 2015). To this end, analysis occurred simultaneously with data collection to consider if more data needed to be collected (Creswell & Poth, 2018; Merriam, 1988; Yin, 2009) and to check with participants to ensure interpretations were accurate (Merriam, 2009). All survey and interview data were coded following Lune and Berg's (2017) content analysis and Braun and Clarke's (2006) thematic analysis phases. Attribute coding and descriptive coding of data sets (Miles et al., 2014; Saldaña, 2013) for participants who completed the pre-survey was employed to consider research question one: What patterns and themes in TC backgrounds appear alongside particular beliefs, held early in their course, about the nature of reading and the teaching of reading?

Content Analysis

Lune and Berg (2017) defined content analysis as a thorough, systematic evaluation and interpretation of content to establish patterns and themes. Categories identified through content analysis may be determined inductively, deductively, or through a combination of both (Lune & Berg, 2017). As in the case of this study, pre-determined categories identified in the pilot study

were used along with emerging categories, underpinning both an inductive and deductive approach. The analytic categories previously identified initiated the thematic coding process, whereby additional categories emerged. Braun and Clarke's (2006) thematic phases of analysis were used as the inductive approach to identify themes.

Thematic Analysis

Braun and Clarke (2006) identified a theme as "something important about the data in relation to the research question, and represents some level of *patterned* response or meaning within the data set" (p. 82). Themes identified in the pilot study deemed worthy of further interrogation in the context of the study at hand and employing the six phases of thematic analysis offered an examination of those themes as well as emergent categories. The phases of thematic analysis include: (1) familiarize yourself with the data; (2) generate initial codes; (3) search for themes; (4) review themes; (5) define and name themes; and (6) produce the report.

In phase 1 of the analysis process, I read survey responses and began writing ideas and potential codes. After I transcribed participant interviews, I read through them and began highlighting relevant quotes that stood out to me, as well as added notes directly on the transcripts about interpretive constructs. The initial readings of the surveys and transcripts served as a way to immerse myself in the data (Braun & Clarke, 2006); and while I recorded initial interpretations, ideas, and highlighted quotes that stood out, I was not formally coding the data.

Coding data assigns meaning to the compiled information and is used later to consider patterns and categories (Miles et al., 2014). Applying codes to the data reflected Lawrence-Lightfoot's (2005) "hand of the researcher" (p. 11) as I identified features of the data. Reduction of the data was done manually, using highlighters, sticky notes, and handwritten notes in the margins to note patterns and identify codes (Braun & Clarke, 2006). Phase 2 involved the careful

reading of surveys and transcripts and assigning codes to phrases and passages of text. The coding process for this study is explained in more depth later in this chapter.

During phase 3 of analysis, the codes were re-examined to consider potential themes. I began by organizing and combining codes, as well as detecting overlaps and parallels in coded data. I created a mind map (Braun & Clarke, 2006) to organize and display codes under broader categories, or potential themes, as I reflected on the relationships amongst codes.

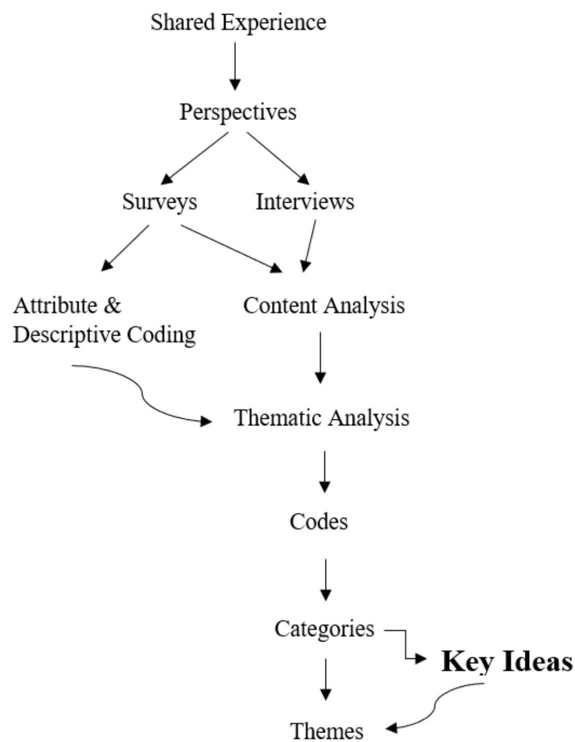
The final phases of the thematic analysis process involved continued reviewing and refining of themes (Braun & Clarke, 2006). Through re-reading survey responses and interview transcripts, I continued to note recurring patterns and themes (Merriam, 2009) while remaining mindful of contrary evidence (Yin, 2009).

Adaptation of Braun and Clarke's Process. Analysis of pre-surveys involved interrogation of data to consider participant perspectives on the nature of reading and reading instruction. Codes and categories were identified through each of those lenses, employing the thematic analysis process. However, I became concerned with Braun and Clarke's process—identifying candidate themes and possible sub-themes—as the next phase in my analysis of the data. It was my intention to share participant perspectives about the nature of reading and reading instruction independently, before considering emergent themes as a whole. At this point in the analysis process, I felt if I moved directly to naming themes and sub-themes, participant presence would be diluted. As such, I adapted Braun and Clarke's process to add an additional layer of analysis—the identification of "key ideas". Key ideas were named concerning the nature of reading and also for reading instruction. These key ideas were then analyzed alongside participant backgrounds, ensuring that participant voice was evident in the findings. Themes were identified in the final phase of analysis, capturing the essence of the data as a whole.

As data were analyzed, I attempted to connect patterns that appeared through the various sources alongside the theoretical orientation of the case study. A social constructivist lens provided a framework to focus the inquiry and interpret the data, with a focus on how knowledge was constructed and the extent to which peers and environment influenced shifts in thinking. Figure 3 represents a visual display of development beginning with the shared experience through the analysis process.

Figure 3

Development from Shared Experience to Identified Themes



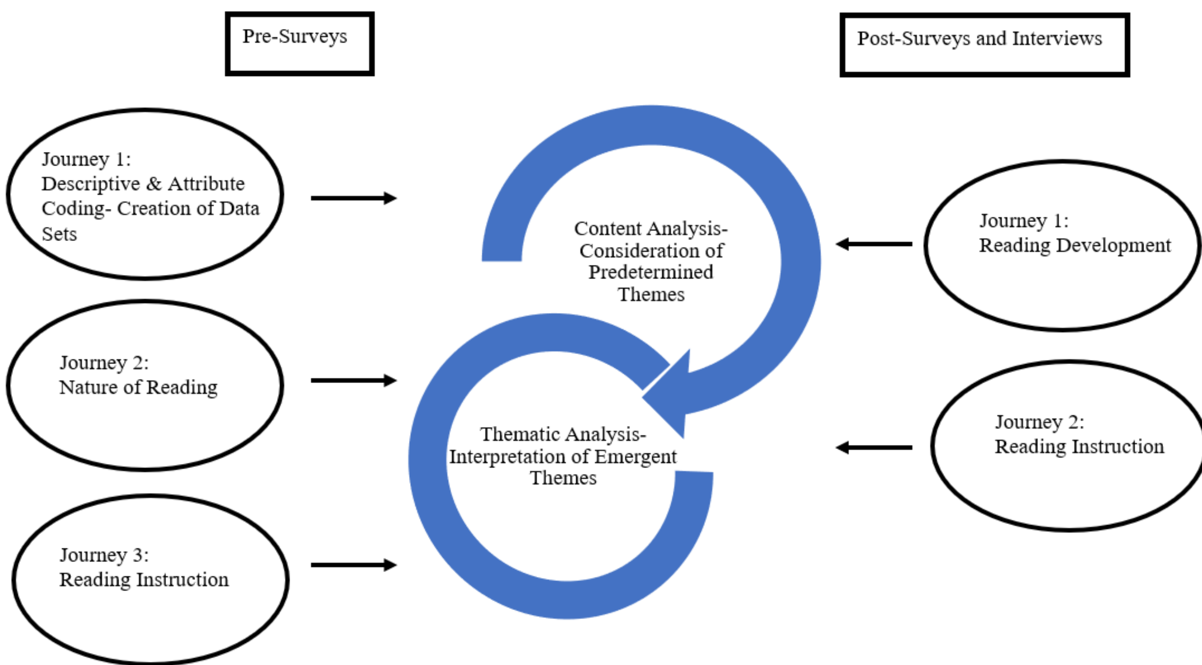
Note. Braun and Clarke's (2006) thematic analysis process is identified in this development through the identification of codes, categories, and themes. My adaptation of their process, in order to include key ideas, is represented with larger, bold font.

Merriam (2009) suggested that the researcher is the primary instrument for data collection and analysis. The inductive process of data analysis is interpretive (Baxter & Jack,

2008; Hancock & Algozzine, 2017; Merriam, 1988, 2009; Yin, 2009), the knowledge is time and context bound (Stake, 1995), and it is important for the researcher to consider their own partialities throughout the analysis phase. To honour participants' meaning-making processes, the researcher considered the context in which participants were perceiving the world and inferences were considered alongside the multiple sources of information (Yin, 2009). As well, repeated attention to data through different lenses of category privileged participant perspectives with distinct guiding topics in mind. Figure 4 depicts the repeated journeys through the data.

Figure 4

Repeated Journeys Through Data



Coding

Multiple sources of data collected were analyzed for themes, categories, and concepts (Benaquisto, 2008; Merriam, 2009) developing with each individual participant, as well as a collective group. Data were collected from surveys and individual interviews. To determine themes, "qualitative data analysis requires coding and searching for relationships and patterns

until a holistic picture emerges" (Johnson & Christensen, 2013, p. 186). Use of attribute and descriptive coding (Miles et al., 2014; Saldaña, 2013) was used to consider demographic characteristics for analysis alongside themes and topics that were interpreted from patterns. Creation of a data set for each participant noted basic descriptive information for use in analysis and interpretation (Miles et al., 2014). This attribute coding provided an additional layer of analysis when considering participant backgrounds alongside beliefs about reading. Descriptive coding involved assigning labels to the data to be used for categorizing (Miles et al., 2014).

The decision to begin the coding process with content analysis was to consider three topics determined through analysis of the pilot study that I thought significant and merited further exploration: reader as dispositional, reading as one dimensional, children as levels. Data collected were analyzed to consider these topics alongside other dimensions that emerged from the careful reading of the data. A thematic analysis process was the final stage whereby I engaged in close, line-by-line reading to familiarize myself with the data (Braun & Clarke, 2006) and formed ideas and concepts (Creswell & Poth, 2018). Thematic analysis was the process used in the analysis of the survey data collected in the pilot study. Having previously engaged in this practice, I had more confidence in this method of analysis and the process was more streamlined as I worked with more data in the current study. I considered the information as it presented itself, bearing in mind the original goals of the research but open to other issues that could potentially surface (Benaquisto, 2008). The open coding process continued until nothing new emerged and certain codes, patterns, and ideas began to stand out. I then proceeded with focused coding, where themes and concepts identified from the open coding process were refined, integrated, and conceptualized into broader categories through repeated viewings of the data (Benaquisto, 2008; Saldaña, 2013). These procedures followed the thematic analysis phases to

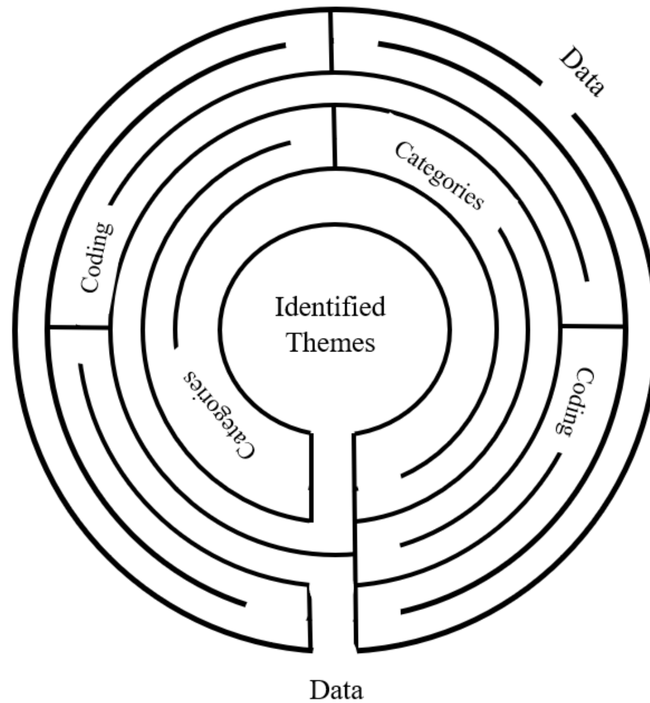
take into account the experiences and realities of the participants and progress on the continuum from description to interpretation (Braun & Clarke, 2006).

Coding is influenced by the lens of the researcher as well as the ontological, epistemological, and methodological beliefs that frame the inquiry (Saldaña, 2013). The coding process was dynamic and considered the multiple perspectives of the individuals who participated in the same event (Benaquisto, 2008) aligning with the social constructivist paradigm that maintains multiple realities are shaped through experiences and interactions (Creswell & Poth, 2018; Tuli, 2010).

Miles et al., (2014) likened the coding process to an "emerging map of what is happening and why" (p. 93). A map implies that there is a direction, or a path that one can follow to get to their destination. Instead, I have likened it to a *labyrinth*, as the process of coding and analysis is complex and may be overwhelming, especially with a lot of data to work through, and does not present itself with a clear direction. However, in the labyrinth one is in a position to see the road ahead and the road behind. Each phase of analysis moved me closer to the final destination, even when I needed to backtrack to consider different interpretations. Progress through the labyrinth also involves moving in and out of cycles of induction and deduction. Do I choose a direction based on instinct or logical reasoning? The coding process I employed considered previously identified themes used alongside emerging categories. The complexity of the "coding labyrinth", depicted in Figure 5, suggests that there are multiple entry points for which one can engage with the data, and the non-linear path from data to identification of themes create multiple paths to the final destination. My creation of the coding labyrinth reflected the interpretive lens through which this study was framed.

Figure 5

Coding Labyrinth



Quality of Qualitative Research

Qualitative research necessitates that the researcher takes an active role in the collection and interpretation of the participants' meaning making. The epistemic beliefs that guided this study provided the foundation to acknowledge and surface the "multiple versions of knowledge" (Yazan, 2015, p. 146). Qualitative research rests on the assumption that reality is multidimensional and dynamic. To assess the quality of qualitative research, the terminology of credibility, transferability, dependability, and confirmability is recognized in naturalistic inquiry (Denzin & Lincoln, 2018; Lincoln et al., 1986, 2018; Merriam, 1988). Pursuing these criteria during data collection and analysis established the rigor, or trustworthiness (Lincoln et al., 1986) of the study.

Merriam's (1988, 2009) and Stake's (1995, 2000) constructivist orientation underlies the assumption of capturing an accurate or approximated knowledge of the case. Stake (1995) contended that there are multiple perspectives that exist and are presented within a case and places an emphasis on uniqueness. Merriam (1988) asserted that the application of case study research is the representation of multiple realities or perspectives and described experiences through the lenses of those interpreting them. Assumptions behind case study research suggest that a *case* is just a case (Dyson & Genishi, 2005) and what is learned is bound within the time and context of the study (Patton, 2015; Stake, 2000). Schwandt and Gates (2018) added that generalizability beyond the case is not the intent of the researcher engaging in case study research, but that the study can be added to the corpus of other descriptive studies to identify trends and can serve as a knowledge base. The following section details the issues of credibility, transferability, dependability, and confirmability.

Credibility

Issues of credibility relate to how congruent the findings of the study are with reality (Merriam, 1988, 2009). This study aligned with the epistemological belief that reality is holistic, multidimensional, and represents current understandings that are subject to change (Merriam, 2009). To this end, this study investigated pre-service teachers' constructions of reality (Merriam, 1988, 2009). Credibility comes with adequate and accurate representation of participant perspectives (Merriam, 1988) and can be validated through member checks and the use of multiple sources of data (Barone, 2004; Lincoln et al., 1986; Merriam, 1988, 2009; Stake, 2000; Yin, 2009). In the case of this study, the member checks offered a chance for participants to edit their interview transcripts to ensure an accurate representation. One participant was satisfied with the transcription, while two participants made considerable edits that refined and

clarified their perceptions. Additionally, credibility comes with prolonged engagement (Lincoln et al., 1986; Merriam, 1988) and the transparency of researcher background, dispositions, and assumptions within the research process (Merriam, 1988, 2009). In Chapter One, I offered explicit information about my background and influences leading to this study, allowing readers the opportunity to consider the influences I may have had on the design and results.

Transferability

Transferability concerns how the findings of the study can be applied to other contexts (Merriam, 1988, 2009). Rich, thick descriptions of the context and findings of the study make transferability possible (Baxter & Jack, 2008; Lincoln et al., 1986; Merriam, 1988, 2009). Within the context of transferability, it is important to consider the reader. Merriam (2009) noted that "it is the reader, not the researcher, who determines what can apply to his or her context" (p. 51). Detailed descriptions that utilize thick narratives provide opportunities for the reader to be an active participant (Baxter & Jack, 2008; Seidman, 2006), learn vicariously through the experiences, and reconstruct knowledge that is personally useful (Merriam, 2009; Stake, 2000). Use of quotes from participant surveys and interviews adds to the richness of description, contribute to the depth and detail of the inquiry, and develops a robust understanding of their meaning-making processes. Chapter Four contains such participant voices to substantiate points made.

Merriam (1988) contended that "one selects a case study approach because one wishes to understand the particular depth, not because one wants to know what is generally true of the many" (p. 173). While this study serves as a contributor to the knowledge base around teacher education and pre-service teacher knowledge, it is a case bounded by time and place and represents the shared realities of those who participated in the study.

Dependability and Confirmability

Dependability concerns the extent that findings can be replicated (Merriam, 1988) and confirmability is the degree to which the findings are shaped by the participants (Lincoln & Guba, 1985). Although human behaviour is dynamic and qualitative research describes context and experiences as interpreted by those involved (Merriam, 1988) there are criteria that support the dependability and confirmability of the research findings. Dependability is addressed through the use of multiple data sources (Savenye & Robinson, 2005) and ensuring the study design is compatible to address the research questions (Miles et al., 2014). The description of the methods, procedures, data collection tools, and data analysis employed in this study (Miles et al., 2014), detailed throughout this chapter, add to the confirmability of the study, as do the specific details around the coding process leading to the findings, presented in Chapter Four.

This study does not seek to explore a general experience, but rather to study an experience in depth, recognizing that social and cultural circumstances define this specific case. It was the intention of the researcher to engage in practices such as detailed descriptions, member checks, and disclosure of researcher predisposition to ensure the trustworthiness of the study. Records of all transcripts and raw data were cross-referenced during analysis, and I recorded personal insights and values on the transcripts and raw data to provide a rationale for the theoretical and methodological decisions (Lincoln & Guba, 1985). Lastly, thick descriptions privileged the emic perspective (Merriam, 2009) of the participants as they interpreted their experiences during the ELA methods courses.

Ethical Considerations

Kvale and Brinkmann (2009) recognized that ethical issues exist throughout the entire process of a study. The researcher adhered to the guidelines outlined by the *Tri-Council Policy Statement* (TCPS2) *Ethical Conduct for Research Involving Humans* (2018) by following the

three core principles: respect for persons, concern for welfare, and justice. To adhere to the principle “respect for persons”, the researcher sought free, informed, and ongoing consent through every stage of the study. The purpose of the research and what participation entails, along with potential risks and benefits was communicated to all of the pre-service teachers enrolled in the ELA methods courses as part of the invitation to participate. As well, this was articulated within the consent to participate in the survey and in the interview consent form. To adhere to the principle “concern for welfare”, all efforts were taken to properly assess and minimize potential risks and to ensure the anonymity of the participants. The survey and interview questions were typical of formative assessment questions instructors have used previously to consider student understanding and to plan instruction (Brenna & Dunk; 2018, 2019). The principle of justice requires that participation in the research should be based on inclusion criteria supported by the research questions. Participants were recruited based on the criteria that they were enrolled in a required ELA methods course.

Participant consent forms were in accordance with the guidelines set out by the University of Saskatchewan Behavioral Research Ethics Committee and included a statement that this study had been reviewed and approved. Participation was voluntary and participants had the opportunity to withdraw from the study until January 20, 2021 for those who completed the online survey and May 20, 2021 for those who engaged in an interview. At that point, all data in the process of analysis, including transcription of the individual interviews, was used in the dissemination of this study. All data, including surveys and transcripts from interviews, as well as email communications was stored in a password-protected computer in the researcher’s locked office. Upon completion of the research, data was stored by Dr. Beverley Brenna on OneDrive, a protected USask system, for a period of five years and subsequently destroyed.

The researcher worked actively to establish respectful relationships, acknowledge participant voices, and engage in reflexive and reflective practices to establish her role within the study (Creswell & Poth, 2018). As such, the researcher ensured that data was recorded, analyzed, and interpreted with rigour and integrity, and ensured all measures were taken to protect the privacy of the participants and the location.

Summary

This chapter outlined the methodology of the current study, beginning with a brief explanation of qualitative research and the philosophical assumptions that provided a lens for data collection and analysis. As well, this chapter included the positionality of the researcher, revealing how I came to this work along with the subjectivities I bring to the research. A rationale for the decisions regarding research design was noted through the description of case study research and the details of the pilot and subsequent doctoral study. Data were collected through the use of pre and post-surveys and individual interviews to explore the beliefs and understandings of PSTs around reading development and pedagogy. The data were analyzed using Lune and Berg's (2017) content analysis influenced by pre-determined categories identified via the pilot study alongside emerging themes identified through the thematic analysis approach outlined by Braun and Clarke (2006), which I adapted through the addition of an additional level where key ideas were identified in the interview data. The chapter concluded with the criteria utilized in naturalistic inquiry to establish trustworthiness of the findings and the ethical considerations to which the study adhered.

Chapter Four: Data Analysis and Results

In this chapter, I delineate the findings from my doctoral study, which aimed to explore the initial and negotiated beliefs and understandings held by TCs related to reading development and reading pedagogy. I also describe the coding process used to analyze the multiple data sources addressing two research questions: What patterns and themes in TC backgrounds appear alongside particular beliefs, held early in a required curriculum course in ELA, about the nature of reading and the teaching of reading? What patterns and themes emerge in the post-course reflections of TCs regarding their ideas about reading development and the teaching of reading?

In this interpretive case study, I relied on data collected from a pre-course survey designed to capture PSTs' beliefs and understandings regarding reading acquisition and pedagogy prior to participating in a required literacy methods course as part of their teacher education program. I used attribute and descriptive coding of pre-survey data to consider patterns and themes related to participant backgrounds and particular beliefs. I analyzed post-survey data, along with interviews I conducted with three participants, to investigate negotiated understandings upon completion of a required literacy methods course. I used content analysis to explore predetermined themes identified during the pilot study alongside newly identified themes emerging from the thematic analysis process.

The description of these findings is presented in two sections. The first section considers data informed by the pre-surveys as I investigated the initial beliefs surfaced by the participants. The second section draws on post-survey data, as well as three individual interviews, as I explored the beliefs and understandings about reading development and pedagogy negotiated by participants upon completion of a required literacy methods course.

Participants

In early January, 2021, I recruited participants for this study from two ELA methods courses at a Western Canadian university—courses required as part of the teacher education program. The first of the two required courses focused on approaches to reading instruction and assessment and the second course extended the learning with a focus on lesson and unit planning.

Eleven participants recruited from the first required course completed the pre-survey in the first two weeks of the semester. Participant data from the pre-surveys reflected initial beliefs and understandings about reading development and pedagogy that these PSTs brought prior to engaging in domain specific content and instructional coursework related to reading. I analyzed data across participants to consider patterns and themes in backgrounds that appeared alongside particular beliefs.

Six participants completed the post-survey: four from the first required course and two from the second. Five of these participants completed only the post-survey, while one completed both the pre and post-survey. I conducted individual interviews with Rao, Shelby, and Antonina (pseudonyms). Rao and Shelby had just completed the first required literacy course and Antonina had completed the second. To provide context, Table 3 outlines the number of participants and data sources drawn from each required course.

Table 3

Number of Participants and Data Sources Drawn from Each Course

Required Course 1		Required Course 2	
Data Source	Number of Participants	Data Source	Number of Participants
Pre-Survey	11	Pre-Survey	0
Post-Survey	4	Post-Survey	2
Interview	2	Interview	1

Influences of the Pilot Study on Content Analysis

A pilot study that I conducted in the fall of 2020 assisted me in refining choices related to content analysis as I collected and explored the data for the current study. The pilot research elicited survey data from five PSTs enrolled in the first of two required language and literacy courses. When I applied Braun and Clarke's (2006) process for thematic analysis to this data, the following themes emerged: reader as disposition; reading as one dimensional; and children as levels.

When asked questions about defining or identifying a good reader, participants in the pilot study referred to dispositional characteristics. TCs believed proficient readers challenged themselves, persisted, and enjoyed reading. Participants suggested that good readers "will enjoy reading," "will enjoy what was read, and if they do not enjoy it, will be able to tell you why," and "enjoy and understand what they are reading." Responses also included that good readers "persist," "challenge them as readers, but not to the point of non-understanding," "keep trying and learning to read more/better," and "never stop finding ways to challenge their reading."

When asked to define reading, responses reflected a one dimensional lens, privileging the interaction with text for meaning. One participant suggested that reading was a combination of word recognition and comprehension. I was intrigued by the disconnect between the person (reader) and the action (reading). How might responses differ if asked to define a runner (person) and running (action)? Would there be a connection between the action and the person performing the action? TC responses appeared to suggest that enjoyment and persistence is indicative of a definition of a reader. However, Hoover and Tunmer (2020) suggested that a child demonstrates reading proficiency when they:

> can successfully identify written words and thereby gain access to their appropriate meanings, which are already in place by virtue of having learned the language, then the child can use her or his language system to construct the meaning of sentences and discourses from those word meanings. (p.25)

This summary of what it means to be a reader highlights accurate decoding ability and understanding the meaning of words within the context of the text. In response to this data, I thought about how the definitions surfaced by TCs, with a focus on reader disposition, might influence pedagogical decisions and how they perceived their role as a reading teacher.

