

An Exploration of Early Reading Instruction:  
Listening to the Voices of Early Elementary Teachers in a Pandemic

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## **Abstract**

Children who do not learn to read by Grade 3 face increased barriers to achieving basic levels of literacy. The purpose of this dissertation was to determine how early elementary classroom teachers are instructing their students in reading and to identify supports they believed were necessary to help more students learn to read. This qualitative study, set in the midst of a global pandemic, involved focus groups and semi-structured individual interviews with 11 early elementary teachers from Atlantic Canada. The data was analyzed using constructivist grounded theory. Study findings indicated that half the teachers expressed low self-efficacy around the use of reading instruction that requires a systematic, explicit approach to teaching phonological and phonemic awareness. While the research demonstrates that this type of instruction is essential for some students and beneficial for most, studies have shown that not all teachers have the education or training necessary to teach using this approach. The participants in this study recommended that phonological and phonemic awareness, as well as the instructional methods necessary to teach these concepts, be offered both in pre-service teacher education and through on-going in-servicing. Participants described being flexible with their instructional methods, when necessary, to ensure student understanding. The results of this study will be beneficial to educators and policy makers as they illustrate some of the challenges early elementary teachers face when teaching early reading. Recommendations are also suggested for policy makers and schools of education to address these challenges.

*Key Words:* Early reading instruction, adaptive teaching methods, teacher self-efficacy, teacher education, pandemic teaching

## Acknowledgements

As a former public school teacher, I have always been amazed (and dismayed) that teachers are rarely asked for their recommendations on curriculum development and policy creation. The wealth of knowledge and information that they could bring to the table is invaluable and yet they are often told what to do rather than asked what they think would work best. The 11 teachers who took part in this research demonstrate why it is vital that we listen to those on the front lines. Without their cooperation and openness, this dissertation would not have been possible. Four years is a long time to stay focused on one area of interest and without the ongoing support of my supervisor, Mary Jane Harkins, I don't know if I could have done it. No matter what obstacles came our way, she was always there, guiding me through them and helping me to see the light at the end of the tunnel. I also want to thank my committee members, Anne Murray-Orr and Laura-Lee Kearns, for taking the time to carefully review my work and make insightful comments and suggestions. This paper is stronger because of their involvement. Special thanks as well to my external examiner, Elizabeth Sloat, for her attention to detail and helpful recommendations. Getting a PhD is a time intensive commitment and for this reason, I acknowledge the support of Mount Saint Vincent University for granting me the *Nova Scotia Research and Innovation Graduate Scholarship*. This financial assistance helped make it possible for me to focus on my coursework and research. To my husband Kevin, my boys, Jake and Noah, and my faithful, furry companion, Luna thank you for being my cheerleaders and supporters throughout this process. Finally, this dissertation is dedicated to my fellow educators, in particular, those I have had the honor of working beside, and those who took part in this study. Thank you for letting me be part of your world.

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## **An Exploration of Early Reading Instruction: Listening to the Voices of Early Elementary Teachers in a Pandemic**

This study is situated in unprecedented times. In March of 2020, Covid-19 arrived on Canada's doorstep and the country closed up shop in hopes of stopping the virus in its tracks. Now, more than two years later, the world continues to deal with the effects of Covid and its many variants. Schools have worked hard to adapt to new measures designed to keep students and staff safe, despite ever-changing conditions. The aim of this research was to describe and explain the early reading instructional methods and beliefs of 11 early elementary school teachers; however, to understand fully the stories of these particular teachers, they must be viewed within the context of the Covid-19 pandemic. Teachers are no longer able to teach as they used to; they have had change their instructional methods in order to adapt to new mandates and restrictions. Listening to the voices of teachers is essential if we want to support students through this crisis and beyond. As front-line workers, it is important that their perceptions and suggestions on how to better support students who are learning to read, are not only listened to, but acted upon. Early reading instruction has been affected by the pandemic, as students who are now in Grade 2 have never experienced a "normal" school year. Their teachers have had to offer early reading instruction, first through online learning, and then through masks and distancing. Absenteeism among both students and staff has increased since the beginning of the pandemic (Grant, 2022; Tait et al., 2022) causing some schools to move between in-person and online learning. For those students in early elementary, these critical years of literacy learning have been upended and students and teachers have had to adapt and adjust to the changes.

## Importance of Strong Literacy Skills

Based on decades of research, we know that strong literacy skills are essential to the social, educational, and economical success of individuals (Beswick & Sloat, 2006; Castles et al., 2018; Machin et al., 2018; World Literacy Foundation, 2018). Young people with higher levels of literacy attain elevated levels of educational achievement, which in turn, leads to increased future earnings and higher social status (Jamieson, 2006). The International Literacy Association (ILA, 2021a) developed the *Children's Right to Read* initiative to ensure that "every child, everywhere, has access to the education, opportunities, and resources needed to read" (para. 1). The ILA asserts that learning to read is a basic human right.

To teach early reading effectively teachers need to have a vast array of knowledge, including an understanding of curriculum; an adaptive pedagogy that takes into account the varying cultural, linguistic, and economic backgrounds of their students; and an awareness of general child and adolescent development. All of these are essential for creating comprehensive programming that sets meaningful goals and supports for student learning.

A substantial body of literature has shown that including an explicit, structured, systematic approach to reading instruction when a child starts school leads to greater gains in the development of the student's reading ability and enhances their future literacy skills (Blachman et al., 1994; Byrne & Fielding-Barnsley, 1991; National Reading Panel, 2000). Based on the research (Al Otaiba & Fuchs, 2006; Beswick & Sloat, 2006; Buckingham et al., 2013; Castles et al., 2018), we know that strong reading skills are essential to academic success; and yet, despite the efforts of a great number of educational, political and social entities,

approximately 25% of Canadian students are still unable to read by grade 3 (O’Sullivan, 2020; Statistics Canada, 2006).

### **Canadian Student Literacy**

If one looks at the results of international tests of student reading, it appears as though Canada is doing quite well on the world stage. In the 2018 Program for International Student Assessment (PISA), Canadian students placed well above the Organisation for Economic Co-operation and Development (OECD) average, ranking among the world's best (O’Grady et al., 2019); however, these scores need to be placed in context. There is no national department of education in Canada; each province and territory are responsible for their own education program. On the PISA, each province is tested separately and there are significant differences between the provinces. The Atlantic and Prairie provinces tend to score lower, while Ontario, Alberta and British Columbia score higher (p. 12). As well, students in Canada’s northern territories do not take part. It’s important to take into account sociocultural reasons for the differences in these scores. According to Statistics Canada data from 2018, we know that one in 9 Canadians live in poverty (Employment and Social Development Canada, 2020) and that levels of poverty affect different individuals and families across Canada in different ways. As well, the “intersectionality of poverty” means that some individuals and groups are affected by multiple barriers (Frank et al., 2021, p. 7).

Poverty is more likely to affect some groups than others. Factors such as sex, gender identity, family composition, immigration status, disabilities, institutionalization, exposure to violence, racism, anti-Black racism, ableism, discrimination, homophobia,

transphobia and location all play a role. Because of colonialism, past and present, Indigenous people are at high risk. (p. 16)

Nova Scotia has one of the highest rates of child poverty in the country, encompassing more than 24% of the children in the province (p. 5). These rates range greatly from one part of the province to another, from a low of 4.8% in the provincial capital of Halifax, to a high of 73.3% in a postal area that includes the Sipekne'katik First Nation, the second largest Mi'kmaq band in Nova Scotia (Frank et al., 2021). While these statistics highlight glaring disparities between two areas less than an hour's drive apart, it is important to take into account the effects of colonization on the Indigenous population. "The legacy of colonialism and masculine domination is seen in whose knowledge is valuable in the state, and whose knowledge is challenged and further marginalized in a standardized, fast paced, humiliating, and competitive educational environment" (Kearns, 2016).

### **Social Costs of Low Literacy**

The social costs of both illiteracy (the inability to read and write) and functional illiteracy (the inability to use reading and writing to further personal development) can be seen in all aspects of life. At the World Literacy Summit, the World Literacy Foundation (2018) presented a White Paper outlining both the individual and community costs of low literacy skills. "Without the ability to read or write, many illiterate people become trapped in a cycle of poverty with limited opportunities for employment or income generation" (p. 2). The global effects of low literacy can be felt on an economic scale as well with worldwide costs estimated at 800 billion euros (approximately 1 trillion Canadian dollars) (p. 1). According to a report by the World Bank "the benefits of literacy are enormous – as are the costs of illiteracy" (Graham & Kelly, 2019).

The report notes that an individual's *private rate of return* (a financial gain or loss on an investment) goes up by 10% for every year of schooling an individual has (p. 3). The negative effects associated with low literacy skills becomes a vicious cycle, whereby an individual is unable to achieve higher levels of schooling and is therefore unable to gain the necessary advanced skills that the labour market demands. This cycle is then repeated through generations of families and communities. This results in an untrained market force making it difficult for a country to compete in the global market. Gross (2009; as cited in Graham & Kelly, 2019) noted that low literacy skills lead to "higher societal costs in terms of employment, education, crime, and health" (p. 3).

Statistics indicate that the rates of incarceration are much higher amongst those who have poor literacy skills:

- Offenders are three times as likely as the rest of the population to have literacy problems (World Literacy Foundation, 2018).
- 79 of 100 people entering Canadian correctional facilities do not have their high school diploma, and 65 of 100 people entering correctional facilities have less than a Grade 8 education or level of literacy skills (Canadian Association of Chiefs of Police, 2009).
- More than 60% of all prison inmates are functionally illiterate and more than 70% of inmates in U.S. prisons cannot read above a fourth-grade level (World Literacy Foundation, 2018).