The third theme, “children as levels”, privileged the importance of levelling systems for assessment, progress monitoring, instructional materials, and reading materials. Levelling systems are referred to as informal reading inventories (IRIs) and “are designed to assess the highest reading level at which a child can accurately read the words and comprehend the text” (Burns et al., 2015, p. 438). The Fountas and Pinnell Benchmark Assessment System: Third Edition (Heinemann, 2021) is commonly used in schools and provides a levelled gradient which matches grade level to Fountas and Pinnell level. The publisher’s recommended use for the

levelled gradient is to match text to small group reading instruction (often referred to as guided reading) (Heinemann, 2021). Participants appeared to believe that reading development was demonstrated through a student's ability to respond accurately to questions assigned to a levelled text. Therefore, reading development equated the progression through a levelled gradient. Additionally, early understandings of reading development reflected an adherence to required benchmarks—reaching the ability to accurately read an identified grade levelled passage at various points throughout the year. Reading development, in this view, was supported through the extended time students practice reading books at their level, and the instruction teachers provide to students at those levels.

The findings that emerged from the pilot study resonated deeply in relation to my research questions and provided a focus for the current study. Additional questions on the interview protocol were added to probe for individual understandings around the three emerging themes—identified in the current research as "key ideas." As well, data for the current study were analyzed across these key ideas to explore them more deeply alongside new, emerging themes.

Data Analysis and Findings of Pre-Survey

Data analysis of the pre-surveys began as soon as they were collected. I started by reading and re-reading the survey responses to get a sense of the data holistically (Braun & Clarke, 2006; Creswell & Poth, 2018). Data were approached through a deductive and inductive lens, allowing me to consider key ideas previously identified in the pilot study as well as additional dimensions presented in the data. Based on my early impressions, through the interplay of deduction and induction (Berg, 2004), specific questions were added to the interview protocol to elicit further understanding of specific terms and concepts that were present in survey

data. For example, the term "reading strategies" appeared in several responses related to instruction and students' strategy use. Adding a question to the interview protocol around reading strategies (see Appendix I, question 10) offered me the opportunity to probe further into how this term was defined and understood by the interview participants.

Attribute and Descriptive Coding

A process of attribute and descriptive coding (Miles et al., 2014; Saldaña, 2013) of the pre-survey data was used to consider the demographic information provided by the participants alongside survey responses. This additional information included their age range, if they had a previous degree or certificate, if they spoke another language other than English, if they had experience working with children learning to read, and if they had been educated anywhere other than Canada for any length of time. All participants indicated they had only been educated in Canada, so data was not compared alongside that attribute. Data sets for each participant were created to note the demographic information together with specific topics (Miles et al., 2014) concerning reading instruction and the nature of reading. Descriptive codes assigned labels to the relevant data for each participant. Table 4 displays the data set focused on the nature of reading, and Table 5 outlines the data set centered on reading instruction. The data reflected in Table 4 for the topic of "understanding reading acquisition" and in Table 5 for the topics of "prepared to teach reading at preferred grade level" and "prepared to teach struggling readers" were drawn directly from the survey (see Appendix H for questions within the survey context) as these questions elicited responses based on a Likert response scale.

As I considered the focus of this inquiry, the pre-survey data were critical as I sought to explore participant backgrounds alongside reading beliefs held early in their course. Creation of these data sets initiated the analysis process as I considered my first research question: What

patterns and themes in TC backgrounds appear alongside particular beliefs, held early in a required curriculum course in ELA, about the nature of reading and the teaching of reading? Patterns around demographic data are interesting and I have explored these further in the description of findings. Some of these patterns inspire directions for further research, such as how experience working with readers, particularly those who struggle, influences beliefs around reading instruction. These patterns are not presented as findings in this chapter with explicit intent to suggest causal or correlational connections. Rather, these findings are presented to note patterns that appear in the data and their import is discussed further in Chapter Five.

Table 4

Data Set Including Demographics and Descriptive Codes for the Nature of Reading

Participant	Attributes				Nature of Reading			
	Experience Working with Children Learning to Read	Age	Additional Language	Previous Degree/ Certificate	Development	Definition of Good Reader	Definition of Reading	Understanding of Reading Acquisition (Self-Identified)
Rao	Parent; EA	31-40	Yes	B.Arts	variety of text; progress through levels; attitude; opportunity to read	love reading	learning about the world	adequate
Minerva	N/A	24 or under	No	B.Arts	enjoyment; challenge; interest; peer engagement	use reading strategies; persevere	understand the world	some
Noah	Parent	31-40	Yes	B.Arts	meet learning goals; improve strengths; enjoyment; talk about text	comprehend; have a perspective	comprehend	adequate
Luna	EA	24 or under	Yes	B.Arts	read at grade level; opportunity to read; decode	are good writers	engage in new experiences	some
Nicole	EA	25-30	No	N/A	confident; read at grade level; safe environment	confident; challenge themselves	act of decoding	some
Bree	N/A	24 or under	No	N/A	read independently; language skills; fluency	use reading strategies	builds knowledge and language	adequate
Freddie	N/A	24 or under	No	N/A	reaching benchmarks; enjoyment	have a perspective	decode for knowledge and/or enjoyment	some

Participant	Attributes				Nature of Reading			
	Experience Working with Children Learning to Read	Age	Additional Language	Previous Degree/ Certificate	Development	Definition of Good Reader	Definition of Reading	Understanding of Reading Acquisition (Self-Identified)
Lauren	Field Experience	24 or under	No	N/A	challenge; confidence; progress through levels; skill development; literacy rich environment; variety of text	decode and comprehend	decode	some
Zephyr	Volunteer	24 or under	No	N/A	progress; decode; opportunity to read	decode	comprehend	some
Jeff	Some Unspecified	24 or under	No	N/A	improvement; pride; enjoyment; opportunity to read	enjoy; comprehend	literacy	some
Joseah	Yes Unspecified	24 or under	No	N/A	enjoyment; read for pleasure; have a reading imperative	comprehend	comprehend	some

Table 5

Data Set Including Demographics and Descriptive Codes for Reading Instruction

Participant	Attributes				Reading Instruction			
	Experience Working with Children Learning to Read	Age	Additional Language	Previous Degree/ Certificate	Pedagogical Behaviors	Prepared to Teach Reading at Preferred Grade Level (Self-Identified)	Prepared to Teach Struggling Readers (Self-Identified)	Preferred Grade Level
Rao	Parent; EA	31-40	Yes	B.Arts	loves to read; co-construct meaning with students; model; language and word level skills	adequate	adequate	3-5
Minerva	N/A	24 or under	No	B.Arts	model; scaffold; language skills; strategy instruction; enthusiastic; disposition	somewhat	not	4-5
Noah	Parent	31-40	Yes	B.Arts	passionate; model; guided reading; develop reading stamina; teach prosody	adequate	adequate	5
Luna	EA	24 or under	Yes	B.Arts	passionate; teach decoding; model; build stamina; transfer efficacy	somewhat	somewhat	3
Nicole	EA	25-30	No	N/A	supportive; encouraging; assess; teach decoding	somewhat	somewhat	2
Bree	N/A	24 or under	No	N/A	teach vocabulary; confer for comprehension; opportunities for discussions	adequate	somewhat	1
Freddie	N/A	24 or under	No	N/A	formatively assess; model; engage in discussions; transfer efficacy	not	not	3-5
Lauren	Field Experience	24 or under	No	N/A	fun and interesting at any level; teach decoding; build stamina; challenge; persistence; patience; confidence	somewhat	somewhat	2

Participant	Attributes				Reading Instruction			
	Experience Working with Children Learning to Read	Age	Additional Language	Previous Degree/ Certificate	Pedagogical Behaviors	Prepared to Teach Reading at Preferred Grade Level (Self-Identified)	Prepared to Teach Struggling Readers (Self-Identified)	Preferred Grade Level
Zephyr	Volunteer	24 or under	No	N/A	decoding; teach meaning cues; vocabulary; one-on-one; engaging	adequate	somewhat	3
Jeff	Some Unspecified	24 or under	No	N/A	follow passions; vocabulary; variety of reading material; patience	not	adequate	8
Joseah	Yes Unspecified	24 or under	No	N/A	enjoy; reading imperative; scaffold; model; discuss; safe environment; spelling patterns	somewhat	not	2

As I considered particular understandings about the nature of reading and reading pedagogy alongside TC backgrounds, data were analyzed to delineate: (a) participants who identified as having experience working with children learning to read and those who did not; (b) participants who identified as having a previous degree and/or certificate and those who did not; (c) participants who identified as speaking more than one language proficiently and those who did not; and (d) participants across age categories (24 or under, 25-30, 31-40). Data driven "key ideas" were analyzed alongside TC backgrounds to note interesting patterns. Beliefs about reading are influenced by an individual's experience as a student, along with a multitude of factors including experiences, people, and places (Barnes & Smagorinsky, 2016). I chose to delineate data alongside the identified demographic information because I was curious whether patterns would emerge related to demographics and individual belief system around reading.

Identification of Key Ideas Through Thematic Analysis

As outlined in Chapter Three, I adapted the thematic analysis process to identify key ideas as a means of interrogating data around the nature of reading and reading instruction alongside participant backgrounds. This additional layer provided a means to privilege participant voice specific to the nature of reading independent of reading instruction before considering overarching themes that emerged from the data as a whole.

Findings

In this section, I note the patterns and themes that emerged from the descriptive coding and analysis of 11 pre-surveys completed by TCs early in their first required ELA course. These findings consider patterns interpreted about two broad topics: the nature of reading and reading instruction.

Nature of Reading

In this study, I sought to investigate early understandings of the nature of reading held by PSTs. Questions relating to factors that support reading development, what TCs would look for to ensure students develop as readers, and definitions of reading and good readers were included on the survey to be analyzed under the topic of the nature of reading. Key ideas that emerged from participant responses were then analyzed alongside participant backgrounds to consider interesting patterns. Participants were also asked to identify their self-perceived level of understanding of reading acquisition, choosing from the following descriptors: little to no, some, adequate, and extensive (see Appendix H). Responses to this question were analyzed across participants with experience working alongside children learning to read and those without, as well as participants with a previous degree and/or certificate and those without.

Description of Key Ideas. Four key ideas were identified about the nature of reading, including reading development and definitions of reading and good readers: (a) reader and reading development recognized through dispositional characteristics; (b) reading development fostered through environment; (c) reading development through instructional goals; and (d) readers and reading evidenced through processes. This section describes each key idea, drawing on participant responses on the pre-survey. Following the descriptions, attribute data is considered alongside each key idea to note patterns in participant backgrounds with beliefs and understandings of the nature of reading.

Key Idea 1: Reader and Reading Development Recognized Through Dispositional Characteristics. TCs noted several dispositional characteristics that reflected the child as a reader and a child's development in reading. In this context, the intended meaning of disposition relates to one's attitude. When asked to consider key factors that support reading development,

two participants mentioned the importance of enjoyment. Freddie stated it was important that "reading [is] seen as something to be enjoyed, not forced" and Minerva suggested that "part of reaching their full potential is if they enjoy reading and choose it willingly rather than reading simply because they must." Participants characterized reading development as students having a positive attitude and an interest in reading, as well as a sense of pride. Minerva suggested that "if a student finds pleasure in reading they are more likely to pursue and develop their reading talents." Nicole stated that good readers "are confident and challenge themselves to become better readers" and that reading development was evident if students "feel comfortable and confident to read at their grade level." A similar understanding was provided by Lauren, suggesting that development was demonstrated "through their confidence in reading" as well as when children "challenge themselves through different texts at different levels." Minerva suggested that good readers "persevere in the face of difficulties" and Rao noted that good readers "love to read books." These findings demonstrated the attention to reading attitudes that TCs hold when considering a reader and reading development.

Key Idea 2: Reading Development Fostered Through Environment. Respondents on the survey posed several factors relating to environment that appeared to them as influential in supporting the reading development of students. Within this context, the term "environment" is used to capture the physical classroom space as well as the social interactions within this space. Nicole suggested a "comfortable and safe learning environment" was a key factor for developing readers, while Noah indicated that "taking away distractions, i.e., videogames, tv, ipads" was important. Minerva highlighted the influence of peers, stating "if their peers value reading the individual student is more likely to value it as well. Whereas if their friends see it as fruitless they are more likely to see the skill as worthless." Lauren suggested that "having lots of visuals

of words and letters throughout the classroom" supported reading development. Several participants indicated the necessity of having a variety of texts available in the classroom, including books with varied and interesting topics, multiple languages, and different genres. Luna highlighted the importance of varied text, stating, "I believe there is a book or genre for everyone. Nobody hates reading. They just haven't found the right book." The emphasis on environment as supportive of reading development over the role of the classroom teacher is explored in further detail in Chapter Five.

***Key Idea 3: Reading Development Through Instructional Goals*.** PSTs suggested that reading development was recognized through attaining various instructional goals. When asked how they would know students are developing as readers, participants mentioned that students would be reading at grade level and that use of a reading test could assess improvement. Several PSTs noted that they would look for skill development. Freddie stated that he would consider "how effectively they [students] achieve the pre-stated components." Noah suggested that students are developing as readers "when students have listed learning goals and have met them. I can identify reading strengths and weakness, I later recognize their reading strengths are more so improved."

Use of levelled texts or a levelling system was indicated as a way to consider reading development. Zephyr and Lauren both indicated that it was important to be cognizant of the different levels children were at in reading. While Zephyr reasoned this knowledge was key as "it is important not to scare them by forcing them to complete tasks they have no knowledge of or are not prepared for," Lauren articulated that teachers could use this knowledge to "make reading fun and interesting to the students." Two participants referred to the use of a levelling system as a means of assessing reading. Minerva stated that "an overall reading development

assessment should encompass a variety of skills so that a student is able to show what they know rather than be seen as at deficit. One common method is using standardized testing to discover a student's reading grade level." She recalled her experience as a student in receiving a "score from A-Z on our overall reading" but did not recollect how the assigned level was calculated. Rao referred to the use of levelled passages to assess reading development, indicating that when a student demonstrated proficiency with one level, comprehension would be assessed at the next level to get a sense of students' reading proficiency. These findings parallel that of the pilot study where TCs' understandings of reading development, held at the onset of their first required literacy methods course, place an emphasis on the use of a levelling system to identify growth.

Key Idea 4: Readers and Reading Evidenced Through Processes. When asked to consider definitions of reading and readers, PSTs referred to broad processes associated with reading (i.e., comprehension and decoding) as well as skills and strategies that support those processes. Use of the general term "reading strategies" was referenced, suggesting that good readers utilize these to "overcome struggles in their texts." Two participants defined reading as the decoding of printed text. Nicole delineated that reading was "sounding out words that are in a sentence that make up a comment or story," and Zephyr suggested that good readers "can sound out words they are not familiar with." In response to defining good readers and reading, the majority of participants indicated that the defining feature was comprehension or understanding what was read. Aspects of language comprehension were mentioned, with Noah stating that good readers "understand concepts and make a judgement on them," shared by Freddie who suggested that good readers "formulate an opinion after reading a text" and Joseah who said they "understand what they are reading and are able to analyze what they are reading." Although

some attention to word reading was evident, the ability to understand or gain meaning from text was privileged as defining readers and reading.

Several participants noted that reading is about knowledge building and learning about the world. Bree stated that reading "will better your knowledge on certain topics," Rao said that reading is "learning about different situations," and Minerva suggested that "reading opens us up to a world of opportunities." Luna shared an aesthetic definition to reading as "entering a place separate from your own." Extending the process of comprehension, Bree stated that "good readers continuously evaluate their predictions and revise them as needed." Although processes of decoding and comprehending text were indicated by the participant group in response to a definition of reading, no single participant recognized reading as both decoding and gaining meaning from text. Automaticity in word reading is critical "to move cognitive resources away from the task of recognizing words to a focus on the meaning of what is being read" (Hoover & Tunmer, 2020, p. 78). It may be that because TCs have effectively developed proficiency in word reading, a greater emphasis is placed on comprehending text when considering definitions of reading. Another consideration may be the theoretical orientation that underpin TCs' reading beliefs and understandings. An emphasis on comprehending text, as well as enjoyment, is reflective of a balanced literacy orientation. A finding concerned to theoretical orientation is discussed later in this chapter as it relates to the second research question, and considered alongside the literature in Chapter Five.

Analysis of Key Ideas Across Participant Backgrounds. Attribute data was collected on the survey to consider some of the diversity in backgrounds and experiences that PSTs bring to their learning environments in their teacher education program. Questions on the survey asked participants to identify if they had previous experience working with children learning to read, if

they held a previous degree or certificate, if they spoke an additional language, and to identify their age range. As belief systems are created through a multitude of experiences, the key ideas that emerged from data analysis were analyzed across these backgrounds to identify interesting patterns, however, this identification does not imply a causal relationship between factors.

Experiences Working with Children Learning to Read. I analyzed data across two groups: participants who identified as having experience with children learning to read (n=8) and those without (n=3). Both sets of participants highlighted dispositional characteristics as well as the physical and social space as influential in reader development. Instructional goals, such as the use of levelled texts to recognize reader development or reference to achieving "grade level", was more apparent in responses by participants with experience working with beginning readers, with only one respondent in the "no experience" group mentioning benchmarks.

Definitions of a good reader differed, with identification of processes associated with reading (decoding and comprehension) along with dispositional characteristics being identified by those TCs with experience working alongside beginning readers. Participants without experience emphasized that good readers use reading strategies. Definitions of reading, however, were similar and reflected the processes associated with reading, including the act of decoding, comprehending text, and references to gaining knowledge and learning about the world.

Previous Degree and/or Certificate. Key ideas were analyzed across participants who identified as having a previous degree and/or certificate (n=4) and those without (n=7). When analyzing responses around reader development, there were no apparent differences between groups. Responses from both sets reflected the notions of reader disposition, the environment, and progressing through instructional goals as leading to reader development.

When defining a good reader, both groups noted dispositional characteristics; however more PSTs without previous degrees defined a reader as one who engages in a process of reading (decodes and/or comprehends) than those with degrees. Additionally, the non-degree group defined reading as either decoding or comprehending text, whereas PSTs who identified as having a previous degree were more inclined to define reading as engaging in texts to learn about the world or seek new experiences.

Additional Language Skills Beyond English. When analyzing data across those who speak another language (n=3) and those who do not (n=8), there did not appear to be any differences when considering the nature of reading development, including definitions of a good reader and reading.

Age Categories. I analyzed key ideas across three age categories: 24 and under (n=8); 25-30 (n=1); and 31-40 (n=2). There was no distinction between groups concerning reader development. When defining a good reader, the 24 and under age group was the only group who referred to the term "reading strategies" to suggest that these were something good readers use. Definitions of reading reflected the processes of decoding and/or comprehending across age groups, and gaining knowledge was mentioned in the 24 and under as well as the 31-40 age groups.

Teacher Candidates' Self-Identified Levels of Understanding Related to Reading Acquisition. The majority of participants (n=8) identified that they had some understanding of reading as they began their first required ELA methods course. The remainder of the participants (n=3) felt they had adequate understanding of reading acquisition. Figure 6 reflects this data as it compares participants identified as having previous experience working with children learning to

read and those without. Figure 7 represents the data as it compares participants with a previous degree and/or certificate and those without.

Figure 6

Attribute: Previous Experience or Not—Teacher Candidates' Perceived Understanding of Reading Acquisition

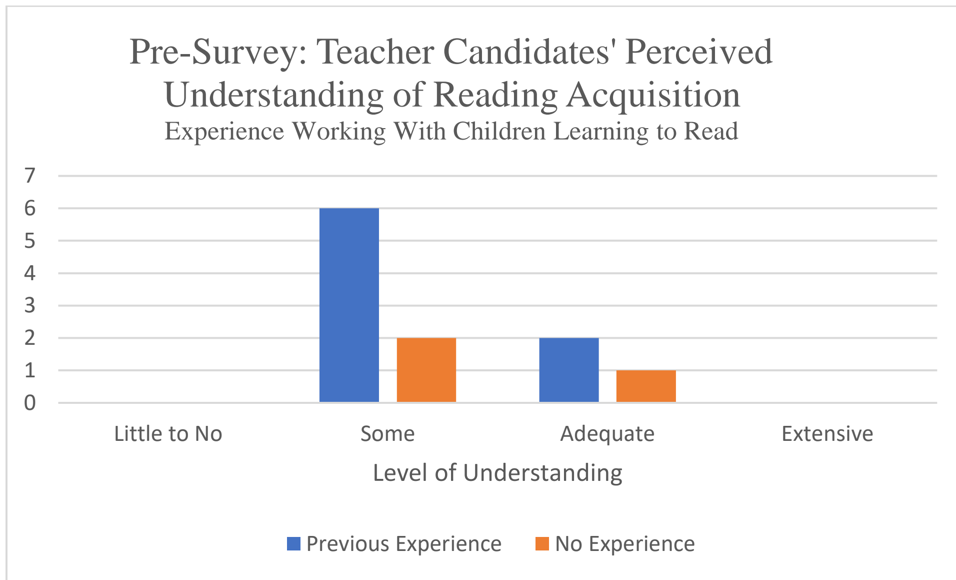
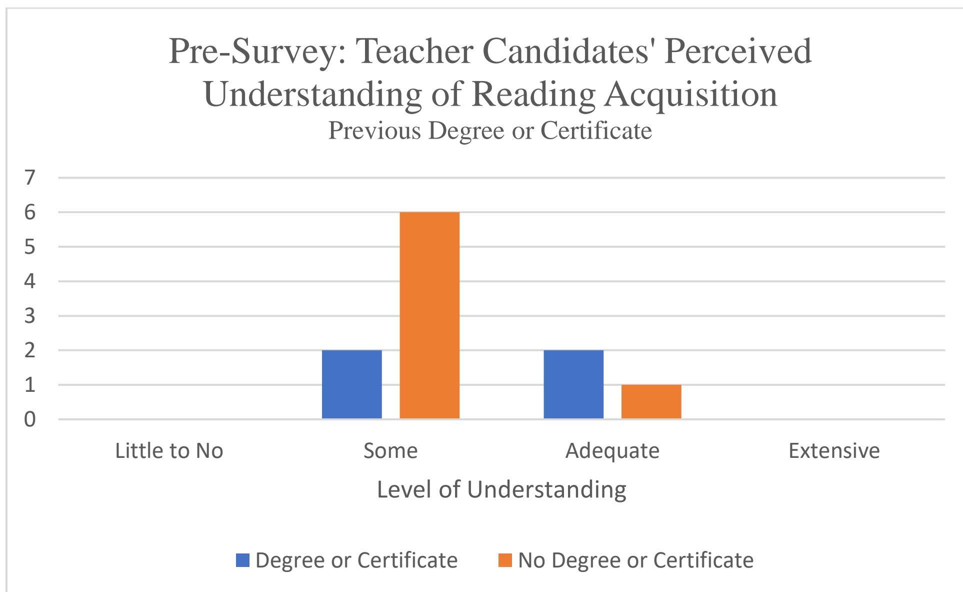


Figure 7

Attribute: Previous Degree or Not—Teacher Candidates' Perceived Understanding of Reading Acquisition



It appears that even though the majority of participants who completed the pre-survey (n=8) described some form of experience working alongside children learning to read, either as a parent, volunteer, educational assistant, or through field experiences, many (n=6) reported having only some level of understanding of reading acquisition. Having a previous degree did not appear to influence how well the participant understood reading acquisition, as two respondents felt they had some understanding and two felt they had adequate understanding.

Reading Instruction

In addition to investigating early understandings of the nature of reading, this study sought to investigate early understandings related to reading instruction. Survey questions pertaining to instruction elicited responses for participants to consider exemplary reading instruction, reading instruction at different grade levels, and instructional practices associated with reading development. Key ideas reflecting participant understandings related to reading instruction were analyzed alongside participant backgrounds. Participants were also asked to identify their feelings of preparedness for teaching reading at their preferred grade level and for teaching struggling readers. For both of those questions, participants choose from the following descriptors: not, somewhat, adequately, and well prepared. I analyzed responses to those questions across preferred grade levels, participants with experience working alongside children learning to read and those without, as well as participants with a previous degree and/or certificate and those without.

Description of Key Ideas. I identified three key ideas related to TC beliefs and understandings of reading instruction: (a) teacher modelling of dispositional characteristics; (b) development of skills and language through informed instruction and a discursive environment; and (c) instructional routines to facilitate development. In this section, I describe each key idea,

drawing on participant responses on the pre-survey. Following the descriptions, attribute data is considered alongside each key idea to note patterns in participant backgrounds with beliefs and understandings about reading instruction.

Key Idea 1: Teacher Modelling of Dispositional Characteristics. TCs noted several dispositional characteristics as exemplifying strengths of reading teachers. When asked to finish the statement, "Exemplary reading teachers…", participants responded with descriptors such as passionate, encouraging, kind, and patient. Lauren suggested that confidence, persistence, and patience are important to teach directly to support reading progress. As well, Joseah indicated that students should be taught ways to enjoy reading. When asked to consider their strengths as a reading teacher, several participants stated that they enjoy reading. Minerva suggested that "if a teacher is enthusiastic about it a student will be more likely to do so." Luna indicated that a personal strength was her own proficiency in reading and writing, while Rao and Jeff loved to read and stated that they could impart that attitude to their students.

Key Idea 2: Development of Skills and Language Through Informed Instruction and a Discursive Environment. Several skills and aspects of language were identified by TCs as important to teach for reading development. Participants indicated they would use assessments to consider development in fluency, comprehension, phonological awareness, pronunciation, decoding, application of reading strategies, and inferencing. Several participants highlighted the importance of developing vocabulary. Zephyr stated that "it is important to teach about the word if a child does not know what it means so they understand the context of what they are reading." In addition, participants referred to aspects of a discursive environment as supportive of reading development. In this context, a discursive environment reflects the interactions and exchanges in dialogue between students and/or students and teacher. Rao suggested that teachers should

"make connections with students about the story content to expand imaginations" and Bree recommended "having a big discussion with the students to discuss questions or comments the students may have" after teacher read alouds. Participants also indicated that class discussions would facilitate deeper comprehension and "positive association with texts." Similar to findings related to reading development, TCs appeared to emphasize aspects of meaning-making as important to teach.

Key Idea 3: Instructional Routines to Facilitate Development. Participant responses on the pre-survey indicated several instructional routines to facilitate reading development. Several participants prioritized silent reading time as important for students to practice reading and build reading stamina. This time included independent reading, as well as partner and group reading. In response to a question asking what teachers of Grade 1 should do regularly, many participants responded with reading aloud to students and having reading circles. Noah suggested that in the reading circle "all the students participate with the teacher in reading the book." Additional routines included think alouds and guided reading. Several participants included working one-on-one with students as a means for assessment, assisting during reading stations, or to listen to students read. Minerva mentioned that modelling and scaffolding were important for reading instruction.

Participants were asked specifically if they would have students practice unrehearsed oral round-robin reading in their classrooms. Three PSTs did not know what this instructional practice was so were unsure if they would include it as part of their practice. Rao and Joseah said they would not include oral round-robin reading, citing that "some students may not be ready for oral reading and this will lower their reading confidence" (Rao) or students may have anxiety reading aloud (Joseah). Nicole indicated she would give students the option to participate in this

activity "because some students enjoy this and it causes other students a lot of anxiety." Several participants felt this was an instructional practice they would employ, suggesting it provides "each student a chance to practice their oral reading skills" (Noah) and that "reading aloud unrehearsed will help develop literacy" (Jeff). Zephyr indicated that it is important for students to develop comfort in reading aloud and Bree noted that by listening to their peers, students can develop comprehension. Minerva suggested that oral round-robin reading develops confidence. She noted the benefits of this practice as "rather risk free and can be important with regards to later assignments in which students may have to give an oral presentation." She added that this instructional practice, depending on the grade level, has the potential "of damaging their self-confidence through making mistakes" so she would likely ask for volunteers to do the reading out loud. Oral round-robin reading was explored further with TCs who completed the post-surveys upon the completion of a required literacy course, as well as during individual interviews. A discussion of these findings is explored later in this chapter as well as alongside connected literature in Chapter Five.

Analysis of Key Ideas Across Participant Backgrounds. Key ideas presented about reading instruction were analyzed across participant backgrounds to note interesting patterns. As well, participant responses to questions pertaining to their feelings of preparedness for teaching reading at their preferred grade level and teaching struggling readers were analyzed alongside preferred grade levels, participants with experience working alongside children learning to read and those without, as well as participants with a previous degree and/or certificate and those without.

Experiences Working with Children Learning to Read. I analyzed key ideas pertaining to reading instruction across participants who identified as having experience working alongside

children learning to read (n=8) and those without (n=3). Instructional routines to facilitate students' reading development, such as guided reading, one-on-one work with a student, and providing time for students to build reading stamina, were noted by participants with experience. Modelling of dispositional characteristics, (e.g., teacher enjoys reading, has patience, is passionate about reading) were consistent between groups. Both groups mentioned aspects of language as important to teach, including vocabulary, pronunciation, fluency, and inferencing. Specific skills, such as decoding and letter patterns, were noted by the group with experience, while the group without referred to strategy instruction and encouraging group discussions or conferring between teacher and student. Use of various forms of assessments to inform instruction were apparent in both sets of participants. Exploring PSTs' beliefs around instruction when considered between those with previous experiences working with children learning to read and those without may offer opportunities for further inquiry.

Previous Degree and/or Certificate. Key ideas were analyzed across participants who identified as having a previous degree or certificate (n=4) and those without (n=7). There were no apparent differences between participants who have a previous degree and those without related to the key ideas of reading instruction.

Additional Language Skills Beyond English. Next, I considered key ideas across participants who speak another language (n=3) and those who do not (n=8). All key ideas relating to instruction were apparent in both groups.

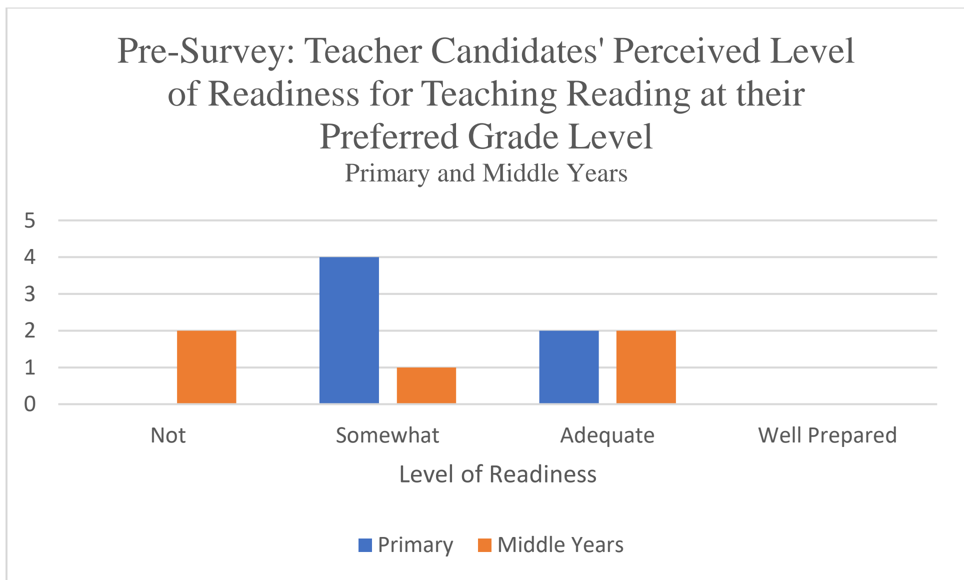
Age Categories. Lastly, key ideas relating to instruction were analyzed across the following age categories: 24 and under (n=8); 25-30 (n=1); and 31-40 (n=2). Instructional routines to facilitate reading development were noted by participants in the 24 and under age group, as well as the 31-40 age group. Aspects of teacher modelling of dispositional

characteristics and development of skills and language through informed instruction and a discursive environment were apparent across age groups.

Teacher Candidates' Self-Identified Level of Readiness to Teach at their Preferred Grade Level. Participants were asked to respond to a question on the pre-survey about their level of preparedness to teach reading at their preferred grade level. Participants who reported their preferred grade level as grades 1, 2, or 3 were considered primary, and those who noted a grade band including grade 3, (e.g., 3-5) and up to grade 8 were considered middle years. Figure 8 compares the self-reported level of readiness between participants interested in teaching a primary grade level and those who would prefer middle years. It appears that participants interested in teaching primary (n=6) have slightly higher self-efficacy—their personal judgement about their ability to promote student learning— for teaching reading as they begin their first ELA methods course.

Figure 8

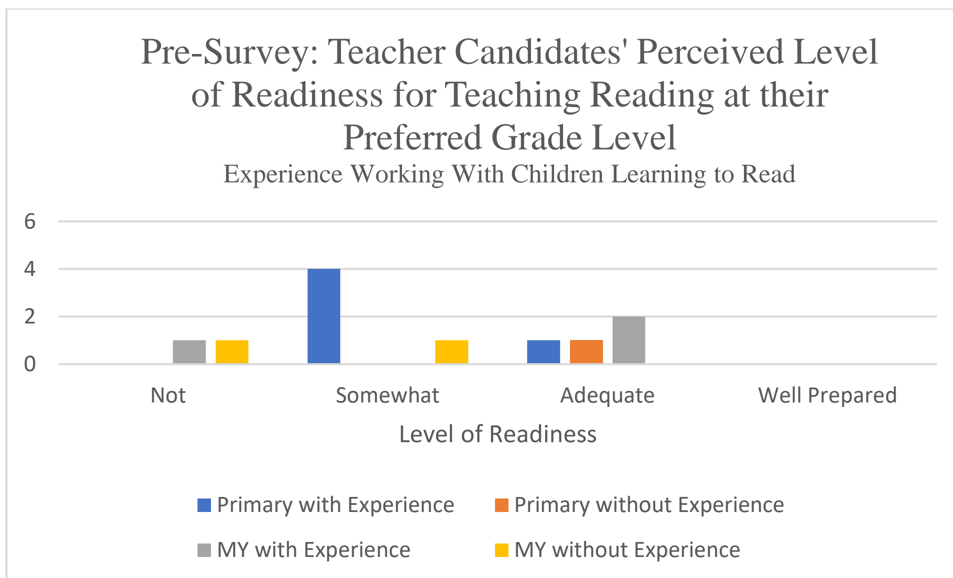
Attribute: Preferred Grade Level—Perceived Level of Readiness



I further delineated responses to the question concerning level of readiness alongside participants who reported having prior experience working with children learning to read. Figure 9 displays this data demarcating preferred grade levels (primary and middle years) and prior experience. Participants who have an interest in teaching middle years with prior experience felt they were either adequately prepared (n=2) or not prepared (n=1). Participants interested in teaching a primary grade level and have previous experience working with children in reading had the highest representation (n=5). The majority of this group felt somewhat prepared (n=4) with one participant noting they felt adequately prepared to teach reading.

Figure 9

Attribute: Previous Experience or Not—Perceived Level of Readiness at Preferred Grade Level

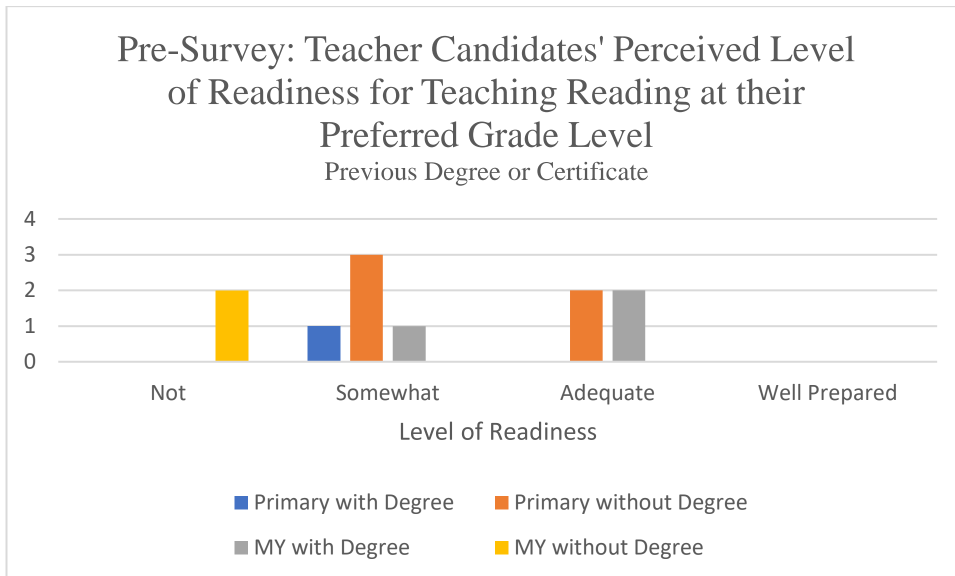


Lastly, data were analyzed across participants who have a previous degree and/or certificate and those without. Figure 10 illustrates the identified level of readiness based on grade level interest (primary or middle years) in conjunction with holding a previous degree. Participants who identified interested in teaching middle years and did not have a previous

degree (n=2) both reported not feeling prepared to teach reading at the start of their first ELA methods course, while those with a degree (n=3) felt either somewhat or adequately prepared. Only one participant interested in teaching primary had a previous degree and felt somewhat prepared. Participants interested in teaching a primary grade level who did not hold a previous degree had the highest representation (n=5) and felt either somewhat or adequately prepared to teach reading at the onset of the course. A discussion related to self-efficacy is explored further in Chapter Five.

Figure 10

Attribute: Previous Degree or Not—Perceived Level of Readiness at Preferred Grade Level

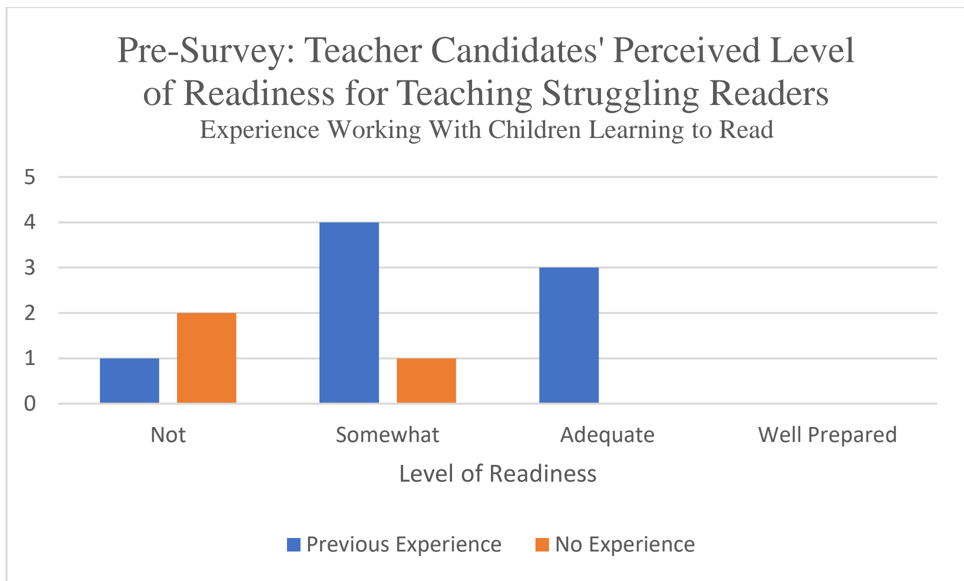


Teacher Candidates' Self-Identified Level of Readiness to Teach Struggling Readers. On the pre-survey, participants were asked to identify their level of readiness to teach struggling readers based on the following scale: not, somewhat, adequately, and well prepared. I analyzed survey responses based on those participants indicating previous experience working with children learning to read and those without. Figure 11 represents this data. Participants with

previous experience (n=8) represented the highest number in this data set. Of those, seven participants felt either somewhat or adequately prepared to teach struggling readers. The self-efficacy of those participants without previous experience was lower, with one feeling somewhat prepared and two feeling not prepared.

Figure 11

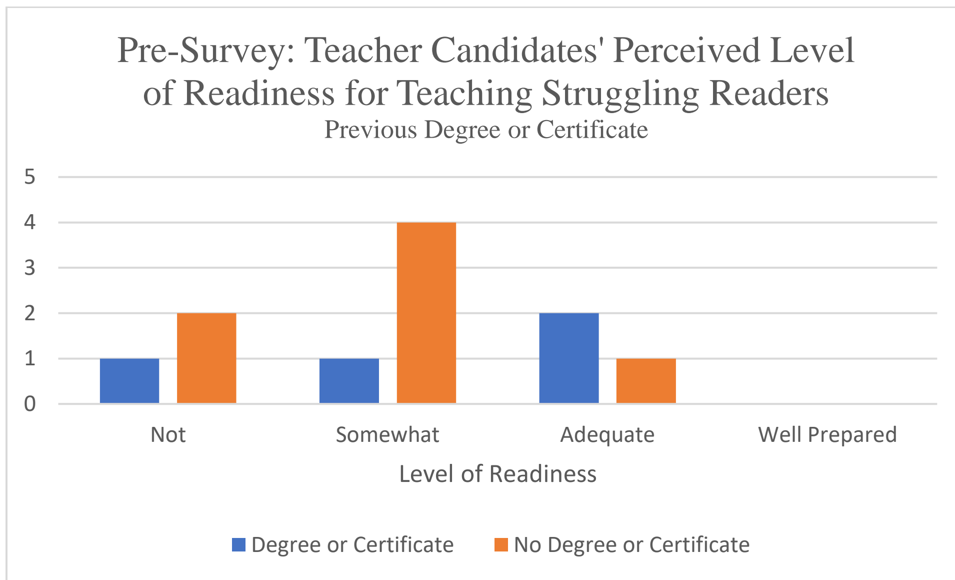
Attribute: Previous Experience or Not—Perceived Level of Readiness to Teach Struggling Readers



Data concerning participants' feelings of preparedness for teaching struggling readers were also analyzed across those with a previous degree and/or certificate and those without. Data reflecting the analysis of this attribute is displayed in Figure 12. Participants without a previous degree (n=7) felt predominantly somewhat prepared (n=4) or adequately prepared (n=1). While the number of participants with previous degrees is low (n=4), half of those respondents felt adequately prepared to teach struggling readers.

Figure 12

Attribute: Previous Degree or Not—Perceived Level of Readiness to Teach Struggling Readers



Emergent Themes for Nature of Reading and Reading Instruction

Three themes emerged through the analysis of the pre-survey data in relation to the nature of reading and the practice of reading instruction. These themes are: (a) teacher and student disposition characterizing reader development; (b) influence of the physical and social environment on reader development; and (c) early understandings of instructional practices to support and recognize reading development.

Theme 1: Teacher and Student Disposition Characterizing Reader Development. TCs who responded to the pre-survey indicated certain dispositions characterized by exemplary reading teachers and personal strengths they themselves would bring as a reading teacher. Participants suggested that reading teachers support reading development in students by being passionate, encouraging, kind, and patient. It was also noted that teachers of reading should directly teach students to enjoy reading, be confident, to persist, and have patience. PSTs suggested that their own love of reading and proficiency in reading would be a strength they

would bring as a teacher of reading. Many PSTs indicated that modelling of dispositional characteristics was important for students. Minerva recalled from her own experience as a student that "you could tell if your teacher actually believed reading was beneficial or was merely trying to fulfil the guidelines of the curriculum."

Dispositional characteristics of students were noted as a means to monitor progress in reading development. PSTs indicated that students demonstrating proficiency in reading were those that enjoyed reading, persisted, had an interest in reading, and were confident.

Based on the analysis of attribute coding, participants with previous experience working with children learning to read and those with a prior degree appeared to define "good readers" as those displaying dispositional characteristics, while those without experience and without a previous degree appeared to define good readers as those who apply reading strategies, comprehend, and sound out unknown words. However, the theme of teacher and student disposition characterizing reading development was broadly evidenced when considering the nature of reading and reading instruction despite participant background.

Theme 2: Influence of the Physical and Social Environment on Reader Development. Respondents on the pre-survey indicated features of the physical classroom environment as well as social aspects that they suggested facilitate reading development. Several participants mentioned areas devoted to classroom libraries and comfortable, cozy, and quiet reading spaces as necessary features of the classroom environment. Additionally, several participants noted that having the alphabet and words on the walls would be important for the classroom space. Jeff suggested that to develop reading, it was important establish a "safe and comfortable environment," a sentiment shared by Joseah who suggested a strength would be "creating an environment where students are not worried to ask me questions and will be

comfortable reading to me." Several participants referred to the importance of ensuring that classrooms were filled with a variety of texts of different topics and genres as a means to support reading development.

Beyond the physical space, TCs noted the importance of making reading fun and interesting and to "encourage student passions" (Jeff) through various topics. The influence of peers was considered alongside reader development, specifically encouraging student discourse to facilitate comprehension. Peer influence was also considered, by Minerva, to be supportive as a means of modelling positive reading behaviours.

When considering the theme of the influence of the physical and social environment on reader development, participant responses do not appear differentiated according to background experiences.

Theme 3: Early Understandings of Instructional Practices to Support and Recognize Reading Development. PSTs held various early understandings of instructional practices to support reading development. Many PSTs indicated that recognition of reading development was through attainment of learning or instructional goals, set benchmarks, or pre-established criteria.

PSTs referred to comprehension and word reading as evidence of good readers and in definitions of reading. Specific skills such as phonological awareness, fluency, and vocabulary were noted as being important to teach and assess for reading development. The term "reading strategies" was referred to as important to teach as well as a way to monitor development in reading (if a student was using reading strategies).

Ensuring that students had time to practice reading, specifically during silent reading time, was an instructional practice privileged by participants. Additional instructional routines included teacher read aloud, reading circles, think alouds, guided reading, and one-on-one time

with students. The specific practice of unrehearsed oral round-robin reading was considered by most to be a purposeful practice that would support oral reading development, build confidence, and prepare students for future occasions where they will read and speak in front of their peers. Participants in the minority voice who indicated they would not engage students in this particular practice suggested that reading aloud in front of peers may cause anxiety for students and lower their confidence in reading.

Participants with experience working alongside children learning to read appeared to consider reading development along with the fulfillment of instructional goals, or progression along benchmarks. Other aspects of early understandings of instructional practices to support and recognize reading development did not appear to be influenced by participant background.

Data Analysis and Findings of Post-Survey and Interview

In this section, I considered the data analysis of the post-survey and individual interviews as the second research question was investigated: What patterns and themes emerge in the post-course reflections of TCs regarding their ideas about reading development and the teaching of reading?

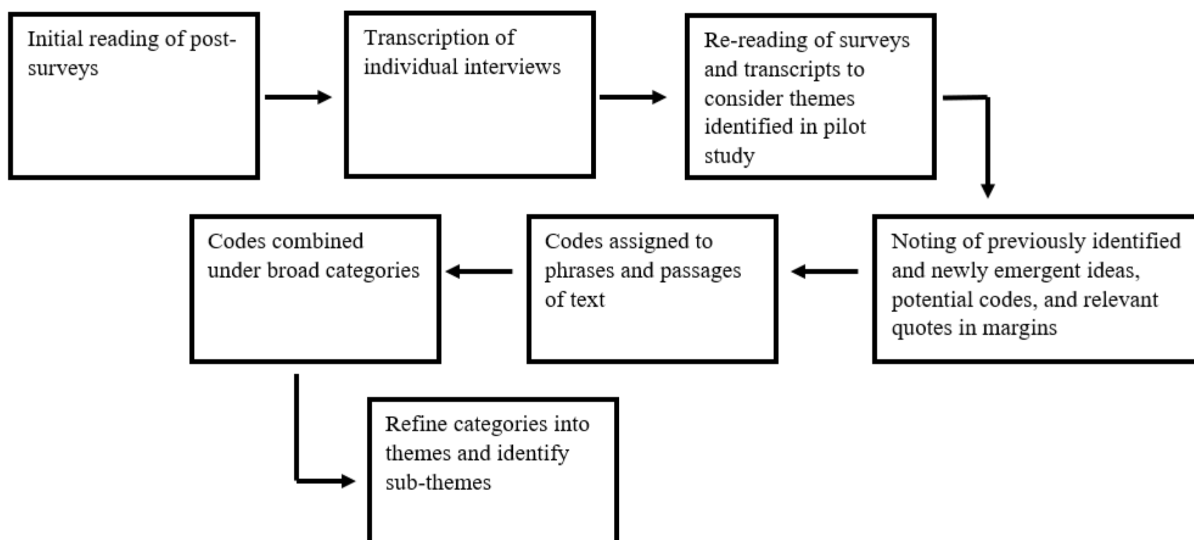
Identification of Themes Through Thematic Analysis

I began the process of thematic analysis as data were collected (Braun & Clarke, 2006). Applying Berg's (2004) content analysis to post-survey and interview data, I considered the pre-established themes generated from the pilot study*:* reader as disposition; reading as one dimensional; and children as levels. New codes along with emerging patterns and related ideas were developed inductively to present participant perspectives (see Appendix J for examples of codes assigned to words and phrases). The "ongoing organic process" (Braun & Clarke, 2006, p. 91) of devising, reviewing and refining themes (Braun & Clarke, 2006) was depicted as my

"coding labyrinth" in Chapter Three. This model highlighted the multiple pathways in which I examined and re-examined the data, and the interpretive lens brought to the analysis process. Throughout the process of data analysis, I was aware of the influence my experiences as a parent, educator, teacher educator, and consultant brought as co-constructor of knowledge in the inductive process (Merriam, 1988) of identifying codes, categories, and themes in the data. I maintained credibility and rigour throughout the analysis process through multiple data sources, member checking of transcripts, and detailing accurate representations of participant perspectives, captured through rich, thick narratives (Merriam, 1988). The process of analyzing the data was delineated in Chapter Three and a summary of this process is presented in Figure 13 as a framework for the findings that follow.

Figure 13

Process of Data Analysis

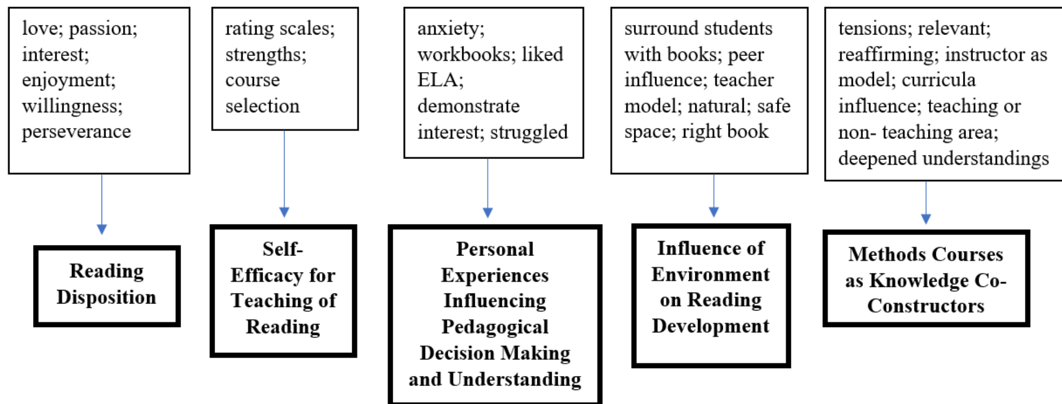


I read surveys and transcripts carefully and codes were assigned to phrases and passages of text (Appendix J). Individual phrases and passages, referred to as "extracts of data" (Braun & Clarke, 2006) were assigned multiple codes, if relevant. I organized codes under five broader categories, identified as: (a) reading disposition*;* (b) self-efficacy for teaching of reading*;* (c)

personal experiences influencing pedagogical decision making and understanding; (d) influence of environment on reading development; and (e) methods courses as knowledge co-constructors. Figure 14 reflects the mind map of these emerging categories.