In the United States, the correlation between low literacy skills and youth detention is profound. According to some statistics, as many as 85% of all juveniles who interact with the juvenile court system are functionally illiterate (p. 4). Other research suggests that students

with poor reading ability are more likely to leave school before high school graduation and experience suicidal attempts more often than students with typical reading development (Daniel et al., 2006). For students of colour, the rate of early school leaving is even higher (American Psychological Association, 2012). This is not a surprise; based on the data discussed earlier in this section we know that “marginalized groups face economic barriers, racism and discrimination and are more likely to live in poverty” (Frank et al., 2021, p. 16).

### **Reading Levels of Grade 3 Students**

The number of Canadian students who are unable to read at grade level by the end of grade 3 has been estimated to be around 25 percent (O’Sullivan, 2020). Since education in Canada is a provincial rather than federal mandate, each province implements their own Grade 3 reading assessments. If we use Ontario and Nova Scotia Grade 3 reading assessment results as examples, we can see that this percentage seems accurate. The results of the most recent Ontario assessment demonstrated that approximately 1 in 4 Ontario students did not meet the provincial reading standards (Education Quality and Accountability Office, 2019). In Nova Scotia that ratio was even higher with 1 in 3, Grade 3 students, who did not meet the provincial outcomes. These results demonstrate that 25 – 30 percent of our students have not learned to read at the level expected by the end of grade 3. By the time students reach grade 4, they are expected to be “reading to learn” (Tamer & Walsh, 2016) as academic vocabulary becomes more complex and the need to be able to decode quickly becomes more important.

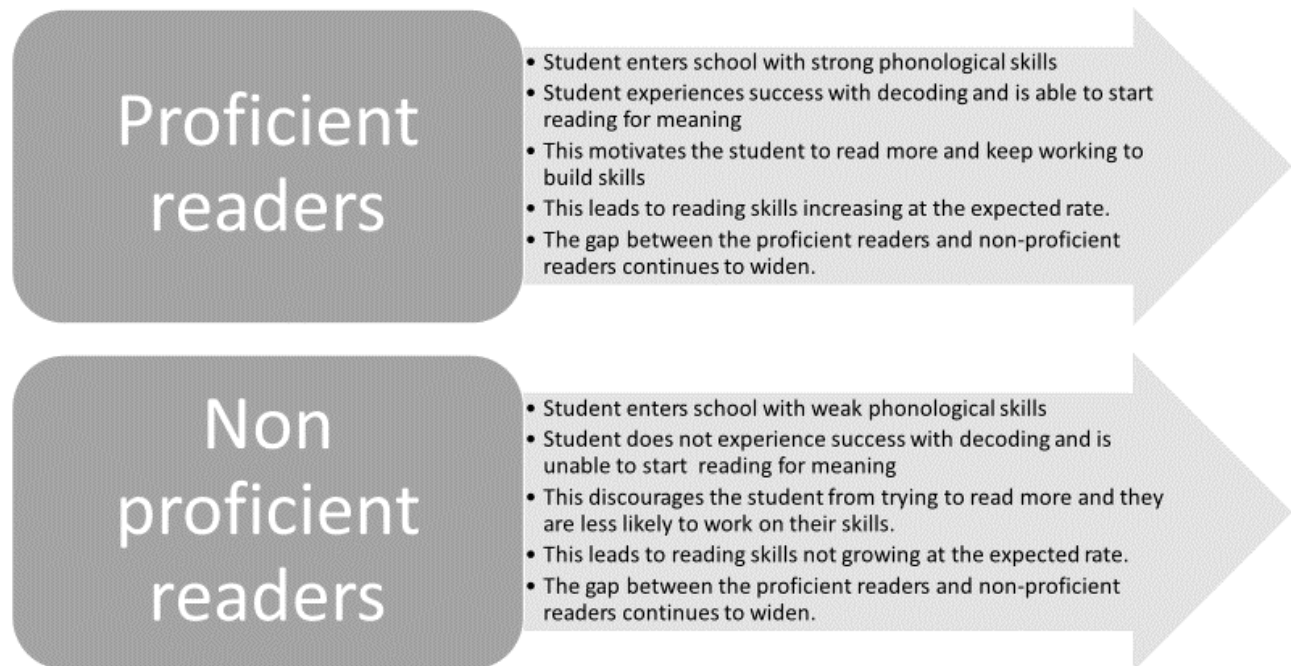
### **Grade 3 Reading Levels as Predictors of Future Success**

Grade 3 reading levels have long been seen as important indicators of a student’s future academic success (Beaudette et al., 2017; Goerge, 2010). In a Canadian longitudinal study

(Statistics Canada, 2006), strong readers at eight or nine years of age demonstrated significantly higher test scores than their peers once they reached 18 or 19 years of age, while students who struggled to read in grade 3, often fell further and further behind as they continued through the grades. Research from other countries, such as the United States, also found this to be true (Craft Al-Hazza et al., 2008; Foorman et al., 1998; Francis et al., 1996; Juel, 1988). Stanovich (1986, 1994) refers to this increasing gap between proficient and non-proficient readers as *The Matthew Effect* (see Figure 1 below). He outlined a model of how “individual differences in early reading acquisition were magnified by the differential cognitive, motivational, and educational experience of children who vary in early reading development” (1994, p. 281). It demonstrates the challenge non-proficient readers face in trying to “catch up” to their peers. The effect on reading is cumulative, which leads to strong readers becoming stronger as the years go on, while poor readers fail to improve at the same rate, thus widening the gap between the two groups.

**Figure 1**

*The Matthew Effect of Reading*



*Note.* Adapted from “Matthew Effects in Reading: Some Consequences of Individual Differences in the Acquisition of Literacy” by Keith Stanovich, 1986, *Reading Research Quarterly*, 21(4), pp. 360–407. Copyright 1986 by the International Reading Association.

In an opinion piece in the Toronto *Globe and Mail* newspaper, O’Sullivan (2020), a professor and researcher at the University of Toronto, claims that Canadians often react to dips in international standardized test results by declaring that we are in the midst of a “reading crisis” (para. 5), and yet no outcry goes up when year after year 20-40 % of Canadian children fail to meet expectations on provincial reading assessments.

Among the 100,000 [unable to read by grade 4], those growing up in poverty, Indigenous children, those whose first language is neither English nor French, and



children with special needs, will be disproportionately represented. ... This is a permanent crisis that decades of research, policy reports, school reforms and think tanks have failed to address successfully. This situation reflects the social, economic, cultural, linguistic and geographic inequities that have existed for generations in Canada. (para. 2)

### **Early Detection and Intervention**

While the social determinants of health highlighted by O’Sullivan above are central to supporting children whose lives are affected by these factors, there is evidence that early detection and intervention are also important ways of supporting those at risk of reading failure (Dev et al., 2002; Juel, 1988; Lovett et al., 2017). Although teachers and schools have little control over broad social determinants, they have a great deal of influence over how curriculum is taught in the classroom. Identifying students who struggle with beginning reading skills, and helping them to improve those skills early, will lead to a more literate population and improve their quality of life (Castles et al., 2018).

### **Using an Explicit, Structured, Systematic Approach**

Studies have shown once students have been identified, then they need an explicit, structured, systematic approach to reading which includes the teaching of *phonological awareness* (Ball & Blachman, 1991; Castles et al., 2018; Double et al., 2019; Ehri et al., 2001; Juel, 1988). Phonological awareness is the understanding of the sound structures of speech and how we manipulate those sounds to create oral language (Note: see Appendix G, Definition of Terms, for more detailed definitions of *italicized* terms throughout this paper). A strong base in

phonological awareness allows students to move on to *phonics*, where they learn to read and spell by focusing on the relationship between sounds and letters.

The two best predictors of how well children will learn to read are their knowledge of letters and their level of *phonemic awareness* (Adams, 1998; Catts et al., 2016; National Reading Panel, 2000; Peng et al., 2019; Stanovich, 1986). Phonemic awareness is the most complex skill involved in phonological awareness and requires the listener to be able to hear, identify, and manipulate individual sounds (*phonemes*) in spoken words. Although there are only 26 letters in the English language, there are 44 phonemes. The number of letters in a word is not always the same as the number of phonemes. Phonemes consist of single letter sounds, as well as letter combinations that produce a single sound (see Figure 2 below).

**Figure 2**

*Examples of Single and Double Letter Phonemes*

Word	Number of Letters	Number of phonemes
mat	m-a-t = 3 letters	m/a/t = 3 phonemes
shed	s-h-e-d = 4 letters	sh/e/d = 3 phonemes
thirst	t-h-i-r-s-t = 6 letters	th/ir/s/t = 4 phonemes

Students also need to be able to *decode* and have strong *word recognition* skills.