Figure 14

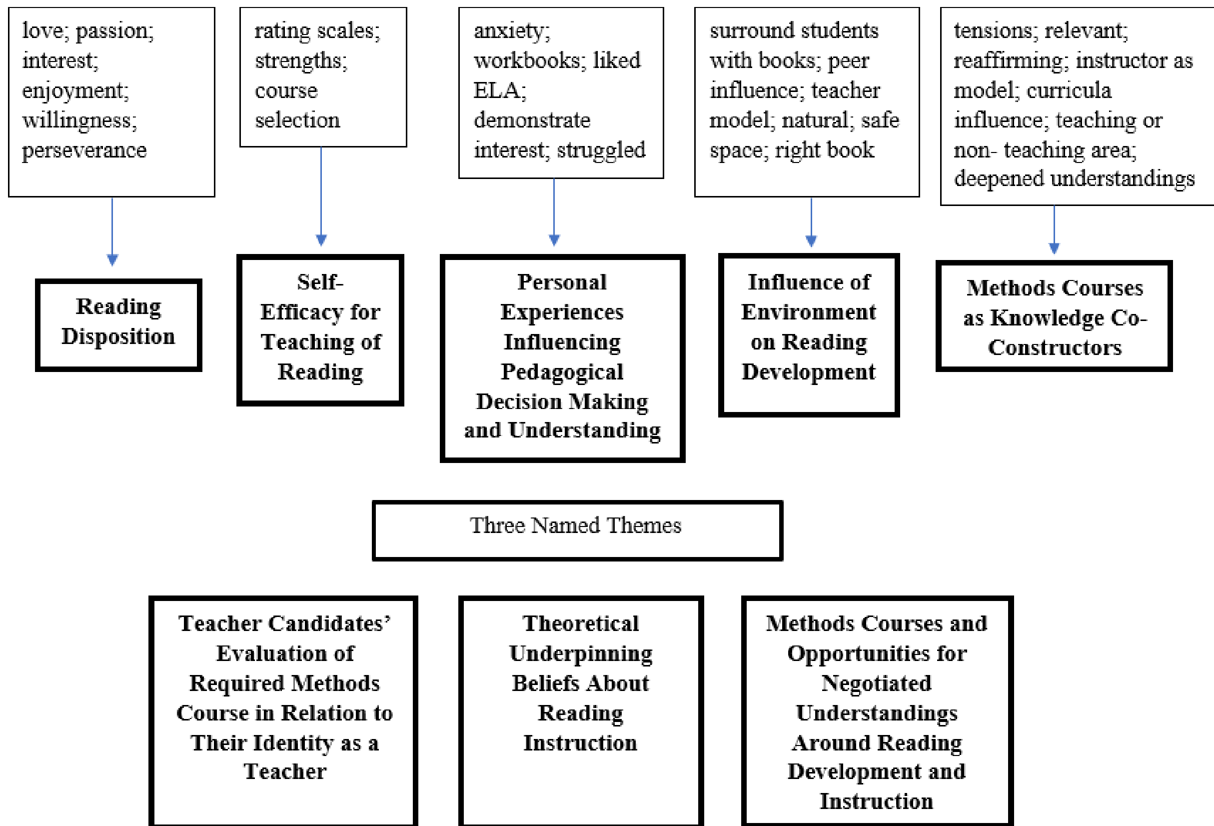
Mind Map of Emerging Categories



Three themes were identified from the original five categories: (a) teacher candidates' evaluation of required methods course in relation to their identity as a teacher; (b) theoretical underpinning beliefs about reading instruction; and (c) methods courses and opportunities for negotiated understandings around reading development and instruction. Figure 15 reflects the revision of the original five categories to the three identified themes. These themes depict the patterned responses related to the research questions (Braun & Clarke 2006) of this study.

Figure 15

Revised Mind Map Including Named Themes



The remaining phases in Braun and Clarke's (2006) phases of thematic analysis include the consideration of sub-themes and the detailed written analysis of each individual theme, evolving into the "analytic narrative that compellingly illustrates the story you are telling about your data" (Braun & Clarke, 2006, p. 93). In the following section, I offer a detailed description of participant perspectives in relation to the three identified themes.

Findings

The following section provides a detailed description of each theme, including sub-themes, that emerged from my analysis of post-surveys and individual interviews.

Theme 1: Teacher Candidates' Evaluation of Required Methods Course in Relation to Their Identity as a Teacher

Participants appeared to value the domain specific knowledge that methods courses offer in teacher education programs. When asked what they felt was important for learning in a literacy methods course (content, instruction, or both), most participants indicated both were essential for their learning as a future reading teacher. Antonina stated that "I want to make sure I am equipping students with the necessary literacy skills and strategies but also ensure I am teaching them in a way that makes sense," and Steve Rogers and Corgi both articulated that content and instruction go hand in hand. Shelby recognized the need for both to direct student learning, stating that "what to teach builds portfolio and content to meet kids where they are at. Instruction teaches me how to identify where differentiated learning needs to be placed." John, however, felt an instructional focus was more important in a methods course because "content doesn't really matter if you can't teach it effectively," whereas Rao felt there should be a content focus because "content is what will engage the class; without engaging content the students will not be engaged." Aspects related to content and pedagogical knowledge in reading, considered alongside literacy methods courses, are discussed in Chapter Five.

Shelby felt that the methods course offered several opportunities for justification of her beliefs around reading instruction. When considering assessments, her beliefs about various forms of assessment were reiterated during the course. She also mentioned that her beliefs and understandings "that culture and language really does support our learning" were reflected in the course readings. As someone who works in a school, Shelby felt the course confirmed her understandings, stating:

> So much of it I already had some context to, so just that reaffirming those beliefs and things that I've seen work. Like invitations, Reggio style learning, making sure that novels are representing kids in the classroom and safer spaces is a huge part of my pedagogy.

Antonina also valued the ELA methods course, stating that "it was a huge learning curve for me with teaching literacy. I think I'll take a lot of learnings from that course moving forward." She highlighted that the ELA methods course broadened her understanding of literacy to include each strand (reading, writing, listening, speaking, viewing, and representing), as well as deepened her understanding of reading strategies she can teach to support students in "construct[ing] meaning from the text." These participants offered differing perspectives on the value of the methods course. While beliefs and understandings around reading were confirmed for Shelby, the methods course presented opportunities for new learning for Antonina.

Self-Efficacy. PSTs were asked, based on a Likert scale, how well they understood how children come to acquire reading skills. Interestingly, all four participants who completed the first required ELA course indicated they had adequate understanding of reading development. The two participants who completed the second required course, Antonina and Corgi, noted some understanding and little to no understanding respectively. This pattern was also reflected in participant responses to the question pertaining to feelings of preparedness to teach reading at the preferred grade level. All TCs who completed their first required course felt adequately prepared, whereas Antonina and Corgi felt somewhat prepared after completing the second required course. Reflecting on feelings of preparedness during her interview, Antonina shared that completion of the two required ELA methods courses made her feel "in a lot of ways less prepared." She elaborated by saying:

> The more you know, the more you know what you don't know… I think I feel more confident teaching older grades. But for younger grades not as confident because there's so many different aspects you need to focus on early on…If I were just starting in Kindergarten teaching someone right from the beginning how to read starting with the basics, I don't think I would feel prepared to do that.

Alternatively, Shelby felt that the curriculum, as well as her experience supporting her daughter in speech therapy and learning to read, added to her feelings of preparedness. She mentioned that "I learned so much from speech therapy and I've been able to carry that over when I get to work with the little kids. It's very easy for me." These shared perspectives reflect the various experiences that contribute to self-efficacy beliefs of PSTs.

When asked about how prepared they feel to teach children who struggle with reading, PSTs who completed the first required course, with the exception of one, indicated they were adequately prepared. Rao, who indicated feeling adequately prepared to teach struggling readers on both the pre and post-surveys did mention some hesitation, however, during her interview. She stated that she was "a little bit nervous about coming in with students that are struggling. I feel like I have all these ideas to help them but what if my ideas don't work?" She added that there was increased pressure because "you have to get them prepped for their next grade and I think as a teacher you always have to be thinking about the next grade." It appeared that while Rao felt knowledgeable around strategies she believed would support striving readers, focus was on fulfilling curricular expectations.

Steve Rogers, Corgi, and Antonina indicated they felt somewhat prepared to teach struggling readers. Interestingly, Corgi mentioned that an identified strength as a reading teacher was that "I struggled with reading my whole life so I can relate to the students who struggle."

Although she felt she had little to no understanding about how children acquire reading skills and felt somewhat prepared to teach reading and struggling readers, Corgi indicated that no further literacy methods courses were necessary to deepen her understanding of teaching ELA. Two additional participants, both who completed the first required ELA methods course, indicated that they felt they had a complete understanding of teaching reading and that an additional required course was not necessary. Shelby, however, felt additional learning was important and that "I consider myself a learner so I never expect to know all things in a subject area." John had a similar response, stating "I feel I have learned a lot, but there is always more to learn." Antonina, who completed the second required course, indicated that she would want additional learning "about teaching and learning phonetics." She also indicated a need to learn more about the sequence of instruction specific to beginning readers. Her questions reflect her interest in additional understandings about reading development:

> If I were starting in Kindergarten, what's the most important thing to focus on when you're beginning to teach reading? Would you start with word sounds? Or talking about the letters and then how do you talk to students about stringing sounds together or how sounds can be different depending on where they appear in a word? Do you build it up from the smallest to biggest units of a sentence? How would that work? And then making sure students don't mix up syllables with word sounds. How would you teach that to younger students who are just beginning to learn how to read?

PST self-efficacy for understanding reading development and for the teaching of reading was relatively consistent for participants who completed each of the required courses, with PSTs who completed the first required methods course having a higher self-efficacy than those who

completed the second. Participants felt that the methods course was informative and offered domain specific understandings to prepare them for teaching reading.

Theme 2: Theoretical Underpinning Beliefs About Reading Instruction

Participants who completed the post-surveys as well as those interviewed shared insights regarding reading instruction and development that appear to characterize a balanced literacy approach. Pedagogical understandings reflective of balanced literacy surfaced in responses concerning instructional routines and decisions, characteristics of a good reader and text choice to support reading development, and the classroom environment.

Instructional Routines and Decisions. In response to questions relating to key routines for literacy instruction, the majority of participants responded with silent reading time for students. Additionally, several participants referenced the "workshop" model and using running records and miscue analysis for assessing students' reading development. Instructional routines were further explored with Antonina during her interview. She privileged the instruction of "active reading strategies" to support students in their reading development. These reading strategies were delineated as making predictions, questioning, relating to personal experiences, considering how understandings change or evolve throughout the course of reading, doing a picture walk, or using illustrations to make sense of meaning. Antonina also felt that shared reading and guided reading were important instructional practices. Her own experience in learning to read contradicted these understandings. She referred to her personal experiences in learning to read, stating:

> I just remember a lot of independent workbook work and we were never taught explicit reading strategies…or shared or partner reading, that wasn't a thing when I was learning

> how to read. It was a lot of just practicing independently once you evolve from the phonics books.

When considering the practices she would bring forward to her own classroom, Antonina felt that independent reading was important, but that phonics books and worksheets, specifically for the younger grades, would not be something she would use.

When considering pedagogical decisions to support students who struggle with reading, Shelby felt it was important to immerse children in authentic learning experiences and align instruction with student interest. She referred to her previous experience working with a child who demonstrated difficulty with reading:

> With the particular boy I worked with he was in in Grade 5 and he was at Grade 1 level reading. So for him, a huge thing he would come with me to do the grocery shopping. When we went grocery shopping I would just have him read to me. Can you tell me which aisle we need to go to? What kind of dirt do we need for the garden? Just making sure language was happening and then making sure that those kids who are struggling, we are knowing who that student is so that they're being met.

Student interest was important to her and she felt that could be used to leverage reading development. She stated that "if you have a hockey player you're going to read about hockey and you're going to have them teach you about hockey. Being able to sit down and say I'm a learner too, tell me what you know." Antonina shared this belief, stating that "teachers should use student interests to inform their classroom instruction and modelling of reading… Also, the teacher should participate as a learner alongside students." Several other PSTs also indicated that instruction should be aligned with student interest. Steve Rogers suggested that a key factor for reading development "would be to introduce them to books and literature that is interesting for

them" and believes teachers should "encourage students to read what they want and plan lessons around that." Attending to student interests in order to support reading development appeared to be an important pedagogical belief.

Discussion of discrete skills for reading development were not apparent in most participant responses concerning features critical for reading instruction. The exception was Antonina, who has an interest in speech and language pathology. She indicated that it would be important to focus on phonology in early reading development. She related this knowledge to learning she had done in a previous course:

> I had a professor who talked to us about how when she learned how to read, she more so was taught to memorize words by looking at them as a whole rather than being made up of individual sounds. So now that she's older she still doesn't know how to sound out words or use sounds to create words. For example, she would often misspell words on the board because she can't break them down to their basic sounds and phonemes. So I think it would be important to focus on word sounds, that would be a really important part of starting to read, and discussing how letters and sounds are different.

Participants were asked a question on the survey about supporting students when they are reading orally 1:1 with the teacher. TCs were asked what they would do if they were listening to a student read and the student read a word incorrectly. Steve Rogers indicated that he would make note of the miscue for future reference, as did Rao. Rao suggested that she would also model making miscues when reading out loud "and then correct my own mistakes in front of the student." Antonina also believed modelling was important, although she indicated that she would wait to see if the student self-corrected the error. If not, Antonina would model the reading with the miscue and prompt the child on meaning (does this make sense?). She would then provide

instruction of strategies for self-correction, noting the importance of the idea "that they develop the skills to correct miscues on their own." John and Shelby felt that if meaning remained intact, they would not mention the miscue to the reader. John elaborated, suggesting that "if they don't catch it and it affect their understanding, I would first point out the things they did well, and then mention the miscue." Several TCs were concerned with the feelings of the child if their reading errors were acknowledged. Shelby and Corgi felt that children might get embarrassed or flustered if their errors were corrected, especially if it was in front of their peers. TCs shared that immediately correcting a child making a decoding error would lower the child's confidence in reading or make the child nervous and cause them to make more errors. John stated that "if it doesn't affect their understanding then bringing it up may only push them away from reading anyway." Antonina indicated she would not correct the child immediately but reasoned that the reader should work to "develop the ability to independently notice and correct their mistakes." Miscue analysis, a tenant of balanced literacy, is reflected in teacher beliefs about word reading, privileges the retaining of meaning over accurate word reading, and has implications on reading instruction. This topic is explored further in Chapter Five.

Several TCs emphasized aesthetic notions concerning reading. Steve Rogers shared that it was important for teachers to regularly "check in with their students and make note of who is enjoying reading and who is not." John shared that sentiment, stating that "understanding and enjoyment is by far the most important" when considering how to assess reading development. When asked what was important to teach directly to support reading development, Shelby suggested "finding ways to encourage and foster a love for reading opposed to it being a chore." These findings are similar to the aesthetic notions of a reader and a teacher of reading shared by TCs who responded to the pre-survey at the beginning of the course.

Instructional routines and decisions for supporting reading development appeared to emphasize a meaning-focused orientation to reading instruction. TCs believed that errors in word reading were inconsequential if meaning and understanding of the text were not compromised. It appeared important to the participants that reading instruction should foster joy and a love for reading and be cognizant that students were not positioned to feel embarrassed or lose confidence in their reading abilities.

Characteristics of a Good Reader and Text Choice to Support Reading Development. Specific questions on the survey asked participants to indicate a "best reader" based on an analysis of the reader's miscues as well as the type of text they deemed best supported beginning reading development. Based on these questions, it appears that most participants ascribe to meaning-based perspectives.

On the post-survey, participants were asked to identify the best reader based on three different miscues. Reader A reads the target word, "canal", correctly the first time and then substitutes a semantically similar word for canal in the next sentence. Reader B uses the first two letters to guess the target word and replaces it both times it appears in the text with a word that does not retain the meaning of the text. Reader C attempts to sound out the word and replaces it both times with a phonetically close mispronunciation of the word. Half of the participants chose Reader A, citing that the child read the word correctly the first time and then replaced it with another word that had a similar meaning. Steve Rogers chose Reader C, suggesting the reader was close to the proper pronunciation of the target word. However, he justified the miscue with attention to semantics, stating "cannel is similar indicating that they understood what the word meant." Corgi also felt that Reader C was the best reader because "they were the closest to

getting the word correct." Shelby did not choose a best reader, noting that all were attempting various strategies to support word reading.

Participants were then asked which type of text would best support reading development in beginning readers. They were presented with the following choices representing a decodable text (high correlation between sound and symbol) and a patterned text (repeated words and phrases supported through context and picture cues): (a) "A fat rat sat. The cat ran at the rat. Sad rat."; and (b) "I like to run. I like to skip. I like to jump. I love to play." For most participants, the text choice did not theoretically align with their responses when identifying the best reader. Antonina, who chose Reader A as the best reader because they substituted a semantically similar word for canal, noted that the decodable text would best support beginning readers because there was "lots of repetition of words and sounds and rhymes." Rao also chose Reader A as the best reader but indicated that the decodable text prompted students to "make connections of similar letters in word families" to promote vocabulary. Corgi chose Reader C as the best reader but chose the patterned text for beginning readers because "I like choral reading for young children. It helps them become familiar with certain words." Shelby, who noted strengths for each readers' miscues, chose the patterned text saying it "is all actions. There is repetition that is less confusing." John and Steve Rogers were the only two participants whose text choice aligned with their best reader orientation. Steve Rogers chose Reader C as the best reader although he reasoned that the miscue was indicative of attending to meaning, not for the attempt at applying phonic knowledge. He also chose the decodable passage and aligned the choice with a meaning orientation, suggesting that "rhyming helps readers understand words better." John, who chose Reader A as the best reader, chose the patterned text. He reasoned that the decodable text "has way too many similar words that could trip kids up I think." Text choices privileging meaning,

including patterned and interest-based texts, emerged as strategies these TCs thought would best support the reading development of students.

Classroom Environment. PSTs indicated various beliefs and understandings about the classroom environment and how they believe that space is supportive of reading development. This included aspects relating to the physical and social environment and provided insight into what these PSTs deem critical for reading instruction and development.

PSTs indicated that an important factor for reading development was ensuring the classroom embodied a safe, comfortable space. PSTs indicated that the walls in their classrooms would provide space for word walls, inspirational quotes, popular book titles, posters, and writing. The importance of the physical space was noted by Rao, who indicated that reading develops through exposure and that reading attitudes are primarily influenced by classroom environments. Shelby highlighted the importance of varied seating and challenged the traditional view of the classroom. She stated:

> I think so much of our learning and development in the classroom happens just from our environment. Whether that's inside and we have the varied seating or we're outside and we're just able to be more flexible with our space so that they're [students] just absorbing what they need to absorb in good ways.

Participants felt it important that classroom libraries would offer a variety of genres, be "organized in a way that is inviting for students" (Antonina), and designated reading areas would offer students quiet, casual spaces to read. Rao posed that it was important to have several spaces housing bookshelves so "then everywhere the student's looking, they see a book." She added that teachers should also have books at their desk so "they look at your desk. They see books, books, books." Classroom libraries are more than just the collection of books for Antonina. She

suggested that this area offers a way to engage students, stating that "you do need to entice them a bit if they're not into reading and making sure it's welcoming for reading." The understanding that reading materials are more influential in reading development than instruction was highlighted by Steve Rogers who stated, "I think that the perfect book will work better for a beginning reader than the perfect teacher." Post-course beliefs shared by PSTs around classroom environment are reflective of those shared by participants at the onset of the methods course.

Participants indicated beliefs around the teacher's role in modelling reading attitudes and behaviours. Several PSTs suggested that reading teachers should be passionate, caring, and love to read. John and Steve Rogers suggested that teachers should make reading fun, and Rao mentioned that "modelling passion for reading" was a key factor in supporting reading development. Teacher as model was also noted by Antonina, who suggested that "the teacher should participate in literacy too, such as by reading their own book during independent reading time." Models for reading development were brought forward from Shelby and Rao in their interviews. Shelby indicated that she was an avid reader, and that she entered Kindergarten knowing how to read. She shared that her mom "always had a book in hand" and that her development as a reader was from "always seeing it." Rao also shared that reading came easily for her and that when she began attending school full-time in Grade 1, "I was fully immersed [and] I just picked it up from my environment." Like Shelby, Rao also considered her mother to be someone who modelled reading behaviours and supported her development as a reader. She shared that "my mom had books everywhere. Even if she wasn't reading them with me, I just saw her reading." Her experience as a child with "just having books around the house… it was just always around me" is carried forward in her identity as a reading teacher. She shared the following:

> I will also have books and resources around my classroom, like my mother did with me. Just them [students] seeing it, absorbing it will encourage students to pick up a book. Someone's going to pick up the book. The next one's going to pick up the book… You don't have to talk about a book but just expose them to reading materials promotes reading.

Beliefs and understandings related to the reading environment appear to suggest that exposure is a key factor for reading development. Theoretical orientations for reading instruction, although not explicitly stated, appear alongside participant responses and reflect a meaning-first balanced literacy perspective.

Theme 3: Methods Courses and Opportunities for Negotiated Understandings Around Reading Development and Instruction

The required ELA methods courses offered opportunities for PSTs to reflect on their own experiences and understandings of reading development and pedagogy.

Oral Round-Robin Reading. When asked if they would have their students practice unrehearsed round-robin reading in their classroom, TCs drew on their own experiences and feelings of empathy towards others when responding that this was not an instructional practice they would employ. Corgi reflected on her own experience, citing it "caused me a great deal of anxiety." Shelby considered how students might feel in front of their peers, stating that "some students notice their differences immediately and may feel ashamed." Antonina felt as an instructional practice it "puts unnecessary stress and attention on one student so it is not an accurate representation of their actual reading skills." Some participants suggested providing choice for students, "because not everyone enjoys oral reading" (Steve Rogers) but that "in small

groups they can do it if the group decides they feel comfortable." (Corgi) These perspectives significantly differ from those held by TCs at the beginning of the course.

Antonina reflected on her own experiences in school and mentioned that "when I was doing round-robin reading in class it just made me feel uncomfortable." She added that "you don't focus on understanding what you read when you are doing round-robin reading because you're just put on the spot to perform for everyone in your class." This practice was directly addressed in the reading methods course and offered her an opportunity to revise her thinking. She "learned that that's a big no-no" and was able to consider alternate instructional practices for students to develop fluency and practice in reading aloud that presented as lower-risk. She described one instructional practice, choral reading, as an option for innocuous engagement in reading aloud:

> Choral reading, I had never thought of that before but that could be an alternative to round-robin reading where everyone gets the practice and students are probably more likely to participate if everybody else is reading at the same time.

This shared understanding was also recognized by John, who indicated that choral reading relieved students of feeling the pressures associated with having to read out loud by themselves.

Rao's experience with oral round-robin reading differed from Antonina's. As a strong reader and "a good public speaker," Rao stated that "at the beginning of the course I felt oral round-robin reading was a great way to assess a student's reading skills." Her prior beliefs and experiences bumped up against new learning in the course. Her understandings shifted, however, through an empathetic lens when considering students who struggle with reading. She shared:

> As we started talking about it my opinion changed. How can you put someone on the spot, put that pressure on them, and do a proper assessment? Or even see what they are capable of because they're under so much pressure that they're breaking?

Addressing misconceptions around instructional practices, like oral round-robin reading, and by hearing other's experiences that differ from one's own provided opportunities for shifts in thinking and revised understandings.

Levelling. Beliefs and understandings around levelling were interrogated in the individual interviews. It was evident through the interviews that the instructor of the methods courses had indicated that use of a levelling system may be used as a form of assessment, but that "levelled reading shouldn't be a focus." (Antonina) Alternate forms of assessment were offered as ways to consider reader development. These understandings were present in participant responses to questions regarding assessment on the survey. John indicated that choral reading "is a good way to assess students' ability to read aloud" and use of questioning after reading could assess comprehension. Other ways to assess development shared by participants were through interviews, assessment guides (knowing what kinds of reading characteristics are appropriate for different ages), observations, running records, miscue analysis, and book choice. Antonina reasoned that "a teacher should use a variety of ways to assess reading to get the best picture of that student's overall reading ability." Corgi was the only TC who indicated that "getting to a higher reading level" was a way of recognizing reading proficiency. It appeared that through coursework, an emphasis on levelling systems for assessment was replaced by an expanded view of assessment practices.

Rao appeared to have tensions when considering the use of levelling systems for assessment. She stated that "as a teacher candidate I am striving for the one to one interview to

assess reading comprehension." She also considered the use of portfolios to demonstrate student growth over time. Tensions appeared when thinking about addressing the needs of individual students. She shared:

> I just think levelled reading can be really black and white and there's so many more things to think about, but when you have thirty kids that are all struggling in different ways, as a teacher it helps me to focus my assessments per student better without getting lost between students.

Rao felt that levelling systems for assessments may be more efficient and provide her the information she required. She indicated that through the use of a levelling system she would be able to assess comprehension of text, recognize if a student was making connections between the text and the illustrations, and note if the child was making personal connections. She appeared to be wrestling with *how* she wanted to interact with and assess students as readers and what she thought was realistic. These tensions appeared to be influenced by what was being presented in the methods course. Rao indicated that the course instructor addressed the use of levelling systems, "but it felt like not to rely on it too heavily." Rao said that "I don't feel as a teacher I want to." These tensions presented themselves again when considering efficiencies:

> It [levelled reading assessment] doesn't give me the opportunity to really look at the growth of my student, to get to know my student, to give myself the opportunity to talk to them. Yes, I think we need to be using them at some point so I, as a teacher, am not burning myself out and I'm keeping track of what's going on much more efficiently.

Shelby's view about levelled readers and levelling systems for assessment appeared to center around student identity. She suggested that "levelled readers are a tool but not the end all" and could be used to "meet kids where they're at." Shelby recognized that for students who were

reading proficiently, awareness of which "level they were at" could foster confidence and "can be empowering." She was candid, however, in how awareness of reading levels affects children who may be struggling. She shared that this knowledge can be "debilitating when kids hold their levels above others and their own level of intelligence." She considered her work with students in schools, sharing, "I've worked with kids who are just broken by this [knowing their level] and really struggle to function every day. It can really just change how they feel." Shelby's experiences with students who identified their reading with a level nudged her to think about how this association could be both beneficial and damaging to students' reading identities.

Both Shelby and Rao felt it was important that, if levelling systems were used, attempts were made to limit student awareness of individual levels assigned. Rao felt that if books were colour coded instead of numbered, "kids aren't identifying who's better, who's more skilled, who's behind. Because that's taking away their self-confidence." It appears that both participants recognized that reader identity could be compromised if children were assigned reading levels.

Antonina's understandings about levelling systems were negotiated through her personal experiences as a student, the methods course, and her field experience. She recalled from her own experience:

> I do remember doing the levelled reading when I was younger but then once you're at the certain point, once you're above grade level, it sort of dropped off in the older years. But when I was younger I do remember being pulled aside to a room and practicing where you read a short book and then after they ask you comprehension questions or they'll point to something that you maybe got wrong. Just asking, questioning your understanding of it afterwards.