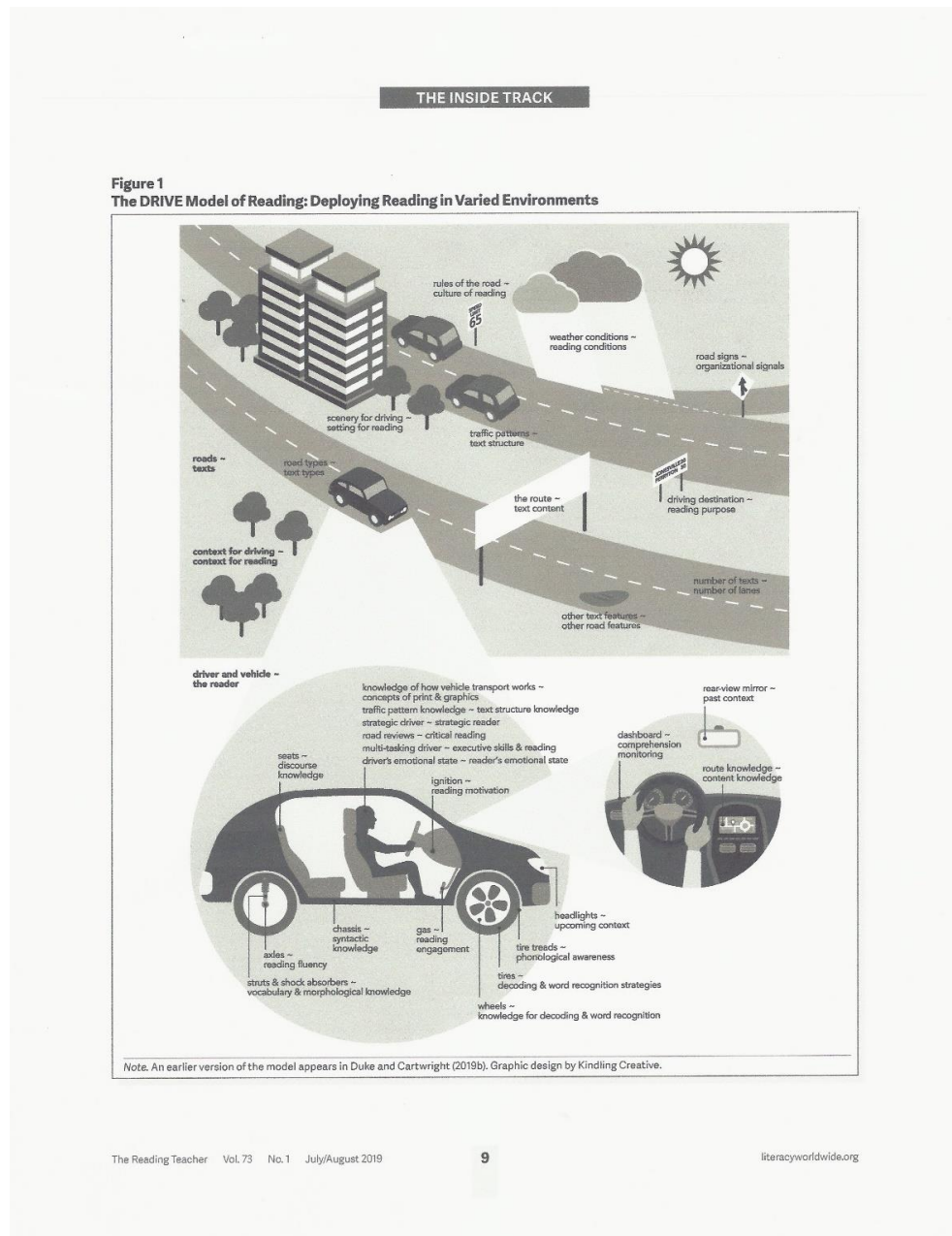
Decoding is the practice of using letter-sound relationships to correctly read written words, while word recognition involves storing and then retrieving those words so that they don't need to be decoded each time they are read.

To illustrate the complexities involved in the reading process, Cartwright and Duke (2019) compared it to those involved in driving a car (see Figure 3 below). The diagram uses the metaphor of driving to demonstrate that reading involves many different, complex functioning

parts working together in order for comprehension to occur. My study acknowledges that all components noted in Figure 3, including fluency, comprehension, and student engagement, are important for children to become proficient readers; however, the focus of this paper will be on phonological awareness, decoding, and word recognition.

**Figure 3**

*The Drive Model of Reading*



*Note.* From “The DRIVE model of reading: Making the complexity of reading accessible,” K.

Cartwright and N.K. Duke, (2019), *The Reading Teacher*, 73(1), p. 9. Creative Commons license.

According to the metaphor, since you cannot drive a car without tires, you cannot read print without knowing how to first decode and then store words in your memory for quick retrieval later. The authors compare phonological awareness to the treads on the tires. While the treads grip the road so that the tires can move smoothly, phonological awareness allows students to understand how sounds can be translated into oral language, thus providing a strong base for decoding and word recognition. Figure 3 above shows that while these are, by no means, the only skills children need to become strong, engaged readers, they are essential. Like a car, if your wheels are not moving smoothly, your reading is not going anywhere.

There is a solid body of evidence suggesting that while the teaching of phonemic awareness and phonological understanding in the early grades is beneficial for all students, it is essential for those who have difficulty learning to read (Ball & Blachman, 1991; Buckingham & Castles, 2019; Double et al., 2019). Despite this knowledge, research has shown that these skills are not always taught in the early elementary grades using explicit, systematic instruction (Bratsch-Hines et al., 2017; Seidenberg, 2017; Wadlington & Wadlington, 2005).

If there is a strong body of evidence that suggests instruction in these areas is necessary for some students and, if successful, could possibly change the course of their life, why are schools not required to provide this instruction? One reason suggested in the literature is that some teachers do not possess the level of phonological awareness that is needed to successfully teach it to their students (Binks, 2008; Moats, 2014; Spear-Swerling & Brucker, 2004; Wadlington & Wadlington, 2005). A study by McCutchen et al. (2009) found that teacher knowledge was linked to student improvement in reading, particularly with lower-achieving students.

Such a finding is consistent with the interpretation that deeper linguistic knowledge enables teachers to intervene more effectively with struggling students' decoding and spelling, which may influence other higher-level literacy skills. Certainly, skilled decoding is not sufficient to ensure comprehension, but comprehension is difficult when decoding skills are poor. (p. 418)

It makes sense that, when teachers are missing this building block in their own understanding of language development, students who need it most will miss this much needed instruction, causing them to fall even further behind.

Another possible reason for the disconnect between the research and its subsequent implementation in the school system involves the philosophical differences between traditional and progressive approaches to reading. These are differences that have divided North American educators, parents, policy makers, and the general public for years (Rayner et al., 2002). This division has been dubbed the *Reading Wars* and involves proponents of *code-based instruction* facing off against advocates for *meaning-based instruction* (Connor et al., 2004). The difference between these two types of instruction has been described simply as follows.

Code-based instruction focuses on explicit and systematic teaching of decoding including letter recognition, letter–sound correspondence, phonics, and phonological awareness. Meaning-based instruction views learning to read as a more natural process (Goodman, 1970) that requires consistent experience with meaningful text within a literature-rich environment (Dahl & Freppon, 1995). (p. 306)

This debate surrounding reading instruction goes back almost 200 years (Castles et al., 2018). When the proponents of each attack the other, they often do so without recognizing the

benefits each brings to a child in need of reading instruction. For example, *whole language* (an approach to reading that involves literature that is student-centered and meaning-focused) and *balanced literacy* (an approach that includes a mix of both phonics instruction and literature) have enhanced classrooms, in part through their focus on:

the use of invented spelling, expectations for classrooms filled with good children's literature, efforts to motivate children to read, use of thematic units, the writing process approach, more time for reading in school, plus integrating reading and writing across the curriculum. (Gentry, 2018, para. 8)

Alternatively, research has also shown that "most children appear to develop stronger reading skills when provided explicit decoding instruction in combination with meaningful reading activities" (Connor et al., 2004, p. 306).

The philosophical differences between these approaches to reading instruction often show themselves in conflicts between policy makers, who set curriculum, and universities in charge of teacher education (Brenner, 2007; Roller & Long, 2001). While the assumption may be that policymaking is the rational application of research findings; in fact, policy is more about values, compromise, access and authority (Brenner, 2007); according to Allington (1999) research on its own rarely leads to policy. Cherney et al. (2012) propose that this is because "educational researchers, bureaucrats and teachers often have different priorities and perceptions about what constitutes useful and valid research" (p. 23). Roller and Long (2001) suggest that, for researchers to move their data from only being read by a small group of like-minded individuals to influencing policy which leads to actual positive change, universities and

policy makers need to communicate in a way that both parties understand. Ion et al. (2019) explain that this can be difficult because of the way research is often funded.

Generally, the context of research production is dominated by the role of universities and research institutions in generating knowledge based on evidence. Thus, the literature on research production focuses more on research funding, research management, and the strategies used by academics to enhance research transfer and utilization than on the research transfer to the users' context....Many policy-makers perceive that educational research has little impact on society and often fails to meet the decision-makers' needs. (p. 2)

Caught in the middle of the policy makers and the researchers are the teachers who are trying their best to meet the needs of a highly diverse student body. When Baumann et al. (2000) surveyed American elementary classroom teachers they indicated that they generally avoided aligning themselves with either polarizing position (code-based versus literature-based). Instead, they chose to describe their approach as *eclectic*, insisting that their instructional methods took into account the individual and collective needs of the students in their class.

In order to be adaptive with one's teaching methods, however, teachers need to know multiple methods of instruction, and yet research demonstrates that some teachers are entering the field without knowing how to teach students to decode in an explicit, systematic way (Binks-Cantrell et al., 2012; Moats, 2014; Washburn et al., 2011). In their review of the literature, Meeks et al. (2016) found that "research-based early literacy instruction is seldom included in many teacher education courses in Canada (Kosnik & Beck, 2008), the United



Kingdom (Stainthorp, 2004), and the United States (Clark, Jones, Reutzel, & Andreasen, 2013)” (p. 93). Ensuring that our teachers have a strong sense of *self-efficacy*, the belief that they can succeed, is essential and plays a large part in student success (Hattie, 2009). “Teacher preparation and professional development are integral to reducing the number of children with reading failure” (Fielding-Barnsley & Purdy, 2005, p. 68). Because teaching is a complex process and the teaching of reading is equally complex, teachers need to have a wide range of strategies, knowledge and understanding that they can use when planning and delivering their lessons. “Teachers who are faced with the variations in achievement, experience, and aptitude found in today’s classrooms need, and deserve, a full toolbox of pedagogical practices” (Pearson, 2004, p. 245).

### **Respecting Teacher Knowledge**

Teachers of reading in early childhood have expressed concerns about how they can meet the wide range of diverse learners in their classrooms (Meeks et al., 2016). In an online survey (International Literacy Association, 2020b), educators from around the world were asked to rank which topics they felt were most critical to improving literacy outcomes over the next decade. More than 1,000 respondents, from 65 countries and territories, ranked their top two priorities as:

1. Building early literacy skills through a balanced approach that combines both foundational and language comprehension instructions, and
2. Determining effective instructional strategies for struggling readers (p. 6).

In addition, the issue of teacher preparation was shown to be an area of concern. Only 27% of Pre-K-12 administrators and 34% of teachers agreed that teachers were being well

prepared to teach early reading, while 54% of higher education professionals felt they were.

“This wide range suggests a significant disconnect between the people who are training the next generation of educators and educators themselves” (p. 26). Specifically, in the area of phonemic awareness, 26% of respondents said their program did an excellent or very good job of preparing them to use these methods (p. 27). A slight majority of the respondents (51%) were in favour of a balanced approach to literacy, rather than a strict focus on either a whole language approach or an explicit and systematic phonics method. This aligns with other research (Pearson, 2004) which found that strong teachers of reading tended towards a middle ground that also took into account students’ backgrounds and needs.

Since early reading instruction involves teachers working cooperatively with a large group of children, it is essential that they are able to make decisions and change lesson plans on the fly (Parsons, 2012). Vaughn (2015) states that we must allow teachers to adapt their instruction as a way of both respecting their identities as professionals, as well as meeting the needs of their students. She says that this is how we honour teachers’ voices. “Adaptive teachers have an understanding of pedagogy, students, and their instructional visions. Such attention to the careful reflection and insight into the nature and complexity of teaching is needed” (p. 58). Teachers need the freedom to be “thoughtful and flexible” with their instruction, so that they can meet the diverse needs of their students (Vaughn et al., 2015, p. 545).

There is a wide range of empirical knowledge that has been gained through research in the field of early reading instruction, some of which has been based on studies done in cooperation with elementary school teachers (Al Otaiba et al., 2016; Graham et al., 2020;

Washburn et al., 2011). This study adds to this body of empirical research by valuing and raising the voices of those who administer early reading instruction on a daily basis. Teachers have a wealth of knowledge that could be accessed to help create curriculum and policy. As well, they could add to the conversation around teacher education and what would help better prepare teachers to teach early reading. Teachers know that every student and every class is different and that this requires them to adapt their teaching to the specific learning needs of the children in front of them.

My research questions for this study were designed to examine how teachers instruct their early elementary students to develop their reading skills, what resources they draw upon when their students have difficulty learning to read, and their level of self-efficacy with reading instruction. I also asked them to offer their suggestions and advice on how schools could best support teachers in teaching reading to all early elementary students within an inclusive program. Next, I wanted to ascertain what recommendations they had for the providers of pre-service and in-service education, in terms of preparing and supporting teachers to meet the early reading needs of their students. Finally, since this study is based in unprecedented times, I asked how they were adapting their reading instruction due to the restrictions and requirements placed upon them due to the pandemic.

### **Purpose of Study and Research Questions**

The overarching aim of this study was to gain an understanding of teachers' perceptions of early reading instruction and how they learned, and continued to develop, their instructional skills in this area. This led to the development of the following six, specific research questions:

1. From the perspective of early elementary teachers, how are they instructing their students to develop their early reading skills, specifically in the area of phonological awareness?
2. What resources do teachers draw upon when their students have difficulty learning to read?
3. What are teachers' levels of self-efficacy with regards to helping students who struggle to read?
4. What recommendations do teachers have for in-service instruction in terms of helping practicing teachers to meet the early reading needs of all their students?
5. What recommendations do teachers have for pre-service instruction in terms of preparing teachers to meet the early reading needs of all their students?
6. How has the Covid-19 pandemic affected the way teachers teach early reading?

My intent with this research is to inform practice. By treating teachers as respected professionals and partners in the research process, the information gained will have more validity when shared with teachers, administrators, and policy makers.

## **Conceptual Framework**

### **Introduction**

According to Ravich and Riggan (2017), a conceptual framework is “an argument about why the topic one wishes to study matters, and why the means proposed to study it are appropriate and rigorous” (p. 5). The authors state that it is something the researcher builds themselves and includes “a combination of experiential knowledge and prior theory and research” (as cited in Maxwell, 2013, p. 7). In this section, I share why this particular area of

study is so important to students, teachers, parents, and society as a whole. I demonstrate in the following how the knowledge I gained through prior experience has been integrated with the research I have done on this topic and the data gathered from the participants.

The purpose of this section is to demonstrate reflexivity and to be open about any preconceptions I may have brought to the research. Malterud (2001) uses the metaphor of a “knower’s mirror” to describe how the researcher must consider their own biases and account for them at each step of the process: “Contemporary theory of knowledge acknowledges the effect of a researcher’s position and perspectives, and disputes the belief of a neutral observer” (p. 484). Malterud describes preconceptions as being the “researchers backpack”, meaning these are the beliefs and experiences the researcher brings with them to the research process. These include previous personal and professional experiences, as well as pre-study beliefs about the research topic.

The following represents my backpack, as Malterud would say. I begin by discussing my identity and personality, followed by a reflexive look at some of my past experiences as an educator, and my discovery of the Science of Reading, something I refer to as the missing piece in my reading education.

### **Identity and Personality**

My identity is that of a life-long teacher and learner. I learn from the students I teach and, in turn, help them develop their strengths and work on their challenges. When I taught grades 4 and 5, I took special interest in planning language arts lessons that allowed all students to be active participants. Every year, I had a wide range of students in my class with varying levels of ability. One year in particular, I had a student with Down Syndrome, a student with

autism, a student with severe cognitive delays, three students with ADHD, two students dealing with severe trauma, four students with learning disabilities, and two students who were on the gifted scale. These students made up half of my class and had very specific and differing needs. The other half needed me to teach the grade 4 curriculum as well as I could manage under the circumstances. To say it was a challenging year would be an understatement. To meet the needs of this wide range of students, I tried a variety of programs and teaching approaches. Most of my students experienced relative success that year with one exception. I did not know how to teach my struggling readers how to decode and, unfortunately, this was the area of reading where they needed support. I knew how to find them good books that were of interest to them, and I knew how to talk to them about comprehension, but for those who struggled to decode, I was at a loss. I ended up referring them to our resource teacher and together we worked to help these students develop their skills. Neither of us knew much about how to teach the decoding aspect of reading and therefore, we were unable to teach our students these skills.

After that challenging year, I took a one-year, unpaid leave of absence to decide how, or if, I wanted to proceed with my career. Following this break, I returned to teaching and started to write about what I felt were the essential components of successful education. In 2016, I published a book titled, *Teaching with Humor, Compassion and Conviction*. The three pillars of instruction that are the focus of my book (Hollis, 2016) - humor, compassion, and conviction—align with my axiology and the way in which I have approached this research topic. I believe that if teachers approach their teaching practice with these three pillars in mind, they will have a much greater chance of engaging their students in the learning process. My ontological

understanding includes the premise that reality is co-constructed through our interactions with each other. Often, we don't hear (or listen to) the ideas and opinions of teachers who work, day in and day out, with students who may struggle with reading. In my doctoral research, I aimed to listen to these voices. Developing an awareness of how teachers teach literacy skills, such as phonological awareness, aligns with my epistemological stance, which acknowledges that knowledge is best developed through both an understanding of the research and through discussions with those who are working in the field. The research methods used throughout this study allowed for the development of knowledge through focus groups and individual interviews with the 11 early elementary school teachers who took part.

### **Reflexivity**

Through prospective reflexivity (Mills et al., 2006), I understand that my background and beliefs, as a public school teacher and a university instructor in elementary education, influenced the way I approached this research. Malterud (2001) states that "a researcher's background and position affect what they choose to investigate, the angle of investigation, the methods judged most adequate for this purpose, the findings considered most appropriate, and the framing and communication of conclusions" (p. 483-484).

I knew that I struggled with the decoding aspect of reading instruction and was aware, through conversations and observations, that many of my fellow teachers also lacked self-efficacy in this area. My experience was that students who did not learn to read through general classroom instruction were referred for additional support from the resource team. Often, in my later role as a resource teacher, I merely continued to teach in the same manner as the classroom teacher, just in a one-on-one or small group setting. It was upsetting to watch

students who needed a different approach to reading and not be able to offer that to them. The research has shown that students who have difficulty learning to read often suffer from low self-esteem and other emotional issues (Daniel et al., 2006; Riddick, 1995; Wadlington & Wadlington, 2005); sadly, I saw this repeatedly throughout my teaching career.