Her personal experience in going through this process was mirrored in her field experience as a TC. She stated that "I was a bit surprised by how often the levelled reading assessments were done on students when I worked alongside the resource teacher." This experience contradicted the learning taking place in her methods course. She shared that based on her learning from the methods course, "I thought teachers need to focus on modelling reading techniques and then give students time to practice them…I was under the impression that it was more important that they develop the skills to correct miscues on their own." She added that what she had learned in her methods course privileged the use of high quality texts, emphasized teacher modelling and supported practice, and teaching students to apply strategies like questioning and making predictions. She shared that "it's more in how you read not as much what you're reading" when considering that "expensive kits" could be used to determine a reading level, but so could "another book that has really great reviews." Antonina's shared perspectives reflected that a reliance on levelling systems to assess students was not necessary. Instead, assessment through observation, application of skills and strategies, and use of authentic texts could be practices implemented to monitor reading development.

Antonina indicated that her beliefs about levelling systems, supported through understandings negotiated in her methods course, were in contrast with her knowledge of school division priorities. Through the course of her field experience, she learned that "there's a big emphasis on collecting data for reading…so it was just part of the job." She added that the levelled reading assessments done with students appeared to be less about using the information to guide instruction and more about "collecting data, seeing how many mistakes they had, adding it up, and using it to choose another levelled book in the future." Her understanding of the purpose of the data collection was to "hold teachers accountable and make sure students show

some reading improvement over the school year." These understandings shared by Antonina offer another layer for the use of levelling systems: one of data collection and teacher accountability.

For Antonina, tensions were apparent with her beliefs and understandings regarding reading instruction and supporting reading development, facilitated through her methods coursework, and those presented during her field experience and what she understands as school division expectation.

Definitions of Reading and Readers. PSTs understandings of reading and the nature of reading reflected an awareness of multiple skills and processes involved. Three PSTs identified affective characteristics to define "good readers", suggesting good readers "are the confident students in the classroom," (Corgi) "do their very best wherever they are at," (Shelby) and "are always looking for new books." (Steve Rogers) However, other participants referred to the application of skills and strategies, indicating that good readers "find the hidden meaning of texts" (Rao) and "use prior knowledge and information from the text to construct their own meaning." (Antonina) When considering reading development, Steve Rogers referred to various skills and strategies such as vocabulary development, proper pronunciation of words, sentence fluency, and comprehension of text. Antonina also appeared to have a developed understanding, suggesting that developing readers would be making connections with prior knowledge, formulate predictions, understand information presented in text, infer meaning of unknown words based on context, apply phonic decoding of unfamiliar words, and have a positive attitude towards reading. While there appeared to be a mixture of affective characteristics and application of skills and strategies in definitions, emphasis was placed on aspects of language comprehension.

Definitions of reading reflected an active process. Several PSTs privileged reading as comprehension. Antonina defined reading as "constructing meaning from a text based on prior knowledge and information from the text," while Rao suggested reading was "another process of learning. Learning new information, cultures, myths, perspectives." Steve Rogers defined reading as "processing the meaning behind words in both sentence structure and overarching meaning." Three participants included a reference to two processes in their definitions of reading. In addition to gaining meaning from text, all three PSTs referred to looking at words. Shelby defined reading as "the ability to see letters formed into a word. Finding understanding in what we see on paper and building connections to our personal life." John suggested reading was "looking at words and understanding the meaning behind them" and Corgi defined it as "understanding the English language enough to look at text and understand the meaning of it." While these definitions appear to reflect a narrow understanding of decoding, they highlight that reading involves the dual ability of reading words and ascribing meaning to them within the context of the text.

Interviews provided an opportunity to explore how these definitions shifted from initial understandings. Antonina shared that her understandings of both a reader and reading reflected a dynamic process; that a reader is "active" and "reading should be emphasized as a process rather than an outcome." Antonina said that her early understandings of reading focused on the ability to accurately read words and understand text. After completion of the ELA methods course, her understandings of reading evolved to consider the complexity of the active processes involved in constructing meaning. Delineating those active processes, such as making predictions and connecting to prior knowledge, was important for Antonina as she had not considered her own application of those strategies as a reader. She said, "I had never thought of reading like that

myself when I read." She stated that "initially, I thought reading was more passive but there was a lot more involved." Her early understandings of reading development were drawn from her experiences working through phonics workbooks. She stated, "I always thought it was about learning small words and word sounds and then giving students practice with easy books with just a few words and about rhyming words." She also approached her methods course with an early understanding of the importance of phonology and its relationship to reading, which was confirmed in her methods course. New understandings, however, were that these skills needed to be directly taught and that most students did not acquire them naturally. Antonina shared:

> I thought teachers didn't have to focus on teaching phonemes as much. That was more of a thing that students should just catch on to and if they didn't, that's when the speech and language pathologist came in. But no, phonetics is something that needs to be taught to students and they need practice with it.

While she recognized the importance of phonology in learning to read, she shared that her understandings of reading development evolved to include pragmatics and semantics. Antonina highlighted that "reading has a lot involved. You need to consider a lot of different things when teaching reading instead of just sounds or meaning. It's both." New understandings shared by Antonina reflect the depth and breadth of reading-related content and pedagogy that needs to be addressed in literacy methods courses.

Rao's early definition of reading reflected a product, suggesting that "reading is a life long skill." By the end of the course, this definition was refined to consider the active process of communication between the author and the reader, as well as metacognitive development as the reader engages with a text. Her early understandings of reading development appeared to reflect reading as something that could either be done or not. When she considered how she would have

assessed a child’s reading development, Rao shared that “I wouldn’t even be looking at the ability to fix those [errors] or address those miscues. I would’ve just put right or wrong.” Evolved understandings reflected the developmental nature of reading. Rao ruminated about her learning journey:

> As time went on I realized that that’s part of the learning process, that’s part of assessment and that we want to see progress. We want to see that development and that you are a good reader when you are developing and learning new things and you’re able to find independence in it.

Pre-course definitions of reading as “right or wrong” shifted to an understanding of the reader being actively engaged in the process of comprehending text, asking questions, assessing their own understandings, and having a perspective.

Shelby’s early definition of reading considered a holistic lens. She shared that “it’s not just sitting down and looking at a book. It’s the listening aspect of it and what we can bring in from our cultural perspectives, too.” Shelby felt that her experiences working in schools provided her “a little bit of an advantage when I go into these classes” and, unlike Antonina and Rao, her understandings related to reading development and definitions of reading remained unchanged. She was reassured throughout the course in her beliefs about incorporating play, developing language, and aligning instruction with interest. Shelby stated that “everything in that course was something that was just so relevant to my own beliefs that the only way I could see contradiction is seeing the teachers who don’t necessarily make sure kids are being met where they’re at.” Shelby’s experiences in schools appeared to provide a solid foundation and context for learning in the methods course.

Summary

The coding process I utilized in this study reflected multiple entry points and repeated journeys, depicted as a coding labyrinth, to analyze data. In this chapter, I explored key ideas and further delineated emergent themes to consider patterns in TC backgrounds that appeared alongside initial beliefs about the nature of reading and the teaching of reading. Additionally, I explored post-course reflections of TCs regarding their ideas about reading development and the teaching of reading through post-survey and interview responses. While pre and post-course data were not analyzed across each other, three individual interviews held post-course provided insights into the negotiated understandings about reading development and pedagogical practices.

Chapter Five presents the analysis and discussion of themes from this chapter in relation to my literature review. I also reflect on my research journey and share implications of the research findings, limitations to the study, and recommendations for further research.

Chapter Five: Discussion

This chapter elaborates on the findings of my investigation of the beliefs and understandings held by PSTs about reading development and pedagogy. I paid particular attention to initial understandings held by 11 PSTs surfaced early in their first required ELA methods course. As well, I focused on negotiated understandings surfaced by six PSTs upon completion of either their first or second required methods course. The goal of this study was to examine these understandings related to reading, carried forward from various experiences into methods courses, and the possible shifts in understandings when presented with new or contradictory learning.

This interpretive case study elicited responses on surveys and three individual interviews, illuminating the reading beliefs and understandings of the participating TCs. Three themes emerged from the analysis of the pre-survey data, which addressed the first research question: What patterns and themes in TC backgrounds appear alongside particular beliefs, held early in a required curriculum course in ELA, about the nature of reading and the teaching of reading? The themes were: (a) teacher and student disposition characterizing reader development; (b) influence of the physical and social environment on reader development; and (c) early understandings of instructional practices to support and recognize reading development.

Post-survey and interview data were analyzed to consider the second research question: What patterns and themes emerge in the post-course reflections of TCs regarding their ideas about reading development and the teaching of reading? Findings revealed three themes relating to reading development and pedagogical understandings: (a) teacher candidates' evaluation of required methods course in relation to their identity as a teacher; (b) theoretical underpinning

beliefs about reading instruction; and (c) methods courses and opportunities for negotiated understandings around reading development and instruction.

This chapter presents a discussion of findings from this study and their significance in relation to relevant literature leading to recommendations for teacher education programs, and addressing limitations of this study. A section on recommendations for further research follows, outlining directions for further study. Additionally, I discuss my research journey and concluding thoughts around this study as it contributes to the body of existing research.

Discussion of Findings

The students who enter teacher education programs bring with them a multitude of experiences that have shaped their belief systems. Somewhat unique to the teaching profession is that TCs have already been in the classroom for many years, albeit as students, and have internalized, through observations and vicarious experiences (Bandura, 1982, 1997; Stuart & Thurlow, 2000), beliefs about teaching. Prior experiences from schooling can have a powerful effect on PST learning and knowledge during teacher preparation (Calderhead & Robson, 1991) and these experiences are foundational to their beliefs about education as their first-hand experience as teachers is limited (Rich & Hannafin, 2008). Beyond their own classroom experiences, this study asked participants to provide information to be considered alongside their surfaced beliefs and understandings. Many participants reported having varied experiences working with children learning to read, either as an educational assistant, community school coordinator, volunteer, as a parent, and in field placements. Reading beliefs may also be initiated from childhood experiences at home, through memories of parents modelling and encouraging reading habits (Vieira, 2019). It would be expected that these experiences would culminate to

contribute to individual belief systems reflective of reading development and instruction. Barnes and Smagorinsky (2016) recognized that:

> The process of learning to teach is not simple. The novice teacher's developing conception of effective instruction is mediated by their previous experiences in schools as students, the structure of their teacher education program, their cultural and social backgrounds, their various field-based experiences, and the students, teachers, and faculty involved in teacher preparation. But this list is by no means exhaustive. There are a host of other experiences, people, and places that influence the novice teacher as they prepare to enter classrooms on their own. (p. 353)

This quote reflects the extensive and varied experiences that shape existing belief systems. PSTs' identities as teachers of reading often reflect the ease at which they, themselves, learned to read (Vieira, 2019). However, "as expert reading adults, we systematically underestimate how difficult it is to read" (Dehaene, 2009, p. 230). Surfacing the beliefs and understandings of reading from PSTs who, themselves, had difficulty with reading acquisition could offer valuable insights for learning within ELA methods courses. The lens through which PSTs in the current study approached the course focused on how to make students love reading as much as they had.

Research Question One

Theme 1: Teacher and Student Disposition Characterizing Reader Development

The initial understandings surfaced by TCs revealed an emphasis on the affective characteristics of teachers and students. In this study, effective teachers were described as enthusiastic, passionate, kind, and patient. TCs indicated that personal strengths they would carry forward as reading teachers were the love and enjoyment of reading. Psychological factors, including confidence, persistence, and patience were deemed as important reading behaviours to

explicitly teach to students. Consistent with the results found in the current study, Murphy et al. (2004) indicated that PSTs were inclined to believe that having strong affective skills were critical characteristics of effective teachers.

Research has indicated that content and pedagogical knowledge of reading-related skills, abilities, and development is essential for effective reading instruction (Cohen et al., 2016; Dehaene, 2011; Spear-Swerling et al., 2005); however, teacher attitudes and their relationship to effective instruction should not be dismissed. Teacher attitudes related to instructional practices may influence instructional decisions, leading to student achievement. Several reports support the interaction between attitudes and instruction (Marzano, 2007; Oskamp & Schultz, 2005; Vartuli, 2005; Wright, 2006). Teacher modelling of dispositional characteristics may also influence student attitudes. Applegate and Applegate (2004) examined teacher enjoyment of reading and observed that students whose teachers did not enjoy reading were less apt to enjoy reading whereas students with teachers who enjoyed reading were more liable to enjoy reading.

Student Characteristics

In the current study, early understandings of reading development also considered affective characteristics demonstrated by students. TCs considered enjoyment of reading to be a key factor in reading development, noting that reading should not be forced and that students should choose it willingly. Good readers were described as students demonstrating a positive attitude, interest, and a sense of pride. They were characterized as confident students who would exhibit perseverance through more challenging texts. Good readers were also identified as the children who loved to read.

It is recognized that several factors impact reading development. Hoover and Tunmer (2020) identified psychological factors, including motivation, interest, and self-efficacy as

influential for learning to read. As well, Hoover and Tunmer recognized home literacy environment and the various resources and activities that support literacy development outside of schools as ecological factors that may impact reading development. Constructs of motivation and engagement are included in recent models of reading (see Duke & Cartwright's Active View of Reading Model, 2021), demonstrating their importance in the reading process. Duke and Cartwright (2021) identify, through this model, the role of interest, perceived value, motivation, desire, and engagement on the reading process.

Johnson (2005) asked fourth grade students to define a good reader and considered how those definitions shifted over the course of four months. Student perceptions of good readers demonstrated an awareness of the varied strategies used when reading, with the top three responses at the end of the study including "ask questions, "sound out", and "understand" (p. 768). Perseverance was the only affective characteristic indicated by these participants. Johnson's study highlights the disconnect between the initial beliefs concerning good readers held by TCs in the current study and what children, themselves, characterize good readers to be. It may be that because TCs have developed proficiency in their reading skills, the work it took to get there has been forgotten, instead replaced with dispositional characteristics reflective of traits over process.

Why might it be important to surface definitions of a reader and reading with PSTs? Perfetti (1984) stated that definitions of reading "are significant for how reading is taught and how reading research is viewed in relation to instruction" (p. 43). In the current study, TCs referred to decoding and comprehension in definitions of reading; however, definitions included one or the other of these processes with more definitions focusing on gaining meaning from text. Definitions of good readers also indicated a meaning-emphasis. More refined definitions

articulated by researchers highlight the necessity of two cognitive capacities working alongside one another. Perfetti referred to reading as thinking guided by print. Carlisle and Rice (2002) described the active nature of the process as the reader draws meaning from the text. Similarly, Snow (2002) identified reading as the process of extracting and constructing meaning through interaction with written language. This contradicts early definitions surfaced by the TCs whereby attention was on the product, such as gaining knowledge and learning about the world.

Disposition Over Knowledge

It was evident in the current study that TCs placed an emphasis on dispositional characteristics as a means of modelling reading behaviours and as an indication of reading development. While it is important to highlight what emerged from participant responses, it is also important to recognize what was not evident. Absent from TC responses concerning effective reading teachers was the level of content and pedagogical knowledge. Studies demonstrate that teachers with domain specific knowledge are able to make strong instructional decisions (Neuman & Danielson, 2021; Snow et al., 1998) and support student learning (Brady et al., 2009; Carlisle et al., 2011; McCutchen, Abbott et al., 2002). Initial understandings of reading development showed a lack of awareness of the cognitive foundations, represented by language comprehension, word recognition and the underlying component skills in each (Hoover & Tunmer, 2020). Understandings of reading development were narrow and undeveloped, focusing on affective characteristics rather than demonstration of skills. Phases of word reading development (see Ehri, 1992) demonstrated by beginning and emergent readers reflect the developmental nature of reading acquisition along with skills and strategies that support development. Knowledge of letter-sound relationships and application of that knowledge to word reading (Ehri, 1992; Perfetti, 1984) were concepts noticeably absent from participant responses.

One participant, however, did indicate new learning, post-course, that reflected some awareness of an initial phase in reference to logographic reading.

Theme 2: Influence of the Physical and Social Environment on Reader Development

Apparent in the initial understandings held by TCs was the consideration of the physical and social classroom space as supportive of reading development. TCs envisioned classrooms that included multiple, cozy areas designated for a comfortable reading experience. Additionally, they wanted their classrooms to provide students with a sense of safety. TCs also considered how wall space could be used to support literacy development, suggesting the alphabet, words, and inspirational quotes would be positioned in that space. Having a variety of book choices was very important to TCs. Participants recognized the necessity of offering a variety of genres and topics, as well as ensuring books reflected diversity in culture and language. It was also indicated that children would be motivated to read if they saw their peers engaged in the experience.

Reference to the physical environment of the classroom suggests external elements such as seating, classroom size, instructional materials, and orderliness, and the social space considers the interaction of those within the classroom, including teacher and students (Matoy, 2021). Initial beliefs surfaced by TCs aligned with those reflected in Barnyak and Paquette's (2010) study. Post-course findings revealed that PSTs believed reading experiences for children learning to read should privilege surrounding children with print and instruction should rely on the use of children's own language and experiences. Findings from Herron Gloria (2015) also reflected PST beliefs around the influence of the physical and social environment on student learning.

There is research to suggest that the physical environment of the classroom may contribute to students' achievement and motivation (Culp, 2005; Higgins et al., 2005) and that effective teachers strategically place furniture and consider the environment as a means of

supporting learning and reducing distractions (Stronge et al., 2004). Inspired by Reggio Emilia's conception of environment as third teacher, the physical classroom space may be viewed as "living" and a contributor to children's learning through intentionally considering children's perspectives and inviting interactions (Strong-Wilson & Ellis, 2007). Social context may also support reading development of children, fostering interest through peers and teachers (Jones, 2015; Nolen, 2007; Pressick-Kilborn & Walker, 2002; Walker et al., 2004). Instructionally, Cooc and Kim (2017) delineated that peer-mediated reading practices, such as pairing a student with weaker reading skills together with a stronger reader, may contribute to reading development.

Contrary to the beliefs held by PSTs, research on teacher effectiveness has indicated that the type, quantity, and phasing of instruction contributes to student development more than the physical conditions of the classroom (Brophy, 1979/2010; Brophy & Good, 1986; Holzberger & Schiepe-Tiska, 2021; Measures of Effective Teaching (MET) Project, 2013; Rosenshine, 1983). Highlighting the significance of instruction, the Canadian Education Statistics Council (2009) reasoned that "with excellent reading instruction, all students, regardless of gender, language, cultural background, or socioeconomic status can learn to read well" (p. 6). When considering critical and interactive components of effective reading programs, aspects of physical and social environments are absent. Rather, facets related to deep content and pedagogical knowledge are highlighted by Snow et al. (1998), identified as: a comprehensive approach to instruction; data used for progress monitoring and to inform instruction; resources and professional capacity; quality intervention for children experiencing difficulties. The influence of a highly effective teacher over the physical and social environment is also shared by Piasta (2016) who stated:

> implicit contexts for learning literacy, such as literacy-related play opportunities and high-quality physical literacy environments (i.e., providing children with materials such

> as books, visual representations of print, writing implements, and literacy-related props and manipulatives), are likely insufficient for supporting many children's development of emergent literacy. Rather, adults need to be involved and act intentionally within these contexts to affect children's learning. (p. 236)

A well-designed learning environment considers the child and individual developmental needs (Canadian Council on Learning, 2006) as well as intentional opportunities for social interactions (Berris & Miller, 2011). It appears that while the initial beliefs around the influence of the physical and social climate on student reading development have merit, it is imperative that TCs develop an awareness of the critical influence they will have as reading teachers, recognized through their understandings of reading development and instruction.

Theme 3: Early Understandings of Instructional Practices to Support and Recognize Reading Development

TCs demonstrated an awareness of several skills and instructional practices supportive of reading development. They noted specific skills, such as phonological awareness, fluency, and vocabulary as important to teach. Absent from their responses were comprehension and phonics, two of the big five outlined by the National Reading Panel (2000) as essential components for reading development. Comprehension did surface in most participant definitions about reading, with only two participants referencing decoding of text, a finding contrary to Brenna and Dunk (2019) where TC definitions of reading privileged decoding.

The term "reading strategies" surfaced as important to teach and as something utilized by good readers. Reading strategies often refer to the active process of reading (Masharipova & Mizell, 2021). However, the intended meaning of this term when used by participants was unclear, so it was explored further in participant interviews. Even in participant interviews held

post-course, there continued to be inconsistency related to a shared understanding of this term with suggestions that reading strategies were what a reader activates to construct meaning while reading, routines for reading instruction, reading instruction strategies, and lesson planning.

Influence of Prior Experiences

Apparent in the initial beliefs surfaced by TCs early in their course were their understandings related to instructional practices based on their own experiences. Specifically, TCs' decisions to engage or not engage in the practice of oral round-robin reading were justified based on their experiences with that practice. These processes echo findings from Debreli (2016), Smagorisnky and Barnes' (2014), and Vieira (2019) which indicated that the primary influence on new teachers' instructional decisions and planning of learning experiences was what they had enjoyed, or not enjoyed, as students. An implication for decision-making based on this criteria is that PSTs will teach how they were taught (Yoo, 2005) but require knowledge around if and how these practices align with research so misconceptions can be directly addressed (Brenna & Dunk, 2019). This necessitates the call for teacher educators to examine PSTs' initial beliefs prior to coursework to determine if they align with best practices in literacy instruction. Oral round-robin reading is a practice that a large body of research deemed ineffective (Kuhn, 2014), yet PST backgrounds, including prior experiences, prior knowledge and skills, beliefs and dispositions are highly influential in instructional decision making (Moore, 2020).

Understandings of Reading Development

It appears that PSTs early in their teacher education programs have an understanding of reading development as the progression through pre-established, socially constructed levelling gradients and targets. TCs indicated that recognition of reading development would be made visible through the identification of reading levels and the progression through levelled passages.

These TCs appeared to lack knowledge of characteristics of developing readers, relying more on pre-established benchmarks to indicate development. One minority voice considered reading development through the lens of individualized learning goals.

After an extensive search through the literature, it is difficult to find research that supports the use of a levelling gradient to identify and monitor reading development, rendering this understanding held by PSTs as misinformed. Burns et al. (2015) indicated that the term "instructional level" was first used in 1946 and continues to be widely used in education to "describe the appropriate level of challenge for reading" (p. 437). However, research has cast doubt on the notion of an instructional level (e.g., Jorgenson et al., 1977; Kuhn et al., 2006; Morgan et al., 2000; O'Connor et al, 2010; Stahl & Heubach, 2005). Despite this skepticism, informal reading inventories (IRI), characterized by levelled texts, are widely used to provide an indication of a student's instructional level. Researchers, however, have questioned the reliability of these systems (Burns et al., 2015). Levelled texts appear to increase in difficulty but not at equal intervals, so the difference in difficulty between an "A" text and a "B" text may not be the same as the increased difficulty between "B" and "C" (Paris, 2002). Additionally, there are reported inconsistencies between books rated as the same level (Burns et al., 2015). Criticism surrounding levelled texts has suggested there is no clear basis for text difficulty, which may be reflected in vocabulary choice, number of decodable words, and the extent prior knowledge may impact understanding and word recognition (Paris, 2002; Picher & Fang, 2007). Additionally, scoring of IRIs are highly subjective and are likely to differ between testers (Burns et al., 2015; Moats, 2017; Paris, 2002).

The PSTs in this study, however, are not the only ones that considered levelling gradients reflective of reading development. Burns et al. (2015) indicated that "teachers seem to rely

heavily on assessments of the instructional level to design instruction, select reading materials for students, and assign guided reading groups" (p. 438). Students, as well, characterize their reading identities and development in terms of levels. Clay (1991) promoted the use of a levelling gradient, suggesting that "many children learning to read will be confused without assistance from some form of a gradient of difficulty in reading books" (p. 201) and levelled books are central to her intervention program. This belief in levelling may not be consistent with research. Instead of supporting children through their development, studies have demonstrated that children defined their reading identities in terms of a level and established who amongst their peers were strong readers, weak readers, and where they situated themselves within this context based on this gradient (Forbes, 2008; Pierce, 1999) often with negative consequences (Forbes, 2008).

Instructional Practices to Support Reading Development

Present in pre-survey data were notions of instructional practices to promote reading development. Participants indicated that modelling and scaffolding should be present in instruction, as well as working one-on-one with students, assisting during reading stations, and listening to students read. Other common practices reflected in participant responses included reading aloud to students, guided reading, think alouds, and silent reading opportunities. These insights contradicted those of Brenna and Dunk (2019) whose findings suggested initial TC understandings of instruction attended to the product (e.g., understanding material; teaching literature) of reading. While TCs were able to identify these practices, the extent of their knowledge around application, teacher role, and student role was unclear. This is referred to as conditional knowledge—an understanding of when and where to use specific instructional practices and how to adapt based on students and context (Leader-Janssen & Rankin-Erickson,

2013). An activity like shared reading is considered best practice although impact is reliant on mediation by an adult who is intentional in targeting specific learning concepts (Piasta, 2016). This type of interaction is consistent with Vygotsky's (1978) "zone of proximal development" where a knowledgeable mentor facilitates learning through social interactions.

Research Question Two

Theme 1: Teacher Candidates' Evaluation of Required Methods Course in Relation to Their Identity as a Teacher

Building Content and Pedagogical Knowledge

Effective instruction is directly linked to student achievement (Joshi, Binks, Hougen et al., 2009; Lyon & Weiser, 2009) thereby necessitating a well-developed understanding of content and instructional practices to support reading development. It is not enough for teachers of reading to have knowledge related to aspects of reading, specifically phonological awareness, phonics, fluency, vocabulary, and comprehension. It is not enough for teachers to select a single "camp" in any "reading wars debate" and remain inflexible in light of current and ongoing research (Castles et al., 2018). Rather, "teachers need to know how all of these components work together to contribute to reading proficiency and how to teach them in an integrated fashion" (Lyon & Weiser, 2009, p. 476).

PSTs in the current study articulated the desire for both content and pedagogical learning in their methods course. One minority voice called for an instructional focus, suggesting effective instruction is key, while another minority voice prioritized content as a mode of engaging students. Interestingly, much of the shared understandings offered by participants reflected aspects of instruction. PSTs imparted new understandings related to approaches for comprehension instruction, teacher think alouds for modelling, and various methods of collecting

evidence of learning. They also shared reaffirmed initial beliefs related to instruction such as the use of invitations, building a diverse classroom library, and leveraging student interests for instruction. References to new or reaffirmed understandings regarding specific content were limited. One TC who had completed her final required literacy course shared the need for additional learning of content related to phonological awareness as well as refined understandings associated with beginning readers—that is, clarity around the foundational skills and layering the building blocks to support reading development. This desire for further knowledge building post required courses offers an opportunity for critical reflection on the importance of various routes through a teacher education program and the value of optional electives in subject areas, especially post internship, as a final opportunity to consolidate learning and address questions.

Peltier et al. (2020) indicated that PSTs engaged in specialized methods courses exhibited higher content and pedagogical knowledge than PSTs who completed only two required literacy courses. In a study by Keehn et al. (2001), students who took an additional 18 hours of reading courses, when compared to students who completed two required methods courses, had a richer knowledge base about reading instruction and its application to classroom practice. Findings from Clark et al. (2017) revealed that PSTs who completed fewer methods courses demonstrated higher content and pedagogical knowledge. While findings around the ideal number of methods courses are inconsistent, Clark et al. recognized that course content alongside the number of courses are factors in building reading knowledge. More is not necessarily better if courses are not designed to broaden and deepen content and pedagogical understandings.

Despite a lack of consensus around the number of methods courses required for sufficient knowledge building related to reading, the literature clearly recognizes the need for TCs to

develop reading-related knowledge (Bos et al., 2001; Cunningham et al., 2004; ILA, 2018; McCutchen, Harry, et al., 2002; Moats & Foorman, 2003; National Council on Teacher Quality, 2020; Spear-Swerling & Brucker, 2004). However, not all TCs believed they required reading methods courses. In the current study, participants who indicated they would not elect to take reading methods courses if presented as electives reasoned that literacy was not a chosen teaching area while others felt they already had an understanding of how to teach reading. Some participants who indicated they would opt in to elective coursework denoted an interest in the teaching of reading while others recognized a need to develop increased understandings. With extensive research demonstrating gaps in teacher knowledge on how to teach reading (Bos et al., 2001; Cunningham et al., 2004; Moats & Foorman, 2003; Noland, 2021; Washburn et al., 2011), it is concerning that if left to choice, many PSTs would elect not to take reading methods courses.

Self-Efficacy as a Teacher of Reading

Pre-service and in-service teachers often overestimate their knowledge of reading (Bos et al., 2001; Cohen et al., 2016; Cunningham et al., 2004; Spear-Swerling & Brucker, 2004). The level of confidence and belief related to task performance that affects outcomes for oneself or others is referred to as self-efficacy (Ciampa & Gallagher, 2018; Clark, 2016; Kagan, 1992a; Tschannen-Moran & Johnson, 2011), yet perceived ability may not align with actual knowledge (Noland, 2021; Washburn et al., 2011). In the current study, TCs self-reported efficacy beliefs for teaching reading presented as comparable between those beginning their first required course and those at the end of their first course. Interestingly, TCs who completed their second required course indicated a lower self-efficacy for teaching reading at their preferred grade level and for teaching struggling readers than their peers who completed the first required course. It may be

that TCs have an inflated sense of confidence early in their program because they are not aware of the knowledge base around reading development and reading instruction.

Biographical experiences with reading (Vieira, 2019) and personal experiences with teaching and learning (Asselin, 2000) influence belief systems. Bandura (1982, 1997) identified four sources of self-efficacy: vicarious experiences, verbal persuasion, physiological arousal, and mastery experiences. Mastery of a task augments an individual's self-efficacy (Bandura, 1982, 1997), so it could be that TCs have a high self-efficacy for the teaching of reading because they, themselves, are readers. Given this, it is important to understand beliefs about reading instruction and how TCs view their role as teachers of reading. Beliefs can influence a wide range of areas, such as how and what gets taught (Yore, 1991). Content area teachers may make decisions about how to teach reading based on incomplete or incorrect knowledge, or how they have observed others teach it. Research with PSTs indicated that the social context for learning plays an integral role in the development of self-efficacy beliefs (Haverback & Parault, 2011) and that decisions are then a reflection of their beliefs not necessarily governed by pedagogical and subject matter knowledge (Hall, 2005).

It may be that PSTs have a higher self-efficacy for instruction because they feel that the "what" of what they need to teach is provided through the curriculum. One participant suggested that methods courses should focus on instruction over content for this very reason. However, Neuman and Danielson (2021) cautioned against an overreliance on curriculum, stating:

> simply providing teachers with curriculum materials, even those of high quality, does not ensure that they meet the intended learning outcomes for children. Rather, high-quality teaching is thought to require the concomitant management of several different resources

for teachers, including their content knowledge, attitudes, and their understanding of the pedagogical instructional practices that might support children's learning. (p. 443)

An across-course analysis of shifts in self-efficacy beliefs could only be explored with one participant who completed both the pre and post-survey. There were no changes in reported beliefs on any question related to self-efficacy. Future studies could explore self-efficacy beliefs pre and post-reading methods course to reflect patterns in shifting individual beliefs with a larger sample of participants.

Teaching Reading to Children Who Struggle

Many TCs in the study considered a strength they will bring as a teacher of reading is that they, themselves, enjoy reading and appeared to believe they will impart this love of reading to their students. It appears that the demands and complexity of competent reading instruction is underestimated. Interestingly, one TC stated that a strength they would bring to reading instruction was that they struggled with reading so they could relate to students who struggle. However, the ability to relate to struggling readers did not transfer to feelings of preparedness to teach struggling readers.

It appeared that TCs felt slightly less prepared to teach struggling readers, and many identified that how to approach and support readers who may be at risk was an area they felt required additional learning, similar to the findings of Bos et al. (2001). In their review of the literature, Meeks et al. (2016) had similar findings, indicating that there was a trend that most PSTs were confident in their ability to teach reading but lacked confidence to teach struggling readers.

Knackstedt et al. (2018) presented insight into the relationship between teacher education and PSTs' feelings of preparedness. They suggested that when offered a course specific to

supporting struggling readers, PSTs believed they were prepared to meet the needs of all learners. Duffy and Atkinson (2001) and Washburn et al. (2011) suggested that PSTs felt unprepared to teach struggling readers by their coursework alone if this coursework did not specifically address instruction for struggling readers. Findings from these studies highlight that attention in reading methods courses specific to the instructional needs of struggling readers is important for TCs' self-efficacy to teach the diverse learners they will have in their classrooms.

Theme 2: Theoretical Orientation of Reading Instruction Underpinning Beliefs About Reading Instruction

Participant understandings related to instructional routines and decisions, characteristics of readers, text choice for reading development, and classroom environment reflected a balanced literacy theoretical orientation. While the term "balanced literacy" was not surfaced by any participant, key tenets of this approach to reading instruction were present. This finding is unsurprising as principles of balanced literacy appear throughout the ELA curricula in the Western provinces (discussed in Chapter Two) and participants in this study were becoming familiarized with the provincial curriculum as part of their coursework. Theoretical orientations within literacy methods courses have an impact on TCs professional and personal beliefs (Grisham, 2000), are often internalized and remain consistent over time (Paris, 1997).

Provincial curricula represent knowledge accepted by community. "Explicit here is the belief that individuals bring implicit theories and perspectives derived from the cultural milieu and that inter-psychological aspects of knowledge creation themselves assist in the formulation of this very cultural context" (Adams, 2006, p. 249). This cyclical process would seemingly be highly influential in the beliefs and understandings about reading and reading pedagogy, lending itself to the instructional orientation PSTs employ. Hoover and Tunmer (2020) cautioned against

an over-reliance on curricular outcomes when making instructional decisions. These researchers suggested outcomes often omit the connection between goals and the cognitive development of a reader. They further delineated that instructional decisions based on curriculum are "typically navigated with limited reference to an explicit understanding of what the developmental structure of reading is or where any given student stands with respect to it" (Hoover & Tunmer, 2020, p. 6-7). This would suggest that deep, pedagogical and developmental knowledge related to reading is necessary to position alongside curricular outcomes to ensure that students are supported while working towards those goals.

Instructional Approaches

Instructional routines characterized by a balanced literacy approach were identified by TCs as important for reading instruction. These strategies reflect a continuum of teacher support, from highly supported to independent, and known commonly as read aloud, shared reading, guided reading, and independent reading (Frey et al., 2005; Rog, 2003). While all of these strategies were present in participant responses, TCs privileged independent reading as a means for reading development. Findings from Frey et al. (2005) and Bingham and Hall-Kenyon (2013) observed that in classrooms characterized by balanced literacy, teacher-directed instruction and modelling, which is necessary—especially for students with poorly developed reading skills—is often implemented less frequently than other components such as independent reading.

Another tenet of balanced literacy is the use of the cueing systems. TC beliefs appeared to reflect instructional approaches that align with use of the cueing systems for word reading. Specifically, TCs suggested that if meaning was not compromised, reading miscues would not be addressed with the student. This is consistent with the three cueing miscue analysis approach, whereby reading a word that corresponds to the written word may not be important for effective

reading since the reader can get the meaning of the general passage without accurate word identification. There is, however, criticism around this approach with suggestions that skilled readers make extensive use of nearly all available visual information in a word (Adams, 1990; Ehri, 1992; Perfetti, 1984) and that context clues are used by skilled readers to elicit meaning of unknown words but not to decode (Hoover & Tunmer, 1993; Kilpatrick, 2015; Nicholson, 1993). Understanding phases of reading development may be helpful when considering instructional approaches to support student learning. There is a need to focus on "when" an instructional approach is most beneficial rather than privileging one to the exclusion of another. Teachers can apply understanding of theory and practice to their knowledge of reading development and the competencies of students in any given phase to identify the instructional approach that will further their development (Noland, 2021).

Lastly, participants indicated that environmental features and surrounding students with print was important for reading development, findings similar to Barnyak and Paquette (2010) and Frey et al. (2005) and advocated by Roskos and Neuman (2001) and Smith (2012). An emphasis on instruction that facilitates and encourages a love for reading was indicated by TCs and recognized as a characteristic of effective teachers by Kaya (2014). The belief that learning to read is a natural process, supported through an immersion in an environment where books are everywhere and readily available to be accessed by students, is indicative of the whole language philosophy (Brady et al., 2009; Goodman, 1986; Snow & Juel, 2007). However, contradictory research concluded that reading is not a natural process (Lyon, 1998a; Pellegrini, 2001) and that "the ultimate goal of reading instruction—for children to understand and enjoy what they read—will not be achieved" (Lyon, 1998b, p. 16) if children are not taught phonemic and phonic skills and how to apply those skills to develop fluent and automatic word recognition.

Instruction of Discrete Skills

Absent from participant responses, with the exception of one TC, was the identification of discrete skills when considering critical components of instruction for reading development. This minority voice shared that an interest in speech and language pathology combined with an instructor who shared a personal struggle with accurate spelling prompted an understanding that instruction of phonemic awareness was important. However, prior to the ELA methods course she was unaware these skills would be taught by the classroom teacher. Rather, she believed students would receive this instruction, if needed, by the speech and language pathologist. Previous studies have investigated the beliefs of PSTs and ideas related to the role of the classroom teacher. Studies by Leko and Mundy (2011), Nierstheimer et al. (2000), and Scharlach (2008) indicated that initial beliefs held by PSTs suggested that supporting struggling readers was outside the scope of the classroom teacher; rather it was the role of a reading specialist or parent. Addressing this misconception in methods courses supported shifts in understandings in the Leko and Mundy, and Neirstheimer et al. studies.

In the current study, TCs appeared to privilege a meaning-focused approach to reading instruction. Participants shared that instruction of strategies to support meaning construction were important to explicitly model and teach, books students read and had read to them should be guided by student interest, and instruction should foster a love and enjoyment of reading. These findings are consistent with an outside-in (Whitehurst & Lonigan, 2001) or top-down (Evans et al., 2004) orientation to reading instruction where instructional focus supports students in reading, enjoying, and experiencing text through authentic experiences (Bingham & Hall-Kenyon, 2013). The notion of balanced literacy considers skill instruction alongside authentic, holistic literacy experiences but interpretations and implementations have led to "imbalanced

conceptions of balanced teaching" (Pressley et al., 2002, p. 1). Similar to the current study, findings in studies that examined instructional beliefs and practices in balanced literacy classrooms indicated comprehension as an instructional focus over skills such as the alphabetic principle and phonological awareness (Bingham & Hall-Kenyon, 2013; Pearsall, 2015; Shaw & Hurst, 2012).

Types of Texts to Support Reading Development

In the current study, TCs expressed their desire to attend to student interest when considering materials to support reading development. This finding was also noted by Barnyak and Paquette (2010) whereby PSTs believed children should be taught to read using their own language and experiences. Nolen (2007) supported an instructional focus based on student interest, specifically highlighting that prior knowledge benefited comprehension and the ability to produce writing. Beginning reading instruction where literature-based activities and independent reading were prioritized was also noted by Moats (2014) in her reflection of common instructional practices. However, Moats highlighted that explicit instruction of sound-spelling correspondences was often absent from instruction for beginning readers. While balanced literacy combines a code-based and literature-based approach, the scarcity of a scope and sequence for combining approaches often results in "an eclectic collection of individual teacher preferences" (Meeks et al., 2016, p. 71). An over-reliance on interest to support reading development should be approached with caution. The belief shared by one TC that "the perfect book will work better for a beginning reader than the perfect teacher" requires some attention to ensure TCs develop an understanding of just how important their role is in the reading development of students.

Types of texts to support beginning reading instruction are also reflective of theoretical perspective. Patterned—or predictable— texts are characterized by language constructed to provide extra support for accurate reading despite a reader's ability to decode or recognize the word in isolation. The written text is strongly aligned with context clues designed to foster use of the three cueing systems (Cunningham et al., 2005). Decodable texts refer to those with a high proportion of phonetically regular words where the emphasis for the reader is to apply letter and sound knowledge to decode unknown words (Mesmer, 2008). In the current study, TCs were asked to choose between a predictable passage and a decodable passage to identify which text they would use for beginning reading instruction. Most TCs chose the decodable text, although justification for this choice highlighted attention to meaning and use of rhyming words over application of letter-sound knowledge.

Theme 3: Methods Courses and Opportunities for Negotiated Understandings Around Reading Development and Instruction

Based on social constructivist principles, engaging in coursework with peers and a knowledgeable mentor (instructor) appeared to serve as catalysts for the construction of new knowledge and understandings held by TCs. Notions around instructional practices were negotiated by participants, particularly if they contradicted earlier understandings, and reflected shifts in understandings or dissonance that was left unresolved. Barnyak and Paquette (2010) posited that instructional strategies presented in methods courses are disregarded by PSTs if they were not practices used in their own school experiences. Findings in the current study contradict this notion, with participants indicating a developed understanding and the intent to employ instructional strategies that were not present in their own schooling.

Negotiated Understandings

High quality teacher education programs positively influence the transition to the classroom and the implementation of effective teaching practices (Hoffman et al., 2005; Mayor, 2005). TCs in the current study reflected on common instructional practices, specifically oral round-robin reading and the use of levelling systems, negotiated alongside prior beliefs and understandings. Moll (2014) described the interplay between visible and invisible mediations as catalysts for dissonance. Learning presented in methods courses, the visible mediations whereby the teacher educator is intentional in guiding TCs in acquiring content and instructional knowledge, is negotiated with the invisible mediations, those that are embedded in sociocultural activities. Invisible mediations were acknowledged by TCs as they reflected on what was brought forward in their coursework and how that differed from their personal experiences, field placements, and division expectations.

Instructional approaches experienced by participants in their schooling (oral round-robin reading) and evident in current practices (levelling systems) were specifically addressed within the ELA methods courses and considered alongside more relevant practices to support and assess reading development. Evidence-based instruction is informed by continuing interdisciplinary research around processes for learning and their interaction with the social learning environment (Guerriero, 2017) which can inform teachers' pedagogical practice. The evidence-base is also informed by the reciprocity between behavioural science research and the experience-base (Fenstermacher, 1994). As such, "teachers' pedagogical knowledge is not static" (Guerriero, 2017, p. 30) and new knowledge surfaces through research or professional communities and is constructed through a shared understanding between academics, teacher educators, and teachers (Fenstermacher, 1987). Conversations that unpack evidence-based practices and how they are

established draw attention to the translation of knowledge from research actualized in authentic, practical classroom experiences (Cordingley, 2008).

Studies have recognized the disconnect between teacher education programs and schools, noting the lack of unitary conceptions of teaching (Duffy & Atkinson, 2001; Massey, 2010; Smagorinsky et al., 2013). Competing beliefs about teaching were surfaced by TCs, particularly around the use of levelling systems for instruction and assessment. TCs shared that division and school expectations appeared to privilege the use of levelling systems, whereas coursework placed less emphasis on levelling systems and more on alternate forms of assessment to monitor and consider reading development. In their review of research on reading methods courses, Clift and Brady (2005) highlighted that TCs often receive differing messages about teaching, learning, and content from their courses, in-school practicums, and school organizations, resulting in "confusion and discomfort" (p. 314). In their review, elementary methods courses offered opportunities for PSTs to revise their understandings of pedagogical practices, although the focus on content and student learning was often abandoned in field experiences, replaced with attention on classroom management and attending to diverse populations of students. One participant voice in the current study reflected this sentiment as tensions appeared with her understandings about various forms of assessment highlighted through her coursework in contrast to what she believed would be manageable, realistic, and efficient when she transitioned to becoming a classroom teacher.

From a social constructivist lens, it could be posited that during their reading methods courses, TCs incorporated new constructs and developed skills to think critically (Hill, 2012; Rolloff, 2010), brought forward by the teacher educator and the learning community, alongside

their existent beliefs. While some understandings shared by the participants reflected a refined understanding, others presented as in a state of negotiation.

Confirmed Understandings

Findings in the current study supported that of previous studies to suggest that methods courses offer opportunities for shifted beliefs and knowledge (Brodeur & Ortmann, 2018; Duffy & Atkinson, 2001; Leko & Mundy, 2011; Nierstheimer et al., 2000); however, one minority voice indicated that coursework did not offer opportunities for negotiated understandings but rather confirmed and aligned with her existing beliefs. Previous research recognized this finding, suggesting that TCs may be resistant to new understandings that contradict personal beliefs (Kagan, 1992a; Risko et al., 2008; Vieira, 2019) and that TCs focus on learning content that calls for confirmation rather than inconsistency (Kagan, 1992b; Vieira, 2019).

It should not be understated that prior experiences influence belief systems and frames of reference when considering which information is accepted and which is dismissed (Gregoire, 2003; Kagan, 1992a; Simon, 2012; Skott, 2014; Vieira, 2019). While belief systems may be difficult to change (Bandura, 1997; Ciampa & Gallagher, 2018; Massey, 2010; Skott, 2014), methods courses may be revised to elicit beliefs and understandings pertaining to reading development and instruction and teacher educators can provide experiences to challenge those beliefs throughout the course. TCs may be unaware of what their reading beliefs *are* until they are made explicit. When beliefs are considered, particularly domain specific beliefs, and when they differ from others, there is an opportunity for TCs to “consciously understand and reexamine the effects of these beliefs on their decision making about classroom practice” (Stuart & Thurlow, 2000, p. 119). In their analysis of teacher education program features, Risko et al.

(2008) indicated that TCs' belief systems were strengthened when programs fostered collaboration between TCs.

Recommendations for Teacher Education Programs

There is a call for improvement in Canadian teacher education programs. The National Strategy for Early Literacy report (CLLRN, 2009) identified teacher education programs as a systemic barrier in literacy achievement and called for improved learnings of scientific principles behind reading development and instruction. This report also called for continued professional learning opportunities for in-service teachers. The Canadian Education Statistics Council (2009) echoed these sentiments, suggesting an increase in courses that focus on reading content and instruction and ongoing professional learning once students enter the teaching profession.

An emphasis in teacher education programs should be that learning is continuous—that professional responsibility requires reflexivity in practice. It is naïve to believe that all learning, specifically around reading pedagogy, is completed in teacher education programs, captured in two required methods courses. I left my teacher education program content with what I had learned and although I enjoyed professional conferences and professional development, I was not initially interested in engaging in professional reading. Now, after graduate degrees, additional certifications, and over 20 years of experience, I am still learning about reading development, reading instruction, and supporting struggling readers. TCs conceptions of teaching are influenced through several avenues, *one* of which is the teacher education program (Barnes & Smagorinsky, 2016). Gaining an in-depth pedagogical knowledge of reading requires time and experience, a process that begins in teacher education programs (Leader-Janssen & Rankin-Erickson, 2013). Teacher education programs should provide opportunities for TCs to read research studies and consider application to classroom practice as well as teach TCs how to

approach professional literature with a critical lens. In schools, various programs and resources are often recommended or mandated for reading instruction and intervention (Valencia et al., 2006). Teacher educators could support TCs in interrogating these popular, commonly used programs and resources—unpack how these are used, to what extent, why, and how they may be modified to complement current research about what children need to learn, as well as being responsive to student needs.

In preparation for a professional teaching career, TCs should be aware of avenues for continued professional learning (Duffy & Atkinson, 2001). They should be encouraged in their transition to the profession to attend professional conferences (made more accessible through remote opportunities as a result of the pandemic) and participate in a community of learners among teachers. Teaching is a collaborative profession; teachers should not be isolated in a classroom with the door closed. Connecting with teachers with varied levels of experience and knowledge provides opportunities to share ideas, professional resources, ask questions, gain insights, and improve knowledge about teaching.

The start of each methods course reflects a mystery of who these TCs are and the experiences, beliefs, and understandings they carry forward. Their beliefs reflect a broad spectrum of understandings that align or misalign with research. Aspects of teacher education programs, specifically reading methods courses, should privilege time required to unpack TC beliefs (Asselin, 2000) so TCs can make room for new knowledge and accommodate with existing knowledge. In addition to supporting their development during coursework as teachers of reading, learning to operate as reflexive inquirers may best match what lies ahead for them in light of new and ongoing research in the complex field of reading instruction.

Limitations

Case study research focuses on the particularities of what is studied (Merriam, 2009; Stake, 1995), is important for what it might represent, and provides vicarious experiences for the reader that merge with what is known (Merriam, 2009). An in-depth analysis seeks to gain understanding and meaning from the perspective of the participants as they interact with their environment (Hancock & Algozzine, 2017; Merriam, 2009; Stake, 1995). This study presented itself within the context of a bounded system and aimed to investigate the experiences of the participants within that system. As such, findings in this study are limited to participants who were enrolled in ELA methods courses at a university in Western Canada. The findings also reflect participant perceptions at that moment in time. The findings espouse transferability, not generalizability, and the reader is encouraged to consider how these experiences resonate with their own. This study does not aim to generalize the experiences of participating PSTs to those enrolled in the same courses who did not participate, the voices unheard, or TCs engaged in other required ELA methods courses. It is not possible to determine the extent obtained results may represent other students who differ along many magnitudes, including region of country, university characteristics, course characteristics, student demographics, or instructor demographics. With an emphasis on uniqueness (Stake, 1995), it is recognized that TCs engaged in the same methods course will vary in their beliefs and understandings. Instead, this study contributes to the collective body of quantitative and qualitative research around teacher education programs.

A major limitation that must be mentioned was the outbreak of COVID-19. The pandemic forced instructors to shift courses to an online delivery format and students were required to adjust to learning online. Instructors noted the stress of transferring courses online

and were hesitant to invite students to participate in a research study during this time, sharing that students felt overwhelmed with fully online course requirements and anxiety around field placements and the new learning environment. PSTs may have been more inclined to participate in a research study had their learning and lives not been disrupted to the extent that the pandemic imposed.

Findings from this study should be considered within the body of knowledge about PSTs' understandings about reading instruction in the wider context of teacher education programs.

Implications for Further Research

This study employed a qualitative interpretive case study design to explore understandings about reading from a small sample of PSTs. Leaning into the rigour of thematic analysis, themes were identified around the initial beliefs held by TCs as well as negotiated understandings post-course. Further exploration of shifts in understandings compared across individuals (pre and post methods course) could shed light into the learning journeys of individuals. In the case of the single participant who provided data both pre and post-course, shifts in understandings about pedagogical practices were articulated, specifically around oral round-robin reading. It was also evident that this participant was wrestling with notions about the use of levelling systems presented in the course—caught between the practices she wanted to engage in as a teacher, and what she felt was practical. Another fascinating area concerning PST self-efficacy was that self-identified efficacy in the areas of understanding reading development, preparedness to teach reading at preferred grade level, and preparedness to teach struggling readers did not change for this participant from pre and post-course. I suggest there is potential for further studies to follow up on these findings.

In addition, future studies could interrogate what TCs from provincial universities as well as across provinces and countries bring to introductory coursework in terms of understandings of reading and the teaching of reading. PSTs bring forward beliefs about reading pedagogy from their experiences and future studies could examine how these varied experiences influence initial understandings. An additional layer for consideration could be the philosophical orientation presented within the ELA curriculum that PSTs had as students and if that was reflected in their beliefs about reading development and instruction.

In the current study, TCs used the term “reading strategies” with varied interpretations of meaning. Definitions of this term reflected strategies to support comprehension of text, strategies demonstrated by skilled readers, instructional strategies, and application to lesson planning. Further research could investigate understandings of reading related terms that emerge from previous contemporary schooling within the province.

PSTs privileged the environment when considering aspects that were influential to reading development. While a greater emphasis was on the physical classroom space, participants also shared their beliefs around outdoor spaces, authentic learning experiences, and the social influence of peers. This finding presented itself in the pre-surveys, suggesting that PSTs bring with them beliefs about the learning environment prior to engaging in an ELA methods course. It was also a finding that surfaced post-course, indicating that these beliefs appear to be retained, or perhaps confirmed through coursework. Further studies could explore this intriguing data, delving into where these beliefs come from.

Data was collected on the surveys that asked participants to identify their perceived level of readiness to teach reading at their preferred grade level. On both the pre and post-surveys, participants who indicated interest in teaching grades 1-3 reported higher levels of readiness than

those interested in teaching middle years. Further research might interrogate the idea that teaching younger children to read is easier than teaching reading to older students.