In 2017, after a 15-year career in public education, I resigned from the public school system. While I was ready for a change, I was also frustrated and exhausted by the fact that I felt I wasn't making a positive difference in the lives of my students. There were a multitude of reasons for this, but one that stood out was my lack of self-efficacy around the teaching of reading. The literature on teacher self-efficacy demonstrates that I was not alone in feeling the way I did. Low self-efficacy in teachers has been linked to burnout and stress, as well as attrition in the profession (Zee & Kooman, 2016). Sutchter et al. (2016) found that teachers who felt they received little pedagogical training during their pre-service program were two to three times more likely to leave teaching after their first year than teachers who had received comprehensive preparation.

It is important to note that some of the issues that affect teachers in their first years of employment are beyond the scope of teacher education programs (Murray-Orr & Mitton Kukner, 2017). Teachers who are considering leaving the profession, state that one of their main reasons is because they are experiencing *burnout* (Madigan & Kim, 2021). The authors describe the symptoms of burnout as emotional exhaustion, which causes them to become less involved, depersonalization, which leads to conflict, and diminished self-esteem, leading to decreased motivation. Other factors include dissatisfaction with compensation and the pursuit of other occupations (Learning Policy Institute, 2016). Research has shown that high rates of



teacher attrition may be reduced through “interventions focusing on improving workplace factors, decreasing stress, and improving mental health” (Mack, 2018, p. 2).

After I left the profession, I took a year off before deciding in July, 2018 to start my PhD in Education. I knew there was more I wanted to learn and quickly discovered that my passion lay in early reading. My goal was, and continues to be, to help more teachers understand how students learn to read and what they need, in terms of instruction, so as to achieve this goal.

### **The Missing Piece – My Introduction to the Science of Reading**

In September of 2018, a friend invited me to take part in a workshop titled, *The Nuts and Bolts of Reading - Practical Strategies and Activities to Fill your Toolbox* (Scottish Rite Charitable Foundation – Learning Centre for Children, 2019). This workshop introduced me to the Orton-Gillingham (OG) approach to reading. The OG method involves teaching children to read using *structured literacy* – an explicit, systematic approach to teaching decoding through phonological awareness and phonics. It was there that I felt that I had discovered the missing piece of my teaching practice. I had not been taught this information in my undergraduate or graduate programs and had not received any in-servicing in this area, despite being a certified resource teacher. This was my introduction to what is commonly known as the *Science of Reading (SoR)*.

There are some variations to the definition of SoR, but, in general, it is method of instruction that involves the explicit teaching of reading skills, such a phonological awareness, phonics, vocabulary and word knowledge (Vaughn et al., 2020). It has been described as the accumulated knowledge about reading and reading instruction based on scientific methods of research centered in a positivist paradigm (Petscher et al., 2020).

Shanahan (2020) argues that this newfound interest in SoR has been brought about by its increased exposure in the media and within public debate and conversation. One article in particular as of late has received a great deal of attention and has stirred up significant controversy. The article published by American Public Media (Hanford, 2018) argues that teachers are not being prepared to teach students how to read using SoR. Hanford argues that this research has not made its way to, or has been dismissed by, teacher educators, which has resulted in new teachers not learning enough about phonological and phonemic awareness so that they can teach it to their students. The Hanford (2018) article has been dismissed by some as being based on “well-worn tropes of scientific certitude, frantic parents, redemption narratives, binary thinking, and blaming of ‘whole language’” (Bomer & Maloch, 2019, p. 262). Despite the controversy, the article, and the author herself are enjoying wide-spread popularity on the internet and beyond. Hanford struck a chord with parents (and some teachers) frustrated by what they feel is a lack of proper instruction for children who continue to struggle to read. Similar thoughts are expressed by teachers interviewed in Hanford’s (2018) article. After learning about the reading science, these teachers were full of regret. “I feel horrible guilt,” said Ibarra, who’s been a teacher for 15 years. “I thought, ‘All these years, all these students,’” said Bosak, who’s been teaching for 26 years.” (para. 46-47)

When I reflect on my own teaching practice, I try to accept that I didn’t know what I didn’t know and therefore couldn’t even request training or instruction in the area. I feel that I was, for the most part, a good teacher of elementary language arts; however, I believe that I could have helped a lot more children if I had had more education in this area.

In the fall of 2018, I was hired as an instructor to teach an elementary language arts class for second-year Bachelor of Education students at a local Nova Scotia university. I devoted a small part of the course to phonological awareness, based on my newfound knowledge, starting with a focus on phonemic awareness. The response to this instruction was overwhelming, with most students expressing that they were thrilled to add this tool to their toolbox of reading instruction. In their feedback, many expressed that although they appreciated gaining this knowledge, this area was challenging for them, as they lacked some of the basics of early language learning. I have now taught this course for four years and have refined my teaching approach and methods based on the feedback I have received from students and the research I have done in this area. This past term, many of my students expressed that they felt much more confident about teaching early reading as they moved into their final practicum. It's important to stress that phonological awareness was only a part of the course, which also included information and instruction on many other aspects of elementary language arts (ELA) instruction. One of my goals with this course was to build a sense of self-efficacy in my students in terms of their instructional ability in ELA. In her final paper, one of my students shared,

The curriculum documents, combined with the ample resources and instruction provided in this course have given me a sense of confidence and excitement as I head into my final practicum. I may not have all of the answers yet but I know where to go to find them. (H. Briand, personal communication, December 19, 2021)

Based on my experience, I agree with the research that has found that some of our new teachers are starting their careers without the tools needed to meet the needs of some of our

struggling readers (Bos et al., 2001; Fielding-Barnsley, 2010; Meeks et al., 2016). They lack the self-efficacy needed to enter a classroom and teach with the confidence that comes with knowing you can make a difference. The goal of this research was to explore what teachers are doing in their classrooms to instruct their students, in particular those who have difficulty learning to read, and asking them what training and education they felt was necessary for them, and future teachers, to be able to help these students find success. I also sought to understand their belief systems around early reading instruction and how this affected their instructional approach.

### **Theoretical Framework**

My goal with this research was to tell a story about the teaching of reading in the early grades, as seen through the eyes of a small group of early elementary school teachers. This research fits within the qualitative paradigm and was designed using constructivist grounded theory (Charmaz, 2006, 2014) as both a method and a methodology. A number of other theories helped to inform this research. They include social-constructivist theory (eg. Adams, 2006; Akpan et al., 2020; Francis et al., 2016; Schreiber & Valle, 2013; Vygotsky, 1978), social justice theory (eg. Beswick & Sloat, 2006; Charmaz, 2020; Francis et al., 2016; Mills & Ballantyne, 2016; Van den Bos et al., 2015), and self-efficacy and collective self-efficacy theory (eg. Bandura, 1997; Donohoo et al., 2018; Hattie, 2009; Visible Learning, 2022).

### ***Social-Constructivist Theory***

This research used *social-constructivist theory* to guide the focus groups and interviews. The definition of social-constructivism used throughout this dissertation references Vygotsky's theory that "social constructivism is a branch of constructivist thought, which holds that

knowledge is individually constructed via one's experiences" (Schreiber & Valle, 2013, p. 396). Vygotsky argued that not only do we construct knowledge (i.e., learn) individually, but we also do so through our reflections on our interactions with others.

Teachers are influenced by a number of social factors, including their own experiences learning how to read, the education they received on how to teach reading, the reading instruction guidelines in the curriculum sanctioned by the government of the area they are working, and finally, sometimes most importantly, the values and strategies that are promoted at the school where they presently teach (Duffy & Atkinson, 2001; Fairman & MacKenzie, 2014; Hoffman et al., 2005; Izci, 2016). All these are factors of the social environment teachers inhabit and are therefore important for understanding how and why teachers have developed their understanding of how to teach reading; this shapes how they choose their instructional strategies, resources, and methods.

Another important aspect of social-constructivist theory that applies to this research is that strong teachers of reading use interactions with their students to adjust their instructional methods. They are adaptive in their teaching based on their observations and the feedback they receive (Vaughn et al., 2020).

Adaptive teachers are flexible and skilled at teaching reading, using knowledge of reading acquisition and embedding instruction within students' instructional needs and their rich literacies, cultures, and backgrounds (Pearson & Hoffman, 2011; Vagle, 2016).  
(p. S300)

## ***Social Justice Theory***

This study is also influenced by *social justice theory*. Ayala et al. (2011), in a reference to Van den Bos (2003), define social justice as “the fair and equitable distribution of power, resources, and obligations in society to all people, regardless of race or ethnicity, age, gender, ability status, sexual orientation, and religious or spiritual background” (p. 2795). We know that children who struggle to read face very different paths depending on their socio-economic status, their race, their ability to speak English, and the quality of teacher instruction they receive (Australian Government - Department of Education, Science and Training, 2005; Buckingham et al., 2014; Darling-Hammond, 2000; Dolean et al., 2019; Graves, 2011). If a child’s need for extra support is not being met at the school level, parents who can afford it will often send their child to a private tutor or a reading support program. Children whose parents cannot afford the high cost of outside tutoring are left to accept what is offered at the school level (Caucutt, 2015). At the start of the pandemic, when many children were required to attend school virtually, the gap between those who could access a safe place to work, with reliable internet service, and those who could not widened (Andrew et al., 2020a; O’Sullivan, 2020). Understanding how this gap has affected student learning will become clearer as research continues to be done in this area. According to a report out of the United Kingdom (Andrew et al., 2020b), “based on the patterns that we document, it is already clear that the COVID-19 crisis is very likely to exacerbate pre-existing inequalities in educational attainment by children’s economic backgrounds. Policy makers should prepare now to offset these growing gaps” (p. 18).

Buckingham and Castles (2019) argue that the most ethical thing teachers can do to help mitigate the existing equity gap is to use teaching methods centered on the research-based evidence; this, they say, will help all students and minimize the disparity that currently exists. As a former public-school teacher, I agree that giving all students their best opportunity to learn to read is not only good practice, but also our moral obligation.

### ***Self-Efficacy and Collective Self-Efficacy Theory***

Teaching is a profession that is well suited to the discussion around *self-efficacy theory*. Self-efficacy is the belief of a person that their actions are effective or make a difference (Bandura, 1997); since making a difference and helping others are typically two of the main reasons teachers enter the profession, it is essential that they have confidence in their ability to do so (Bergmark et al., 2018).

Bandura (1997) wrote about the importance of self-efficacy in teachers, as it affects the way they approach their students, their curriculum, and their instructional activities. “The task of creating learning environments conducive to development of cognitive competencies rests heavily on the talents and self-efficacy of teachers” (p. 240). Dembo and Gibson (1985) reported that teachers’ self-efficacy predicted their students’ levels of mathematical and language achievement over the course of the academic year. Teachers with high levels of self-efficacy believed that they could help all students with a little bit of ingenuity and extra effort. Teachers with low levels of self-efficacy perceived that the students were responsible for their poor achievement due to low levels of ability and a lack of motivation (Scharlach, 2008). This research is supported by Hattie’s (2009) meta-analysis of influences and effect sizes that determine student success. Hattie’s most recent ranking (Visible Learning, 2022) found that

*collective teacher efficacy* was the number one factor strongly linked to student achievement.

Collective teacher efficacy is “the collective belief of teachers in their ability to positively affect students” (para. 1). Hattie also found that individual teacher self-efficacy was also an important factor in student success, scoring 11<sup>th</sup> out of his list of 252 influences.

The research surrounding self-efficacy and collective teacher efficacy was an important factor in analyzing the data I collected in this study. Some of the teachers interviewed talked about their lack of confidence in teaching children how to read in the early grades and stressed the importance of having a strong school team to help them. Based on these findings, teacher self-efficacy and collective teacher efficacy were determined to be important factors in the beliefs and practises of the teacher participants in this study.

## **Conclusion**

To tell the story of a small group of teachers and their experience with early reading instruction, my research focused on the three theories described in this section and my analysis of how they may or may not have been visible in the data: social constructivist, social justice, and self-efficacy and collective self-efficacy theory. These theories have been cited in much of the literature as being significant in the beliefs and actions of teachers.

## **Literature Review**

### **Introduction**

I began this literature review with a rather narrow focus. I wanted to know if the teaching of phonological skills beginning in grade primary/kindergarten helped students learn to read. I was interested in seeing whether this method would reduce the number of children who experienced difficulties. As I delved further into the research, I realized I needed to expand



my investigation so that my results weren't skewed in one direction or another. Ravich and Riggan (2017) note that the goal of a literature review "is not to find published work that supports your point of view; rather it is to find rigorous work that helps shape it" (p. 10). This helped open my mind to what I was reading and how I conducted my search.

After reviewing hundreds of articles, books, theses, and websites on the teaching of reading in the early years, I narrowed my review to four main areas that best suited my research: models of reading, teacher education, past and current early reading instructional methods, and teaching throughout Covid. The first part of the literature review focuses on the research that has been done on how individuals learn to read. This section demonstrates how new information, based on research and science in education, psychology and neuroscience, has led to changes in our understanding of how the brain acquires the ability to read print. This lays the groundwork for the other three areas which focus on how reading is taught.

Teacher education is the second area reviewed as I felt it was important to clarify how teachers were educated and trained in the past, and how that instruction has evolved to its present state. Knowing how teachers have been instructed to teach reading is important if we are to understand the choices they make with their pedagogy.

The third area deals with four models of early reading research. Although there are others, these four stood out to me as they represent seminal research that has stood the test of time.

The final section of the literature review deals with the challenges teachers have been facing as they navigate the restrictions and requirements that have accompanied the Covid-19 pandemic.

In a separate chapter, I have also included a review of the Primary – Grade 3 English Language Arts curriculum documents for Nova Scotia. The purpose of this review is to provide an overview of the curriculum guidelines Nova Scotia (NS) teachers are required to follow when teaching reading. This review helps provide background information that clarifies some of the statements made by the participants in the Findings. It recognizes that while 5 of the participants are not currently teaching in NS, they are employed in an Atlantic province. All four of the Atlantic Provinces (ie. Newfoundland and Labrador, Nova Scotia, Prince Edward Island and New Brunswick) use the same foundational document as the framework for their Elementary English Language Arts (EELA) programs. The Foundation for the Atlantic Canada English Language Arts Curriculum (1996) was developed to improve student needs, ensure equality of education across Atlantic Canada and improve the quality of education.

Each foundation document includes statements of essential graduation learnings, general curriculum outcomes for that core program, and key-stage curriculum outcomes (entry grade 3, grades 4-6, grades 7-9, grades 10-12). Essential graduation learnings and curriculum outcomes provide a consistent vision for the development of a rigorous and relevant core curriculum. (p. 3)

Although the provinces have their own curriculums that have evolved over the years, the outcomes-based system remains the same. For this reason, and because all of the participants were taking part in a NS-based graduate education program, this dissertation uses the NS EELA curriculum to provide background information for the reader.

## **Choosing an Inductive Approach**

Some educational research is conducted top down, with government bodies administering standardized tests and then issuing reports and recommendations to teachers. In contrast, by interviewing practicing teachers, I was able to study the issue inductively, from the bottom up, asking those on the front lines what they think is needed to help their students who have difficulty learning to read. Most teachers know which of their students struggle to read; they also know which students will have difficulty taking the test. This makes classroom teachers a veritable goldmine of knowledge on the students they teach. This research asked teachers about their approach to early reading and their thoughts on how the process could be improved or changed based on their education and teaching experience. I believe the results have enabled me to identify participants' needs and beliefs, and to recommend ways in which teachers can be supported in their goal of helping more children learn to read by the end of Grade 3.

The undertaking of this literature review has allowed me to take an extensive look at the research surrounding reading instruction in the early grades. This subject has been studied from the perspectives of education (e.g., Castles et al., 2018; Goodman, 1967; Ritchey & Goeke, 2006; Seidenberg, 2017; Shulman, 1987), psychology (e.g., Blachman et al. 2013; Byrne et al., 2000; Castles et al., 2018), neurology (e.g., Georgetown University Medical Center, 2003; Norton et al., 2014; Ritchey & Goeke, 2006;), and public policy (e.g., Adams, 2006; Brenner, 2007; Buckingham et al., 2013; Pearson, 2004) and I read widely within these areas. I used a variety of search engines available through the Mount Saint Vincent University Library to find articles and books online, including EBSCO, ERIC, and PsycINFO. The literature that has been

sourced here comes from published texts, government reports, and peer-reviewed journals; however, I also read widely from published dissertations and theses, popular websites, blogs, and non-peer-reviewed journals that dealt with these issues, as I felt it was important to see what the direct stakeholders (students and families) were saying about the teaching of reading in the early grades. These personal stories gave the academic literature I was reading a more human perspective by describing the actual people affected when a child has difficulty learning to read. What I felt was missing, though, were the voices of the teachers working with early literacy learners in the current educational climate and context. This is the area I addressed through my research.

According to Hart, a researcher from the University of Cambridge, (2018) there are four basic stages to producing a literature review. The first is a search for relevant sources. Over the past few years, I conducted thorough library and internet searches, and further sourced authors and articles based on recommendations from my supervisor and committee. At first, I read widely, gathering as much information as I could about reading, reading disabilities, and the teaching of reading; but as my research questions became clearer, I narrowed the parameters of my search. I focused my research on early elementary reading instruction and the effects Covid has had on the teaching profession. This directed me to resources that addressed my research questions more closely. These questions asked the participants to reflect on how they teach early reading now, what challenges they face in this process, their recommendations on how they could be supported, and their perspective on teaching reading during Covid times. By focusing on the two areas of early reading instruction and Covid, I was able to dig deeper into literature on my research questions.

The second stage of the literature review process involves the “analysis, critical evaluation and synthesis of existing knowledge” (Hart, p. 3) applicable to my research questions, while the third stage is the act of extracting data and making notes on themes. The following themes discussed here surfaced after determining my focus on reading instruction in the early grades, in particular with students who have difficulty learning to read. The final stage for the researcher in the literature review process is the writing of the sections on the themes. The purpose for doing so, says Hart, is to find the gap in the literature. Based on the literature review and the stories told by the study participants, I believe the gap was made visible. Despite an intensive search, I found very little research on teachers from this area. As well, since the Covid pandemic is recent and unprecedented, the research on teaching early reading during lockdowns and restrictions is still in its early stages. Finally, much of the research on early reading instruction came from quantitative studies where either teachers’ understanding of phonological awareness was tested or where students were tested before and after reading intervention took place. This research sets itself apart by telling the stories of teachers and their actions and beliefs as they apply to early elementary reading. It illustrates the challenges and successes that teachers face as they try to help their students learn to read. I plan to ensure these voices are now heard and valued as I disseminate the findings of my research.