In Western Canada, provincial teacher certification requires six credit units (two courses) related to literacy and language. Previous research reflected varied findings in the area of how many required reading methods courses are necessary (Brodeur & Ortmann, 2018; Clark et al., 2017; Duffy & Atkinson, 2001). Helfrich and Clark (2016) compared feelings of self-efficacy between TCs who engaged in five literacy courses and those enrolled in two. TCs who completed two required courses reported significantly higher self-efficacy. While this may suggest that quantity does not translate to individual beliefs about teaching (Hikida et al., 2019), it may also suggest that TCs who took more courses have a more accurate, realistic understanding of the complexity of reading instruction. In the current study, PSTs approached their reading methods courses feeling somewhat or adequately prepared to teach reading. The knowledge calibration (Cunningham et al., 2004) of PSTs may be low in that they do not know what they do not know in terms of the complexity of reading instruction. This is concerning if reading methods courses become electives. TCs may opt out of reading methods courses if they feel they have the knowledge to teach reading or if they do not choose reading as a teaching area. Additionally, when unaware of gaps in knowledge, TCs may be less receptive to new content if they believe their existing knowledge is high (Stark et al., 2016). Further research into the number of reading methods courses recommended to adequately prepare TCs to become effective reading teachers could be influential for teacher education programs.

Additional research that is longitudinal in nature could investigate if and how learned knowledge from teacher education methods courses is reflected in instructional decisions and responses to the literacy needs of students during the extended practicum and into the first years

of teaching. Additional research could also investigate other aspects of teacher education programs which might influence beliefs and understandings around literacy instruction. These could include field placements, grade level interests, methods courses versus interdisciplinary courses, and program option streams.

Lastly, an interpretive, qualitative case study design (Merriam, 1988) was used to interrogate participant perspectives as they shared beliefs and understandings related to reading development and pedagogy. The survey instrument used for data collection was adapted from an original document of Gove (1983) and Vacca et al. (1991) created to elicit teacher beliefs related to literacy teaching. In the current study, beliefs and understandings around reading and their alignment with theoretical orientations were interpreted based on participant responses on this survey instrument as well as narrative interview responses. Future studies could add to existing qualitative research using DeFord's (1985) Theoretical Orientation to Reading Profile instrument (see Broman, 2018; Elliott-Johns, 2004) or the Teacher Perceptions About Early Reading and Spelling survey (Bos et al., 2001) to examine this aspect of PST beliefs more in-depth. As well, the application of different methodologies could be used to further explore shifts in beliefs and negotiated understandings. For example, studies have demonstrated the influence of prior experiences on teacher beliefs and instructional decision making (Debreli, 2016; Moore, 2020; Smagorisnky and Barnes, 2014; Vieira, 2019). Approaching the exploration of beliefs and experience through narrative inquiry could offer insight into how PSTs negotiate understandings during a methods course through the commonplaces of temporality, sociality, and place (Clandinin & Connelly, 2000).

My Research Journey

Conducting Research During a Pandemic

I could never have predicted that at this point in my doctoral program, the world would be living through a pandemic. Every aspect of our lives has been disrupted and while some normalcy is returning, there continues to be a sense of uncertainty around the impact of COVID-19.

An immediate shift to remote learning occurred in March 2020. This affected university programs that were in the midst of winter semester as well as my work in the school division as a literacy consultant. At this point in my program, plans were to begin my study with participants at the beginning of the fall semester just as universities across the country were preparing to move all courses online. It became a challenge to find course instructors who were eager to extend the invitation for participation in a research study. Some declined participation, noting the difficulties they were facing with transitioning courses to online and having a busy start to the semester. Others considered the additional stress students were facing with the shift to online and issues obtaining required textbooks. Despite an overwhelming hesitancy for engagement in the study, two instructors were open to engagement.

Limited participation by TCs resulted in my dissertation research moving to the winter semester. However, the small amount of data emerging from the fall semester funneled into an unanticipated pilot study, providing focused thinking around particular avenues to explore that I might not otherwise have had. The pilot study afforded me opportunities to test and further refine the survey and interview protocols (Ismail et al., 2018), go through the transcription process, and analyze data through Braun and Clarke's (2006) thematic analysis process. While pilot studies are often neglected in qualitative research (Ismail et al., 2018; Malmqvist et al., 2019), this

unexpected departure from my original program map resulted in my development as a researcher and enhanced the current study.

TC participation in the current study continued to reflect a small sample size, discussed in Chapter Three, however copious amounts of data emerged, providing rigor to this exploration. I am grateful to the generous participation of those TCs who shared their perspectives around reading through the surveys and interviews. It might be inferred that these TCs held a real interest in reading so were willing to take additional time to engage in a research study. However, responses on the surveys indicate that the teaching of reading was not an interest for all participants. As the study concluded, I spent time considering the many TCs enrolled in these methods courses who did not participate. Their voices are left unheard.

Analyzing Data: Privileging Participant Voice

Engaging in a qualitative study, I found myself confronted with a push/pull dynamic as I situated myself within the research. I was reminded that my presence, through an etic lens (Merriam, 2009) was inherently part of the meaning-making process. Yet I remained challenged to privilege the emic perspective (Merriam, 2009) to ensure that findings were credible and participant voices would resonate with the readers. I was also reminded of the theoretical framework with which I was approaching this inquiry. Through a social constructivist lens, I was in a position to interpret, understand, and describe the experiences of the participants (Creswell & Creswell, 2018).

Coding Labyrinth

My coding labyrinth, discussed in detail in Chapter Three (see Figure 5), became a visual representation and reminder for myself as I engaged in the data analysis process. The labyrinth made visible the multiple entry points through which I approached the data as I considered my

research questions and themes that resonated from the pilot study as well as the current study. The analysis process was not linear, following a progression of steps. Rather, it was cyclical in its process as I revisited data, considered codes, categories, and key ideas, and returned to the data to reflect on my interpretations and be open to the multiple realities shared by the participants. The model of the labyrinth gave space to enter into engagement with the data positioned with a destination while remaining open to multiple pathways. It allowed me to consider themes inductively and deductively just as one would make decisions when moving through a labyrinth. It also depicts the coding process as complex and intricate; that time needs to be spent with the data, as one would spend time in the labyrinth, to come to rest on final themes and interpretations.

Adaptation of Braun and Clarke's Thematic Analysis Process

Tensions in privileging participant voices became evident during pre-survey data analysis using Braun and Clarke's (2006) phases of thematic analysis process. Guided by the first research question, data from pre-surveys were analyzed to consider TCs' initial beliefs and understandings of the nature of reading as well as reading instruction. Approaching the data through phases permitted a constructive analysis, attending to meaning through the participants' words and phrases. However, movement from the identification of categories to refining themes was concerning for me as I considered ideas pertaining to reading (the nature of reading and reading instruction) as distinct and separate. As I ascribed to search for truth situated in the multiple perspectives presented by the participants, I adhered to the attributes of reflective individuals described by Yost et al. (2000): open-mindedness, responsibility, and wholeheartedness. This led to the adaptation of Braun and Clarke's process to include the naming of key ideas to privilege participant voices in responses to narrowed concepts. This

adaptation came out of need to fully consider the data in response to the research question before encapsulating the essence of the data as a whole. The additional layer of interrogation added to the compelling and rigorous process, leading to the identification of overarching themes related to initial beliefs and understandings around reading. It is necessary to note that adaptation of Braun and Clarke's process is not an indication that I believe their process is flawed. In fact, the original treatment of Braun and Clarke's thematic analysis process was used as data were analyzed for the second research question. However, key ideas emerged from data related specifically around the nature of reading separate from reading instruction, and I felt it necessary to explore and discuss participant perspectives in this way prior to a discussion of broader themes. Figure 4, appearing in Chapter Three, depicted the data analysis process as beliefs and understandings related to reading were shared by participants through surveys and interviews and analyzed to consider final themes.

Concluding Statements

This study aimed to contribute to the body of research concerning the influence of reading methods courses on teacher candidate knowledge of reading development and pedagogy. Inherent to the study was the practice of surfacing the beliefs and understandings that TCs bring to these required courses. Intentional opportunities for TCs to share these initial beliefs allow teacher educators to address misconceptions and direct learning experiences to provoke cognitive dissonance, potentially leading to negotiated understandings. In this way, discussion of pedagogy draws on the surfaced beliefs held by TCs and allows space for them to hear themselves and each other. This study drew on the theoretical framework of social constructivism, considering that knowledge is socially constructed (Adams, 2006; Mertens, 2015) and that learning evolves as individuals rationalize beliefs, make ideas explicit, and negotiate alternate perspectives (Richards

et al., 2018). Teacher educators have the opportunity to act as the more capable guide, supporting the learning of TCs in domain specific content and pedagogical knowledge.

Results of the study suggested that TCs begin literacy methods courses with narrow, misaligned understandings about reading development and instruction. Post-course reflections indicated negotiated understandings, especially concerning instructional practices (e.g., use of levelling systems and oral round-robin reading) that were specifically addressed by the instructor. This inquiry confirmed that instructional beliefs related to reading are reflective of a socially accepted philosophical orientation, privileged through provincial curriculums that these future teachers will be expected to adhere to for guidance in instructional practices and content. Teacher educators provide opportunities for TCs to familiarize themselves with the ELA curricula, preparing them for field experiences, extended practicums, and their transition into the profession. Teacher education programs are often criticized for not preparing teachers to teach reading (Drake & Walsh, 2020; Lyon & Weiser, 2009; Moats, 2014; Walsh et al., 2006) yet teacher educators may be at an impasse. Do they support PSTs in unpacking and designing instructional and learning opportunities based on provincial curricula, or should attention focus on the five components of scientifically based reading, recognized as essential and effective for all children (Canadian Education Statistics Council, 2009; CLLRNET, 2009; National Council on Teacher Quality, 2020; NRP, 2000; Snow et al., 1998; Ontario Ministry of Education, 2003; Rose, 2006; Rowe, 2005)? Additionally, there may be a lack of agreement among teacher educators about what comprises effective reading instruction (Joshi, Binks, Graham et al., 2009; Moats, 2014). Podhajski et al. (2009) stated that "identifying exactly what teachers should know about reading instruction becomes critical for deciding what should be taught in teacher preparation programs" (p. 404). Moats (2014) offered some critical questions that should be

considered as teacher education programs address the current literacy landscape and the reading proficiency deficits that afflict our students:

> What combination and sequence of experiences create the most indelible insights for teachers in training? What will engage them so that they persist with challenging students and advocate for them? How can teachers' prior beliefs be surfaced, discussed, and challenged (if necessary) in ways that engender cognitive shifts? How much metalinguistic awareness and verbal skill should be expected before teachers are even admitted to a training program? Within the confines of training programs, what concepts are most important to convey and in what order? What is the difference between knowledge needed by specialists and knowledge needed by regular classroom teachers, and what is the difference in training time? What kind of measures are valid for documenting professional competence? (p. 88)

Perhaps, in addition to supporting transformation of beliefs about reading and reading instruction,

coursework that allows time for negotiated beliefs also prepares teacher candidates for ongoing reflexive inquiry in a field that is undoubtedly continuing to change. Already, a new edition of the textbook is being used by the next group of TCs in the group following the PSTs involved in this study (see Heydon et al., 2021) that explores a posthuman orientation to reading. While analyses of studies undertaken by multiple countries appear to converge on the evidence supporting the instruction of phonological awareness, phonics, fluency, vocabulary, and comprehension (Canadian Education Statistics Council, 2009; CLLRNET, 2009; National Council on Teacher Quality, 2020; NRP, 2000; Snow et al., 1998; Rose, 2006; Rowe, 2005), perspectives to instruction including whole language, balanced literacy, and science of reading

approach these elements with varying degrees of focus. Approaches to instruction that consider combinations dependent on learners and context—an alternative to the historical "reading wars" where camps fuelled pedagogical debates—offer flexible application that is responsive to student needs at specific times of their reading development (McDonald Connor et al., 2004).

It is recognized that withholding evidence-based practices within classrooms disproportionately affects minority students, English Language Learners, students from low socio-economics, and students with disabilities (Fien et al., 2021). In Saskatchewan, 2019-20 provincial reading data for students in Grades 1-3 is unavailable due to suspension of data collection resulting from the COVID-19 pandemic. However, June 2019 provincial data (Saskatchewan Ministry of Education, 2019-20) is striking with only 66.8% of Grade 1, 71.4% of Grade 2, and 75% of Grade 3 students reading at a proficient level. While these percentages are discouraging, a greater concern is that First Nations, Métis, and Inuit students demonstrated significantly less proficiency, with only 40% of Grade 1, 46.6% of Grade 2, and 55.5% of Grade 3 students demonstrating competence in reading. Data reported for these grade levels has remained relatively unchanged, with only 1-5% improvement in overall proficiency over the last six years. Have we, as teachers and school divisions, accepted this as the norm? If we believe that all students have the right to read, what are we changing, as teachers of these children, to ensure all develop the skills to read proficiently? Additionally, proficiency is reported by assessment practices that rely on the use of levelling systems—determining a child's level through texts that privilege some knowledge and experiences over others. Shifts are necessary to move away from levelling and, alternatively, align with the evidence-base around assessment practices.

Dehaene (2009) stated that "all children have similar brains. Their cerebral circuits are well tuned to systematic grapheme-phoneme correspondences and have everything to gain from phonics" (p. 327-328) along with robust vocabulary instruction to develop language and meaning. The content, or what to teach, to support reading acquisition and development has been recognized in research (Adams, 1990; NRP, 2000; Snow et al., 1998; Rose, 2006; Rowe, 2005). Research also supports how we teach, with features including: explicit, systematic, and sequential instruction; cumulative practice and ongoing review; robust student-teacher interaction; prompt, corrective feedback; and hands-on, engaging, and multimodal (Moats, 2019; Spear-Swerling, 2018) However, it is imperative that responses to persistent provincial data enact culturally responsive practices—a "perspective that permeates all a teacher does, rather than specific strategies" (McIntyre et al., 2011, p. 9). McIntyre et al. (2011) outlined common principles as connecting curriculum to students' background, building on home languages and dialects, engaging students in dialogic opportunities with peers and teachers, maintaining a rigorous curriculum, and attending to classroom discourse. Content and instructional practices, guided by research, can and should be taught through a culturally responsive disposition—mutually supportive of one another (McIntyre et al., 2011).

As teacher educators, how are PSTs being prepared to address the needs of students throughout the phases of reading development to ensure instruction is supportive and differentiated? Research spanning over two decades demonstrates that incorporating explicit, systematic instruction of skills identified as foundational for word reading can improve reading proficiency to 94-98% (Felton, 1993; Foorman et al., 1998; Mathes et al., 2001; Torgesen et al., 1999) yet there continues to be a disconnect between research and what is actualized in the classroom. Beliefs about reading instruction have been at the centre of debates for decades, yet

interdisciplinary research on various aspects of reading has provided an evidence base for the components necessary for skilled reading. A focus on prevention of reading failure, rather than remediation of gaps, highlights the necessity for teacher education programs to provide TCs with a robust knowledge base for reading instruction (Al Otaiba et al., 2012; Hurlbut & Tunks, 2016). More needs to be done to ensure pre-service and in-service teachers have the knowledge to teach beginning and striving readers, as the reading development of students relies on effective (Darling-Hammond, 2000) and knowledgeable (Cohen et al., 2016; Dehaene, 2011; Spear-Swerling et al., 2005) teachers. Snow et al. (2005) described the gap in teacher education and the gap that exists in children's life experiences, stating that:

> the achievement gap between the rich and poor, the privileged and marginalized, the advantaged and disadvantaged in our society is still unconscionably wide…We cannot, we believe, eliminate the achievement gap in our schools without closing the knowledge gap in our profession. (p. 223)

Learning to read is recognized as a human right (Derby, 2018; OHRC, 2019; UNESCO, 2019), and the current inquiry by the Ontario Human Rights Commission on the use of evidence-based approaches for reading instruction may lead to necessary reform in teacher practices and curriculum. The International Dyslexia Association Ontario (2020) called for "pivotal changes" (p. 8) within the Colleges of Education and the Ministry of Education, as well as structured literacy in all classrooms (explicit, systematic instruction in the structure of the English language), adjustments to provincial curricula to reflect specific instructional goals for foundational skills, use of decodable texts for early reading instruction, and mandatory early screening for reading difficulties. As teachers of reading, it is our job and our passion to provide the gift of reading to all students, not just those who will learn to read in spite of how we teach.

When considering reading research, we must recognize that the knowledge base is not static and that “researchers are continuously expanding the body of knowledge, and the field must exercise humility when representing the evidence base and be transparent when gaps in the literature exist” (Fien et al., 2021, p. S115). Findings in the current study demonstrated that TCs bring with them beliefs about practices that may not align with the current research base. Teacher educators can provide space to surface those beliefs and offer intentional opportunities for revised understandings while continually updating their own practices and instructional models. All children have the right to read, and it is time that research, not popular opinions, or outdated experience-based notions collected by PSTs from their history in classrooms, informs reading instruction.

“Your son can’t read”. Those words shared with me from my son’s teacher came from a place of concern and care. My son’s story as a reader had a happy ending. He received the instruction and intervention he required and learned to crack the code of written English, was successful throughout his schooling, and went on to college with academic and athletic scholarships. His story, however, is not that of many others who have difficulty learning to read— children we see in our classrooms every day. The literature review I completed for this dissertation reflects a sense of urgency: a call for teachers to critically reflect on their instructional practices and for teacher education programs to evaluate the number of literacy methods courses and the content offered within these courses. My passion for reading instruction was inspired by those children for whom learning to read presented as a challenge. Even in my early years as a Grade 1 teacher, my concern and care were fueled with a desire to support these children the best way I knew how. The difference now is a refined, deep pedagogical understanding of reading development and an interest in connecting research to practice. I am

afforded the opportunity to share this understanding and interest as I work alongside classroom teachers to shift current practices to support the reading development of all students. More recently, as a sessional lecturer I have been gifted time to engage in conversations and learning with TCs before they start their own careers—TCs who are similar to those whose shared voices are the essence of this study.

The findings in this study leave me with a profound sense of how unpacking this very data will support the lens through which I approach the instruction of TCs in their literacy methods courses. I am struck by the importance of what TCs have shared, and revelations around their beliefs suggest that making space for the sharing of beliefs will be a critical practice I provide to TCs as I embark on the instruction of another course. Having an awareness of the beliefs and understandings held by TCs will inform and guide the learning and experiences I am in a position to offer throughout the course. A significant finding in this study demonstrated that literacy methods courses offer opportunities for refined, negotiated understandings—this was particularly evident in misaligned beliefs of specific pedagogical practices. Early understandings reflected in both my pilot study and the current study privileged the use of levelling systems. While this was surprising, levelling systems are commonly used in the schools that many of these TCs went through as students, as well as being part of the assessment and instructional landscape that is modelled in their field placements. These shared understandings affected me personally, however, because of the work I am doing as a literacy consultant in shifting this reliance on levelling systems to identify student development to a deeper understanding of the characteristics of phases that children progress through as they develop as readers. It has become common practice for teachers to identify children as levels, leading to how this defines a child's own identity as a reader.

I conclude this dissertation reflecting on the reading beliefs and understandings shared by the participants of this study. These beliefs, shaped by a multitude of experiences, are likely to be highly influential in the formation of their identities as teachers of reading. Their experiences in required literacy methods courses have the potential to shape understandings if courses are intentional in being responsive to the TCs' prior beliefs. This study invited PSTs to spend time in a liminal space, in between their past experiences as a learner and their professional roles as teachers. In this middle ground, they could be conscious of both stances and the way their experiences and their current learning were bumping up against each other. Teacher educators who approach instruction through packaged courses limit PSTs' time and space to go backwards and forwards as student to teacher. It is pedagogically critical for instructors to shape coursework to provide authentic, impactful learning experiences that serve as catalysts in moving TCs into this liminal space between experience and new pedagogy. In this way, TCs may be encouraged to construe their own images and deepen their understandings of reading and how to teach it.

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Appendix A: Recruitment Script—Course Instructor

Hello, my name is Andrea Dunk and I am PhD candidate in the Department of Curriculum and Instruction at the University of Saskatchewan. I am reaching out to you in regard to my current research study, contextualized in ELA coursework, and to request permission to invite your students to participate. This is a study about pre-service teacher beliefs and understandings about reading acquisition and reading instruction. This research will hopefully lead to a better understanding of the beliefs and understandings pre-service teachers bring with them to their teacher education program and the influence of ELA methods coursework on those pre-existing beliefs.

This research is important to develop an understanding about how prior beliefs are negotiated during a course as teacher educators prepare pre-service teachers to be teachers of reading.

The study will run for the duration of the course (January to April) with virtual interviews taking place in May. I would ask that I could speak to your students for 15 minutes during the first class (through an online service such as Webex) to describe the study and invite consent for those who wish to participate. All students who consent will complete a pre-survey (within the first two weeks of the course) and a post-survey (to be completed the second last week of the course), with incoming data associated with the chosen pseudonym by the participant to ensure confidentiality. The survey will take approximately 20-25 minutes to complete. Students who consent to participate in individual interviews will occur virtually in May, lasting for approximately 1 hour each. Again, data from the individual interviews will be associated with each participant's chosen pseudonym to ensure confidentiality. In addition to the initial access to students, with your permission I would also request a copy of your course syllabus, including required reading for the TCs registered.

The criteria for eligibility to participate is that they are interested in teaching early or middle years (K-8) and that this is a required English Language Arts methods course. Each participant in the study will choose a pseudonym to ensure confidentiality. As the course instructor, you will not know which students are participating in the study. This study will not evaluate the course, coursework, or the instructor in any manner.

Your permission for student access to this study is voluntary. If you agree to grant me access to your students for study purposes, please sign consent in the respective signature line on the initial consent form. While there are no anticipated benefits or risks directly associated with your permission, upon request the final results of my study would be provided to you for consideration as data in course development and revision capacity.

I would like to assure you that this study has been reviewed and received ethics clearance through a University of Saskatchewan Research Ethics Committee. However, the final decision about participation is yours and, further into the study, voluntary also on the part of your students.

If you have questions about this process or if you need to contact me about participation, I may be reached at alf973@usask.ca. Thank you for your time and I look forward to hearing from you.

Appendix B: Course Instructor Consent Form

Participant Consent Form—Instructor

You are invited to participate in a research study entitled: *Identifying as a Teacher of Reading: A Case Study of Pre-service Teachers' Beliefs about Reading and the Teaching of Reading Over the Duration of a Required ELA Course*

Student Researcher(s): Andrea Dunk, PhD Candidate, Department of Curriculum and Instruction, University of Saskatchewan, alf973@usask.ca

Principal Investigator/Supervisor: Dr. Beverley Brenna, Department of Curriculum and Instruction, University of Saskatchewan, bev.brenna@usask.ca

Purpose and Objective of the Research:

The purpose of this research is to explore the processes pre-service teachers go through as they learn about reading development and the teaching of reading. The research questions are: *What patterns and themes in TC backgrounds appear alongside particular beliefs, held early in a required curriculum course in ELA, about the nature of reading and teaching of reading? What patterns and themes emerge in the post-course reflections of TCs regarding their ideas about reading development and reading instruction?*

Procedures:

- Students will be recruited to participate in an online pre-survey (at the beginning of the course) and a post-survey (at the end of the course). Additionally, participants will be invited to participate in an individual interview (to meet virtually for approximately 1 hour in May).
- All surveys will be attached to a pseudonym of the participant's choosing. The individual interviews will be recorded using a recording device.
- Pre and post-surveys will be online. Individual interviews will be via WebEx.
- Participation in this research may cause some inconvenience to you in the time commitment required to invite students to participate in the study.
- If your students' participation is granted, a copy of your syllabus including required reading will be requested by the researcher.

- Please feel free to ask any questions regarding the procedures and goals of the study or your role.

Potential Risks:

- There are no known or anticipated risks to you by participating in this research. If you would like to withdraw permission up until the time when the researcher has contacted the students registered in your course, you may do so without any questions asked.

Potential Benefits:

- The potential benefits of your participation in this research include contribution to the body of evidence relating to the effectiveness of ELA methods courses within teacher education programs. These benefits are not guaranteed.

Confidentiality:

- The findings of this study will be shared as a dissertation which will be online at the University of Saskatchewan. It is anticipated that the findings will be shared in scholarly presentations at educational conferences and in publication in scholarly journals.
- Direct quotations may be used in the dissertation and publications. Direct quotations will be reflected using the pseudonym chosen by the participant. Additional data will be reported anonymously in a summarized form.
- There are some limits to the confidentiality to your participation in this study. However, the researcher will make all attempts to maximize anonymity.
- Affiliation with a specific class, university, or other identifying details will not be shared in order to maximize anonymity and confidentiality. As the course instructor, will not be aware of which students, if any, are participating in the study.

Storage of Data:

- All print and physical data will be stored in a locked filing cabinet, in a locked research office on campus. All electronic data will be stored by the PI on a password- protected USask computer and moved to the USask OneDrive account, a protected USask system for a period of five years and subsequently destroyed. The researcher will use an email account run by the University of Saskatchewan to ensure security of the data.
- Consent forms will be stored separately from the data collected.

Right to Withdraw:

- Your participation is voluntary and you may withdraw from the research project for any reason, at any time without explanation or penalty of any sort.
- Whether you choose to participate or not will have no effect on your position (e.g., employment, academic status, access to services) or how you will be treated.

Follow up:

- To obtain results from the study, please contact the researcher at alf973@usask.ca

Questions or Concerns:

- Contact the researcher(s) using the information at the top of page 1.
- This research project has been approved on ethical grounds by the University of Saskatchewan Behavioural Research Ethics Board. Any questions regarding your rights as a participant may be addressed to that committee through the Research Ethics Office: ethics.office@usask.ca; 306-966-2975; out of town participants may call toll free 1-888-966-2975.

Signed Consent:

Your signature below indicates that you have read and understand the description provided.
I have had an opportunity to ask questions and my questions have been answered. I consent to participate in the research project. A copy of this consent form has been given to me for my records.

______________________________	______________________________	________________
Name of Participant	*Signature*	*Date*

______________________________	________________________
Researcher's Signature	*Date*

A copy of this consent will be left with you, and a copy will be taken by the researcher.

Oral Consent:

I read and explained this consent form to the participant before receiving the participant's consent, and the participant had knowledge of its contents and appeared to understand it.

______________________________	______________________________	________________
Name of Participant	*Researcher's Signature*	*Date*

Appendix C: Recruitment Poster

Department of Curriculum and Instruction
University of Saskatchewan

PARTICIPANTS NEEDED FOR
RESEARCH IN *Required ELA Methods Course*

We are looking for volunteers to take part in a study of
teacher candidates' beliefs and understandings of reading development and reading instruction.

As a participant in this study, you would be asked to: *complete a pre and post online survey. A later possibility might arise to opt in for an individual interview. Your data will be recorded under a pseudonym and your course instructor will not be aware of which students participate, or whose data appears in my final results.*

In terms of time commitment, your participation would thus involve two online surveys, each of which is approximately 20-25 minutes. Should you wish to continue with further participation, the possibilities of one **virtual** individual interview session of approximately 1 hour might also arise.

For more information about this study, or to volunteer for this study,
please contact:
Andrea Dunk
Department of Curriculum and Instruction
at
Email: alf973@usask.ca

This study has been approved by the University of Saskatchewan Behavioural Research Ethics Board

UNIVERSITY OF SASKATCHEWAN | usask.ca

Appendix D: Recruitment Script—Participants

Recruitment Script- Participants

Hello, my name is Andrea Dunk and I am PhD candidate in the Department of Curriculum and Instruction at the University of Saskatchewan. I am reaching out to you in regard to my current research study, contextualized in ELA coursework, and to invite you to participate. This is a study about pre-service teacher beliefs and understandings about reading acquisition and reading instruction. This research will hopefully lead to a better understanding of the beliefs and understandings pre-service teachers bring with them to their teacher education program and the influence of ELA methods coursework on those pre-existing beliefs.

This research is important to develop an understanding about how prior beliefs are negotiated during a course as teacher educators prepare pre-service teachers to be teachers of reading.

The study will run for the duration of the course (January to April with interviews taking place in May). All students who wish to participate will complete a pre-survey (within the first two weeks of the course) and a post-survey (to be completed the second last week of the course), with incoming data anonymized upon receipt. Completion and submission of the survey implies free and informed consent. The survey will take approximately 20-25 minutes to complete. For students who consent, participation in individual interviews will occur virtually in May, lasting for approximately 1 hour each. Participants for individual interviews will be contacted by the researcher with an invitation to participate and consent forms. Again, data from the individual interviews will be anonymized upon receipt.

The criteria for eligibility to participate is that you are interested in teaching early or middle years (K-8) and that this is a required English Language Arts methods course. Each participant in the study will choose a pseudonym to ensure confidentiality. Your course instructor will not know which students are participating in the study.

I would like to assure you that this study has been reviewed and received ethics clearance through a University of Saskatchewan Research Ethics Committee. However, the final decision about participation is yours.

If you have questions about this process or if you need to contact me about participation, I may be reached at alf973@usask.ca. Thank you for your time and I look forward to hearing from you.

Appendix E: Survey Consent Form

Participant Consent Form-Survey

You are invited to participate in a research study entitled: *Identifying as a Teacher of Reading: A Case Study of Pre-service Teachers' Beliefs about Reading and the Teaching of Reading Over the Duration of a Required ELA Course*

Student Researcher: Andrea Dunk, PhD Candidate, Department of Curriculum and Instruction, University of Saskatchewan, alf973@usask.ca

Principal Investigator/Supervisor: Dr. Beverley Brenna, Department of Curriculum and Instruction, University of Saskatchewan, bev.brenna@usask.ca

Purpose and Objective of the Research:

The purpose of this research is to explore the processes pre-service teachers go through as they learn about reading development and the teaching of reading. The research questions are: *What patterns and themes in TC backgrounds appear alongside particular beliefs, held early in a required curriculum course in ELA, about the nature of reading and teaching of reading? What patterns and themes emerge in the post-course reflections of TCs regarding their ideas about reading development and reading instruction?*

Procedures:

- Students will be recruited to participate in an online pre survey (at the beginning of the course) and a post survey (at the end of the course).
- All surveys will be attached to a pseudonym of the participant's choosing.
- Pre and post surveys will be online.
- Participation in this research may cause some inconvenience to you in the time commitment required to participate in the different aspects of the research.
- Please feel free to ask any questions regarding the procedures and goals of the study or your role.

Potential Risks:

- There are no known or anticipated risks to you by participating in this research. If at any time throughout the research process you would like to withdraw, you may do so without any questions asked. Any collected data that you have provided up to that point will be destroyed or included in the research at your request. Withdrawal from the

study is possible up until January 20, 2021. At this point, data in the process of transcription will be used in the dissemination of the study.

Potential Benefits:

- The potential benefits of your participation in this research include contribution to the body of evidence relating to the effectiveness of ELA methods courses within teacher education programs. These benefits are not guaranteed.

Confidentiality:

- The findings of this study will be shared as a dissertation which will be online at the University of Saskatchewan. It is anticipated that the findings will be shared in scholarly presentations at educational conferences and in publication in scholarly journals.
- Direct quotations may be used in the dissertation and publications. Direct quotations will be reflected using the pseudonym chosen by you. Additional data will be reported in a summarized form to promote confidentiality.
- There are some limits to the confidentiality to your participation in this study. However, the researcher will make all attempts to maximize confidentiality. You will choose a pseudonym by which you will be identified in the research. All survey data will be de-identified with a master-list connecting participant identities to pseudonyms. The master-list will be stored separate from the data and will be destroyed when data collection is complete and it is no longer required. The consent forms will be stored separately from the data so that it will not be possible to associate a name with any given set of responses.
- Affiliation with a specific class, university, or other identifying details will not be shared in order to maximize confidentiality. Your course instructor will not be aware of which students, if any, are participating in the study.
- This survey is hosted by Survey Monkey. Your data will be stored in facilities hosted in Canada. Please see the following for more information on Survey Monkey's Privacy Policy.

Storage of Data:

- All print and physical data will be stored in a locked filing cabinet, in a locked research office on campus. All electronic data will be stored by the PI on a password- protected USask computer and moved to the USask OneDrive account, a protected USask system for a period of five years and subsequently destroyed. The researcher will use an email account run by the University of Saskatchewan to ensure security of the data.
- Consent forms will be stored separately from the data collected.

Right to Withdraw:

- Participation in this survey is voluntary.

- Whether you choose to participate or not will have no effect on your position (e.g., employment, academic status, access to services) or how you will be treated.
- Should you wish to withdraw, advise the researcher and you will be asked if you would like your data to be included in the study up to that point. If you agree, you will sign a consent form with a note explaining this arrangement. If not, all data that you have contributed will not be included in the study and will be destroyed.
- Your right to withdraw data from the study will apply until January 20, 2021 at which point the data will have been compiled and analyzed. After this, it will not be possible to remove individual data sources from the study.

Follow up:

- To obtain results from the study, please contact the researcher at alf973@usask.ca

Questions or Concerns:

- Contact the researcher(s) using the information at the top of page 1.
- This research project has been approved on ethical grounds by the University of Saskatchewan Behavioural Research Ethics Board. Any questions regarding your rights as a participant may be addressed to that committee through the Research Ethics Office: ethics.office@usask.ca; 306-966-2975; out of town participants may call toll free 1-888-966-2975.

By completing and submitting this survey, your free and informed consent is implied and indicates that you understand the above conditions of participation in this study.

Appendix F: Email Script for Interview

Dear _______________,

I would like to invite you to participate in an individual interview to talk about your beliefs and understandings of reading acquisition and the teaching of reading. Please be advised that you do not have to participate in the interview. If you consent to participate, I will ask you to sign the interview line on the consent form. Please provide a few dates and times that you are available to meet via WebEx for approximately one hour during the week of May 3-7, 2021.

Sincerely,

Andrea Dunk

Appendix G: Interview Consent Form

Participant Consent Form

You are invited to participate in a research study entitled: *Identifying as a Teacher of Reading: A Case Study of Pre-service Teachers' Beliefs about Reading and the Teaching of Reading Over the Duration of a Required ELA Course*

Student Researcher(s): Andrea Dunk, PhD Candidate, Department of Curriculum and Instruction, University of Saskatchewan, alf973@usask.ca

Principal Investigator/Supervisor: Dr. Beverley Brenna, Department of Curriculum and Instruction, University of Saskatchewan, bev.brenna@usask.ca

Purpose and Objective of the Research:
The purpose of this research is to ask about the processes pre-service teachers go through as they learn about reading development and the teaching of reading. The research questions are: *What patterns and themes in TC backgrounds appear alongside particular beliefs, held early in a required curriculum course in ELA, about the nature of reading and teaching of reading? What patterns and themes emerge in the post-course reflections of TCs regarding their ideas about reading development and reading instruction?*

Procedures:

- Some individual participants will be invited to participate in an individual interview (to meet virtually for approximately 1 hour in May).
- Individual interviews will be recorded. The recording will be saved as a local recording on the computer and not be stored on the cloud. For security protection, the computer will be equipped with industry standard file encryption. You may request that the recording be turned off at any time during the interview without giving a reason.
    - By signing this consent, the participant agrees not to make any unauthorized recordings of the content of the meeting/data collection session.
- Individual interviews will be via WebEx. The option for a telephone interview will be available.
    - For more information on WebEx's privacy policy, click here

- The servers are in Canada and no interview data will pass through or be stored on servers outside of Canada.
- No guarantee of privacy of data can be made.
- The videoconference or phone call will be conducted in a private area of the researcher's home that will not be accessible by individuals outside of the research team during the interview, and it is recommended that the participants do likewise.

- After your interview, and prior to the data being included in the final report, you will be given the opportunity to review the transcript of your interview, and to add, alter, or delete information from the transcript as you see fit. The deadline for your review will be seven days after you initially receive the transcripts. If this deadline is missed, the researcher will use the initial transcripts for purposes of data analysis and use in the final report.
- Transcription of the interview will be completed by the researcher.
- Participation in this research may cause some inconvenience to you in the time commitment required to participate in the different aspects of the research.
- Please feel free to ask any questions regarding the procedures and goals of the study or your role.

Potential Risks:

- There are no known or anticipated risks to you by participating in this research. If at any time throughout the research process you would like to withdraw, you may do so without any questions asked. Any collected data that you have provided up to that point will be destroyed or included in the research at your request.

Potential Benefits:

- The potential benefits of your participation in this research include contribution to the body of evidence relating to the effectiveness of ELA methods courses within teacher education programs. These benefits are not guaranteed.

Confidentiality:

- The findings of this study will be shared as a dissertation which will be online at the University of Saskatchewan. It is anticipated that the findings will be shared in scholarly presentations at educational conferences and in publication in scholarly journals.
- Direct quotations may be used in the dissertation and publications. Direct quotations will be reflected using the pseudonym chosen by you. Additional data will be reported in a summarized form to promote confidentiality.
- There are some limits to the confidentiality to your participation in this study. However, the researcher will make all attempts to maximize confidentiality. You will choose a pseudonym by which you will be identified in the research. The consent forms will be stored separately from the data so that it will not be possible to associate a name with any given set of responses.

- Affiliation with a specific class, university, or other identifying details will not be shared in order to maximize confidentiality.

Please put a check mark on the corresponding line to grant or deny your permission:

I grant permission to be video recorded	
I grant permission to be audio recorded only	

- If you deny permission for any recording of your interview, the researcher will take notes of the interview and prior to the data being included in the final report, you will be given the opportunity to review the transcript of your interview, and to add, alter, or delete information from the transcript as you see fit. The deadline for your review will be seven days after you initially receive the transcripts. If this deadline is missed, the researcher will use the initial transcripts for purposes of data analysis and use in the final report.

Please write your pseudonym below:

My identity will be confidential through use of a pseudonym. The pseudonym I choose for myself is: __________________________

Storage of Data:

- All print and physical data will be stored in a locked filing cabinet, in a locked research office on campus. All electronic data will be stored by the PI on a password- protected USask computer and moved to the USask OneDrive account, a protected USask system for a period of five years and subsequently destroyed. The researcher will use an email account run by the University of Saskatchewan to ensure security of the data.
- Consent forms will be stored separately from the data collected.

Right to Withdraw:

- Your participation is voluntary and you can answer only those questions that you are comfortable with. You may withdraw from the research project for any reason, at any time until May 20, 2021 without explanation or penalty of any sort.
- Should you wish to withdraw, advise the researcher and you will be asked if you would like your data to be included in the study up to that point. If you agree, you will sign a consent form with a note explaining this arrangement. If not, all data that you have contributed will not be included in the study and will be destroyed.
- Whether you choose to participate or not will have no effect on your position (e.g., employment, academic status, access to services) or how you will be treated.
- To ensure that you continue to consent to participate in this research, you will be reminded before each contact about your option to withdraw from the study with no explanation needed. If you agree to continued participation in the study you will sign the consent in the respective signature line in the initial consent form.

Follow up:

- To obtain results from the study, please contact the researcher at alf973@usask.ca

Questions or Concerns:

- Contact the researcher(s) using the information at the top of page 1.
- This research project has been approved on ethical grounds by the University of Saskatchewan Behavioural Research Ethics Board. Any questions regarding your rights as a participant may be addressed to that committee through the Research Ethics Office: ethics.office@usask.ca; 306-966-2975; out of town participants may call toll free 1-888-966-2975.

Signed Consent:

Your signature below indicates that you have read and understand the description provided. I have had an opportunity to ask questions and my questions have been answered. I consent to participate in the research project. A copy of this consent form has been given to me for my records.

______________________________	______________________________	________________
Name of Participant	*Signature*	*Date*

______________________________	______________________
Researcher's Signature	*Date*

A copy of this consent will be left with you, and a copy will be taken by the researcher.

Oral Consent:

I read and explained this consent form to the participant before receiving the participant's consent, and the participant had knowledge of its contents and appeared to understand it.

______________________________	______________________________	________________
Name of Participant	*Researcher's Signature*	*Date*

Appendix H: Survey

Pre and Post-Survey

(adapted from Brenna & Dunk, 2018, 2019; Gove, 1983; Vacca, Vacca & Gove, 1991)

Pre and Post Survey (adapted from Brenna & Dunk, 2018, 2019; Gove, 1983; Vacca, Vacca & Gove, 1991). This survey is anticipated to take approximately 20-25 minutes. Thank you in advance for your participation.

- Which course have you just completed?

☐ ECUR 309

☐ ECUR 310

- Did you complete the pre-survey?

○ Yes

○ No

- Please use the anonymous name that you provided on the pre- survey. If you did not complete the pre-survey, please provide a pseudonym.

Pseudonym: ____________

- In lieu of a focus group, the researcher would like your permission to contact you for a follow-up interview at your convenience. These interviews will provide valuable data for this study.

☐ Yes, I would like to be contacted for an interview

☐ No, I do not want to be contacted for an interview

- Please provide your university email address so the researcher can contact you **if you wish to participate in an interview.**

- List ways you might assess reading development in your students in grade___________(fill in your preferred grade here):

Preferred Grade Level

Comment

- What are some key components you might look for when you assess reading development?

- How will you know if your students are reaching their full potential as readers?

- How well do you think you understand how children come to acquire reading skills?

little tono understanding

some understanding

adequate understanding

extensive understanding

- What recommendations to parents might you have to support their children's reading development?

- What would you consider to be key factors that support the reading development of students?

- Finish the following statement: "Exemplary reading teachers..."

- What will you do when a student is reading orally in a 1:1 reading context with you and reads a word wrong (also called a 'miscue')?

- Is it good practice to immediately correct a child, in the situation above, as soon as an oral reading error is made? Why or why not?

- Will you have your students practice unrehearsed oral round-robin reading in your classroom? Why or why not?

- Is it important to introduce all of the new vocabulary words before students in grade______________(fill in your preferred grade here) read a selection independently? Why or why not?

Preferred Grade Level

Comment

- Classrooms support many different kinds of activities in teaching students to read or to be more proficient readers. Which activities do you think should occupy the greatest amount of classroom time in your preferred grade as identified in the previous question. Number the following from #1

(greatest amount) to #5 (least amount)"

	Greatest amount of Classroom Time: 1- Greatest...5- Least
introduction of vocabulary	
setting purposes for reading	
reading (silently or with a partner)	
response to reading activities	
direct instruction of reading skills and strategies	

- I think teachers of reading in Grade 1 should regularly:

- I think teachers of reading in Grade 8 should regularly:

- What role might parents have in your future classroom and/or at home around reading instruction?

- What are some of the key routines you would have included in your literacy block?

- Finish the following statement: 'Good readers...'

- Look below at the oral reading 'mistakes' ('miscues') of three readers. The word they have not read correctly is underlined, and what they read instead of that word is written above it. Which of the three readers would you judge as the best or most effective reader based on what you see here?

Why?

Miscue Analysis

Reader A

I live near this canal.
Men haul things up and
channel
down the canal in big
boats.

Reader B

2. candle
1. ca
I live near this canal.
Men haul things up and
candle
down the canal in big
boats.

Reader C

2. cannel
1. ca
I live near this canal.
Men haul things up and
cannel
down the canal in big
boats.

- What kinds of things do you think are important for teachers to teach directly, in support of children's reading progress?

- When teaching beginning readers, what type of text would you want to use to support reading development? Why?

"A fat rat sat. The cat ran at the rat. Sadrat."

"I like to run. I like to skip. I like to jump. I love to play." Why?

- How well do you think you are prepared to teach children to read at your preferred grade level?

not prepared

somewhat

prepared

adequately

prepared

well prepared

- How well do you think you are prepared to teach struggling readers how to read?

not prepared

somewhat

prepared

adequately

prepared

well

prepared

- What do you feel will be your strengths as a reading teacher? What do you think you will need to learn more about?

- In a literacy methods course, what do you value as most important learning for you as a future teacher? Why?

content

(whatto teach)

instruction

(howto teach)

both

Why?

- What is your definition of reading?

- If you were imagining your future students grown up, remembering how you supported them as a reading teacher, what might you hope for in terms of their recollections? "My teacher assisted me by..."?

- How might someone describe your future classroom if they were observing the floor-plan and how it related to literacy learning?

- Upon completion of this required literacy course, do you feel you have a complete understanding of teaching English Language Arts (and a second required literacy course would not be necessary)? If not, what topics/content would you want covered in the second required course?

Yes

No

Comment:

- If this required ELA course were an elective, would you have registered for it? Why or why not?

- Do you have experiences working with children learning to read (as a parent, in the community, in a school, etc.)? What are some insights from those experiences?

- Is there any other information about your beliefs and understandings about reading instruction and/or reading development that you would like to share?

- Age
  - 24 or under
  - 25-30
  - 31-40
  - 41-50
  - 50 or older

- Do you speak more than one language proficiently?
  - Yes
  - No

- Were you educated (K-8) anywhere other than Canada for any period of time? If so, where and for which grade levels?

- Please list any post-secondary degrees or certificates earned:

Appendix I: Interview Protocol

Interview Questions

Thank you for taking the time to speak with me about your beliefs, understandings, and what you have learned during your time in the ELA methods course. First, I'd like to learn a little bit more about you and your own experiences as a reader.

Questions Addressing Research Question 2: What patterns and themes emerge in the post-course reflections of TCs regarding their ideas about reading development and reading instruction?

1. At the beginning of 309, how would you have defined reading and what would you have thought important to teach? How has that changed?
2. At the beginning of this course, what did you think about reading development? About reading instruction?
3. Has that changed? If so, what do you think now? What hasn't changed?
4. What aspects of the course or experiences you engaged in caused you to adjust your thinking about reading, or confirmed what you thought about reading?
5. What experiences have you had in classrooms that have supported or contradicted ideas about teaching reading from your current coursework?
6. [look at survey and definition of a reader]: What is your definition of a proficient reader? Tell me about that. Have your thoughts changed… if so, why?
7. What are some specific memories you have about the reading instruction you had at any point from Kindergarten to Grade 8? About learning to read? What thoughts or feelings do those memories surface for you?
8. What are the instructional decisions you would bring to your own classroom from your personal experiences around reading? What did you learn from the course about instruction that you would bring to your own classroom? Are there any specific areas of tension around your personal experiences and what you learned in the course?
9. What is your understanding of reading levels? How would you place them within the context of your literacy instruction? How would you privilege them?
10. What is your understanding of reading strategies? What does that mean to you for instruction? What would you want to see as application when students are reading?
11. If you have worked as an instructional aide, what experiences did you have that supported or contradicted ideas about reading in your current coursework?
12. Are there any other thoughts related to your background knowledge that you'd like to share related to the nature of reading and the teaching of reading?

Questions Addressing Research Question 1: What patterns and themes in TC backgrounds appear alongside particular beliefs, held early in a required curriculum course in English Language Arts, about the nature of reading and the teaching of reading?

13. What are your most significant learning experience(s) in the ELA methods course? How did it change your thoughts or reinforce previous thoughts about reading instruction? About how children learn to read?
14. How prepared do you feel to teach reading? Did that change after taking your literacy course?
15. What do you believe you still need to learn about reading development and/or reading instruction before you are a reading teacher?
16. What do you anticipate being the biggest challenge for you with teaching reading? How will you respond to that challenge?
17. What are some experiences and opportunities you believe are most important for students to engage in when they are beginning readers? How would you support that as a teacher?
18. What about for students who are proficient readers? As a teacher, how would you support this group of students?
19. What about for students who are struggling/striving readers? As a teacher, how would you support this group of students?
20. Who or what will influence you the most in the teaching of reading? Why?
21. What do you feel will have the most impact on you as a reading teacher?
22. Are there any other course-related thoughts about reading acquisition and the teaching of reading that you would like to share?
23. What grade level would you like to teach? What comes to mind when you think about teaching students to read at that grade level?
24. How would you describe yourself as a reader?
25. Are there any other thoughts you'd like to share with me about your understanding of reading, and the teaching of reading?

Sample prompts:

- Would you explain further?
- Would you give an example?
- Can you clarify what you meant?

- Please elaborate on that statement.

Appendix J: Coding Examples

Coding Samples

An example from an interview transcript coded for 'levelling' is: 'They're [students] so aware of it. And in some ways it is a good thing because a kid would be like 'I'm a Z and I'm only in Grade 5'…And then there's the kids, if they should be at that benchmark, like S, and they're may an F, oh my gosh. I've worked with kids who are just broken by this and really struggle to function in every day. It can really just change how they feel'. An example of a survey response coded in the same way is: 'Kids knowing their levels in reading can be empowering but also debilitating when kids hold their levels above others and their own intelligence'.

Table 6 details initial codes assigned to words and phrases from post-survey and interview data.

Table 6

Initial Codes and Extracts of Data from Surveys and Interviews

Codes	Extracts of Data
assessment	various ways (of assessment); where students are at; (identifying) strengths and weaknesses; inform instruction; ability to decode; comprehension; types of text; interest; read out loud; activities; miscue corrections; improvement; confidence; foundational skills; apply reading strategies; questions about the text; use of standardized testing to identify level; enjoyment; fluency
definition of reading	culture; constructing meaning of text; active process; application of reading strategies; accuracy; skill; enjoyable experience; develop language; word reading; learning; comprehension of written language; decoding; deepen/extend knowledge
direct instruction	sounds; decoding; reading strategies (e.g., predicting, connections, skimming); vocabulary; skills; love of reading; comprehension; phonemic awareness; concepts of print; modelling miscues; fluency

Codes	Extracts of Data
environment (physical and dispositional)	safe space; being surrounded by books; seeing other students reading; imparting my love of reading; modelling passion, enjoyment; finding the right book; attitude
good readers	accuracy; interest; positive attitude; apply reading strategies (questioning, connections; predictions); comprehension; identify miscues; have perspective; apply decoding; want to read; do their best; love to read; infer; confident; challenge themselves; persevere; enjoy; use prior knowledge and information to construct meaning
instruction	meeting individual needs; curriculum; engage students; interest; responsive; sequence of instruction; instructional activities; cross-curricular; variety of texts; modelling; levelled reading as tool; sounds and meaning; text features; intention; not prepared for students who struggle; one-on-one; discourse; student choice; read alouds; encourage interest; instructional routines; scaffolding; vocabulary
instructional orientation	surround students with books; meaning miscue (9)- similar meaning, fewer mistakes; apply phonic knowledge (7)- trying to sound out, recognize it's the same word; use texts for beginning readers that reflect authentic experiences; allow students to direct their learning based on passions
levelling	children are aware; not necessary; use to support where students are at; used as a tool; I was assessed using levelled system; tension between what is happening in the classroom and what was taught in the course; emphasis on collecting this data; use for assessment; reading development by moving through the levels; only provides a small amount of information; use levels to guide activities
methods course	share experiences in learning communities; relevant to beliefs; learning about how to work with students who struggle; reaffirmed beliefs; confirmed my understanding; learning curve; revised understandings; useful resources; staff and partner teacher will have impact; need more learning; feel less prepared; tensions between course and classroom; importance of curriculum classes; practicum will support practical; instructor modelling; course activities; content and instruction; is not my teaching area so I wouldn't take it; is my teaching area; content can be learned through curriculum
potential	progress; interest; assessment guides; developmental; various reading material; using levelled texts; meeting expectations; enjoyment; willingness; read at grade level; confidence; comprehend; independence
reading development	vocabulary; sounds as foundational; sequence of skills; application of strategies; moving through levels; comprehension; through exposure revised to pre-alphabetic reading; practice;

Codes	Extracts of Data
	books of interest; phonemic awareness; attitudes; various text types; modelling passion; instilling enjoyment; pre-reading strategies; environment; peer influence; decoding; make it fun; fluency
reading skills and strategies	teach phonemic awareness; predictions, questioning; connections; revising understanding; picture walk; shared, guided reading; prior knowledge; text features; think alouds; reading instruction; vocabulary; inferring; decoding unfamiliar words
reading stamina	independent reading (memory of reading); silent reading or reading with partner as important; practice reading
personal experience	feel very prepared to begin teaching reading; strong influence is mom as she was always reading; reading before Kindergarten; had anxiety about having to read aloud; have experience in the classrooms; slow reader and often have to reread for understanding; did levelled reading; did popcorn/round robin reading and was uncomfortable; not positive feelings towards reading in school; not taught reading strategies- used phonics books; no partner or shared reading; interest in speech language pathology; picked up reading from my environment; strong reader; really liked ELA in school; tell if teacher was interested in reading; I struggled so I can relate to students who struggle