The following sections of the literature review evolved from my extensive analysis of the research in the areas noted above. By starting with the four selected models of reading, I demonstrate the complexities involved in both reading itself, as well as reading instruction. Following this, I review some of the factors that affect children’s ability to read. Finally, I discuss how teachers are trained and educated to teach early reading.

## Models of Reading

### *Introduction*

To teach reading, it is important to know *how* individuals learn to read and to have a firm grasp of the structure of the spoken English language (Moats, 1994). Although reading appears to be a visually based learning activity, it is in fact, primarily oral language-based (Moats, 2020). The path to reading starts with the acquisition of speech (Seidenburg, 2018). Learning to speak is a natural process that occurs in almost all children starting at birth; reading, however, is not. While the brain is structured to process spoken language, no such mechanism exists for understanding the written word (Ehri, 1998; Rayner et al., 2001). Before children learn to read, it is important that they have strong receptive and expressive oral language skills. Children who enter school with less extensive language experiences and vocabulary, or with language impairments are at a greater risk of developing a reading disorder (Duff & Tomblin, 2018). Duff and Tomblin's study found a strong association between a student's word-reading ability in grade 4 and their rate of vocabulary growth. Research has shown that it is also necessary for students to acquire the *alphabetic principle* (the understanding that written letters are connected to sounds) before they can learn to read (Buckingham et al., 2019).

It is the understanding that written English is a code invented to record and communicate spoken English, and that the code is systematic and largely consistent. Hence, acquisition of the alphabetic principle is essential for learning to read and write.

(p. 50)

Researchers have described the reading process in a variety of ways over the years. As noted in the introduction, it has been studied through the lenses of education, psychology, and neuroscience, to name a few. It would be impossible to cover all of them here, so I have included four of the more commonly known explanations. These four reading development models include: The Four Resources Model, The Simple View of Reading, The Rope Model, and the National Reading Panel Report, which has served as a model of reading since its publication in 2000.

### ***The Four Resources Model***

Freebody and Luke (1990) introduced the four resources model more than 30 years ago as an approach to understanding the process involved in reading. They proposed that in order for a reader to be successful they needed to be able to successfully take on four roles (p. 8). The first was the role of code breaker. This meant they needed to be able to decode the written words. Second was the role of text participant which involved the reader asking themselves about the meaning of the text. The role of text user was third. This required the reader to be able to use texts in a functional way. Finally, the fourth role was that of the text analyst. This role was designed to explain how texts are not neutral and that they are created for specific purposes. These four roles, the authors felt, would allow the reader to be able to not only decode and comprehend written text, but also interact with it in a way that involved critical thinking.

The authors noted that this model was not designed to be used as a prescriptive program, but, rather, as a framework for balance in curriculum and instruction. “Simply, it would be impractical, boring, and counter-productive to just teach ‘critical pedagogy’ the entire

time; just as it would be absurd to teach phonics to the exclusion of other requisite competences and knowledges” (Luke, 2017, p. 2). As a former primary teacher, Luke knew that exemplary teachers understand how to adapt their instruction based on the developmental, cultural, and linguistic needs of their students. Working with Freebody, Luke developed what is known as the *Four Resources* model. They asserted that there should be four things happening during the reading process: decoding both texts and graphics, making meaning, using that meaning for some sort of purpose, and then critically analyzing those texts. Unfortunately, some misinterpreted their model to mean that instruction for students in the younger grades should centre on decoding, while those in the higher grades should focus their attention on critical analysis. Luke responded by stating that that was not the intent.

The argument that we made, which I think has been since demonstrated by people like Vivian Vasquez (2014) and Barbara Comber (2015) is that all four of these resources can be engaged in early childhood education, in the first three years of schooling. (p. 4)

Freebody and Luke’s model aligns with my view that all four of these resources can be implemented throughout the grade levels. I believe reading is a fluid process that involves moving back and forth within the four blocks. Teaching students to engage critically with text can happen as early as grade primary, while some students in high school may still require support with decoding.

### ***The Simple View of Reading***

The Simple View of Reading (SVR) was developed by Gough and Tunmer (1986). They used a formula (Decoding x Language Comprehension = Reading Comprehension) to convey their idea that reading comprehension requires two main cognitive abilities: *decoding* and



*language comprehension*. They described decoding as the ability to recognize words, quickly and accurately, in print; while language comprehension was defined as the ability to understand spoken language (Hoover & Tunmer, 2018). Once both abilities are established, the reader can extract and construct both the literal and inferential meaning of the text. The authors were careful to add that the act of reading was in no way “simple”, only that the division of parts was not complicated. “Both word recognition and language comprehension are highly complex, and because of that, reading is complex. The SVR simply separates the complexity of reading into two component parts” (p. 306). This interpretation of reading states that reading comprehension is dependent on a student’s decoding skills and language comprehension abilities. The SVR notes that difficulties in reading fall into three distinct categories: poor language comprehension, weak decoding skills, or a combination of both.

Despite its name, the SVR is a complex theory that involves a great deal of learning on the part of the teacher if they are to understand it fully. I find the separation of reading into two simple parts takes away from the complexity of the issue and does not consider all the social issues that also play a part in learning to read. That said, it is a theory that I have studied over the course of my research, and have found that it has relevance to my analysis of the data, and therefore to my findings. In terms of reading written texts, we know that decoding is necessary for comprehension and that the comprehension process cannot begin without decoding.

### ***The Rope Model of Skilled Reading***

The rope model of skilled reading was created by U.S. psychologist, Dr. Hollis Scarborough (2001) in the 1990s, to explain the complexities of the reading process to parents.

Using a diagram of two pieces of rope that begin separate and then become intertwined, Scarborough explains that the top fiber of the woven strands consists of the different parts of language comprehension, while the bottom includes the aspects of word recognition. The language comprehension piece consists of five parts: background knowledge, vocabulary, language structures, verbal reasoning and literal knowledge, while the word recognition strand is made up of three parts: phonological awareness, decoding and sight recognition. Once the strands of the rope have been woven together, and the student has developed mastery in these two areas, they can then be considered a skilled reader.

In an online interview (What I Should Have Learned in College, 2020), Scarborough described the reading rope as both a “lit review” and a “visual metaphor”. Her original intent was to create a handout that could be used to explain the reading process to anyone unfamiliar with the research.

Its best function in my eyes is as a basis for clear communication. It allowed my audiences and I to talk about a familiar concrete thing, a rope made of strands, as a metaphor for what research had been shown to be important for becoming a good reader. (What I Should Have Learned in College, 2020)

I appreciate that the visual simplicity of the reading rope model and a description of the braided strands work well when explaining the reading process to anyone unfamiliar with the concept. It contains components of the previous models and presents them in a way that is visual and easy to understand.

### ***Five Pillars of Reading – The Report of the National Reading Panel***

One of the most cited, and most controversial, studies intended to improve student reading was conducted in the United States (US). The National Reading Panel (NRP, 2000) published, *Teaching Children to Read – An Evidence-Based Assessment of the Scientific Research Literature on Reading and Its Implication for Reading Instruction*, which was designed to change the way reading was taught in the US. This study was extremely influential in the development of American education policy. It was used as a model for reading, requiring instruction in all five pillars to take place in the classroom. The report noted that a successful approach to reading instruction is one that incorporates explicit instruction in five areas: phonemic awareness, phonics, reading fluency, vocabulary and reading comprehension. Despite this, and the many other attempts to improve the reading levels of students in the US, such as the *Common Core State Standards Initiative* (2022); *No Child Left Behind Act* (H.R.1 - 107th Congress, 2001-2002); *Race to the Top* (U.S. Department of Education, 2009) results from tests such as the PISA and those from the National Council of Teacher Quality (NCTQ) show that overall literacy levels for children in the US have not increased since 2000 (O’Grady et al., 2018). The latest PISA results from 2018 placed the United States 13th out of 79 countries; by comparison, Canada ranked 4th.

The literature reviewed by the NRP was screened using rigorous evidence-based methodological standards that required the research evidence included in their report to be based on experimental and quasi-experimental study design (National Reading Panel, 1-1). That this process excluded a great deal of literature that did not meet this criterion has drawn considerable criticism since the report’s publishing in 2000. “Critics have argued that the

narrow definition of rigorous scientific research failed to recognize quality research of other designs, such as causal comparative, correlational, and qualitative (Pressley, 2001; as cited in Almasi et al., 2006, p. 38). The authors of the report noted that reading instruction has always been influenced by politics, economics, and the popular ideas of the day (National Reading Panel, p. 2-9). By focusing on the research, the authors say, they tried to avoid this pitfall. Unfortunately, when speaking about the NRP report, the media, governments, and, sometimes the researchers themselves, tended to misrepresent the results by overemphasizing the report's recommendations about the teaching of phonics and phonemic awareness. The actual recommendation of the panel was that effective decoding instruction should be a small part of every kindergarten and first grade reading lesson (Allington, 2013). "Results of the meta-analysis showed that teaching children to manipulate the sounds in language helps them learn to read" (NRP, p. 2-5). However, they were quick to point out that teachers need to view phonemic awareness as "a means rather than an end" (p. 2-6) to literacy development. Thinking about phonemic awareness as a vital, but singular, piece of the puzzle was emphasized in the report.

Although the meta-analysis confirms that these are key components that can contribute significantly to the effectiveness of beginning reading and spelling instruction, there is obviously much more that needs to be taught to children to enable them to acquire reading and writing competence. (p. 2-43)

The United States struggles with equity for students, which is known to be a relevant factor in academic success. In response to a drop in national test scores in reading for students in Grades 4 and 8, Peggy G. Carr, commissioner of the National Center for Education Statistics

(NCES) released a statement to address her concerns over the lack of improvement. “In fact, over the long term in reading, the lowest performing students—those readers who struggle the most—have made no progress from the first NAEP administration almost 30 years ago” (Barshay, 2019, para. 3). She added that scholars and policy makers have suggested different reasons for this, including an increase in child poverty in the United States and a drop in the funding for public schools based on the 2008 recession. As well, “despite the progress made toward racial desegregation in the 1970s and 1980s, schools remain highly segregated by race and income: Poor, black, and Hispanic children often attend different schools than wealthier, white, and Asian children” (Von Hippel et al., 2018, p. 325). Von Hippel et al. state that this leads to inequalities in schools and perpetuates the reproduction of class structure through the generations. Their study found that these inequities begin before students start school, suggesting that interventions need to start by supporting parents and families.

Despite the lack of improvement in US reading scores, the NRP’s report (2000) has been cited in academic texts and journals more than 24,000 times since it was published, according to Google Scholar. Timothy Shanahan, a prominent literacy educator, was a member of the NRP. In a 2017 article, he concluded that the report is as valid today as it was when it was first written. “The evidence supporting instruction in the five areas in which NRP concluded were beneficial continues to accumulate—meaning that the case is even stronger today supporting the need for those kinds of teaching” (para. 6).

The reading models referenced above are examples of how the teaching of reading has been approached in recent years. They are relevant to this dissertation as they demonstrate

our evolving understanding of the process of reading. This next section explains how different factors may affect a child's level of reading proficiency.

### **Factors that Affect Reading Proficiency**

The focus of this section is on three factors highlighted in the literature that have an impact on a child's ability to learn to read. These are obviously not the only factors that determine a child's ability to learn to read; however, they are important for teachers to understand if they are to help a child meet their potential in reading.

The first involves the child themselves. All children enter the classroom with their own set of strengths and challenges. Some of these are biological in nature, while others have developed within the socio-cultural environments in which they are raised. Children who have a specific learning disability (LD) in reading face a much different challenge learning to read than classmates without an LD. I have focused on this particular element as the literature indicates that teachers sometimes have a poor understanding of reading disabilities and therefore do not know how to teach students who have them (Moats, 1994, 1998, 2014, 2020; Wadlington & Wadlington, 2005).

The second factor discussed in this section describes how a child's homelife can affect their learning. Research has shown that students who live in poverty tend to score lower on standardized tests and are more likely to leave school before graduating from high school (Dolean, 2019; von Hippel, 2018). Since children are dependent on their parents, we know that a child's socio-economic status is determined by that of their parent or guardian (Buckingham et al., 2014).

Usually, socio-economic status is a composite variable or index of relative socio-economic advantage/disadvantage with three components – household income, parent occupation, and parent education, each of which has been found to correlate significantly with literacy. (p. 429)

The third factor involves the education system and its influence on a child's reading ability. Research has shown that teachers and schools have been highly influential in terms of reading proficiency (Whack, 2018). To help students become competent readers, it is important that a teacher be able to deliver research-based instruction in a culturally responsive way (Vaughn et al., 2020). It is essential that teachers feel confident in their ability to deliver early reading instruction, as studies have shown that teacher self-efficacy is highly influential to student success in reading (Hattie, 2009).

### ***Specific Learning Disability in Reading***

Reading disorders are identified when a student demonstrates difficulty learning to read (National Institute of Child Health and Human Development, 2020). According to Hoover and Gough (2009), there are three types of reading disorders. The first is *hyperlexia*, which involves the ability to decode quickly and accurately, but without comprehension. This type is rare amongst children with reading disorders. The second is what they refer to as "*true dyslexia*" or the inability to decode the written word, despite having an understanding of spoken language. The third type is what they refer to as "*garden-variety reading disorder*" which involves a student having difficulty both decoding written text and understanding spoken language (para. 5).

The American Academy of Pediatrics (2011) states that the most common specific learning disability is *dyslexia*. According to some studies, approximately, 5-10% (Rastegari & Shafer, 2016) of the world's population is thought to have dyslexia, although some organizations have put this number as high as 17% (University of Michigan, 2021) or 20% (Yale Centre for Dyslexia and Creativity, 2017). This wide discrepancy between differing organizations is partly due to how groups define the term, *dyslexia*.

The term, first coined by Rudolf Berlin in 1887 (Rudolf Berlin Centre, n.d), was described as “reading problems which were not the result of visual impairments” (para. 2). The word *dyslexia* is made up of two different parts: *dys* which means, not or difficult, and *lexia* which means words, reading, or language, which simply translates to difficulty with words (Hudson et al., 2007). In 1994, the International Dyslexia Association (IDA) created the *Definition Consensus Project* (International Dyslexia Association, 2021), where a panel of experts developed an agreed upon meaning of the term. *Dyslexia* is defined as difficulties with word recognition, spelling and decoding which are generally the result of a weakness in phonological awareness; it is unrelated to an individual's cognitive abilities or effective classroom instruction (International Dyslexia Association, 2021).

Although there are many research studies that discuss dyslexia within the context of public education (including many cited in this dissertation), the term is not often used in public-school settings. According to Williams and Lynch (2010) this is because “most states do not have programs specifically addressing dyslexia, and those that do may not provide additional funding for instruction” (p. 68). Instead, students are said to have a specific reading or learning disability. When discussing reading disabilities with parents and teachers, psychologists often



use the language given in the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-V) published in 2013. The DSM-V classifies dyslexia under the umbrella term of specific learning disorders, calling it an “alternative term used to refer to a pattern of learning difficulties characterized by problems with accurate or fluent word recognition, poor decoding, and poor spelling abilities” (American Psychiatric Association (APA), 2013a, p. 67). Despite the inclusion of the term *dyslexia*, the use of it is not recommended by the APA:

Just as in DSM-IV, dyslexia will be included in the descriptive text of specific learning disorders. The DSM-5 Neurodevelopmental Work Group concluded that the many definitions of dyslexia and dyscalculia meant those terms would not be useful as disorder names or in the diagnostic criteria (American Psychiatric Association, 2013b).

While respecting the recommendation of the APA, I have chosen to use it in parts of this dissertation when it is used in the literature cited.

While the exact causes of dyslexia are still unknown, researchers have studied the neurobiology of reading for more than a century and have discovered that when a person reads, they activate all four main lobes of the brain: the frontal, parietal, temporal, and occipital.

Neurobiological research has revealed patterns of coordination among these regions in good readers, demonstrated how the brain scans of students with dyslexia differ, and indicated how reading intervention can change the brain activation patterns of students with dyslexia. (Kearns et al., 2018, p. 179)

Advanced technology has allowed investigators to identify the parts of the brain that are activated by different phonological skills (Georgetown University Medical Center, 2003). In

children with developmental dyslexia, phonological skills are almost always a challenge. “This observation lends support to the theory that there may be several neurobiological profiles that correspond to different subtypes of dyslexia, each associated with varying deficits in one or more of these different phonological skills” (para. 4). As noted by Kearns et al., studies over the past 15 years have been able to prove, through neuroimaging, that there are distinct brain differences in people with dyslexia (Norton et al., 2014). Imaging studies have found that the brains of children with dyslexia develop and work differently than the brains of children who do not have dyslexia, due to alterations in the left hemisphere of the brain. Meta-analyses of primary studies identify “functional and structural [brain] differences between typical and dyslexic readers” (p. 74).

Neurobiologists, and others in the medical research community, have expressed concern at what they feel is a resistance from colleges and universities to teach reading according to the scientific knowledge they have accumulated about reading acquisition. This information, they say, would inform both the identification of children with dyslexia and help to develop early intervention strategies.

Although the Science of Reading provides considerable information with regard to the nature of dyslexia, its evaluation and remediation, there is a history of ignorance, complacency and resistance in colleges of education with regard to disseminating this critical information to pre-service teachers. (Hurford et al., 2016b, p. 1)

The disconnect between scientific researchers and schools of education has caused tension between the groups, with each declaring they have the best interests of students and teachers in mind (Bomer & Maloch, 2019; Seidenberg, 2017). Vaughn et al. (2020) address this tension

by suggesting that aligning the science of reading with adaptive teaching is the best way to help teachers become effective instructors of early reading. They recommend that these two groups work across “epistemologies and methodologies to investigate the nuances of these processes in real-world classrooms, particularly in ways that eliminate homogenizing literacy practices” (p. S299).

I believe this is one of the strongest and most positive recommendations I have read on this topic. The ability to translate research into practice is essential if we are to increase the number of students who can read by the end of the third grade. Some of the research (Ball & Blachman, 1991; Bell, 2013; Beverly et al., 2009; Blachman et al., 2013; Dev et al., 2002; Double et al., 2019) demonstrates that teaching reading systematically and explicitly, with a focus on phonemic and phonological awareness, helps students with a specific disability in reading learn to decode; however, as Castles et al. (2018) point out, this is not all there is to learning to read.

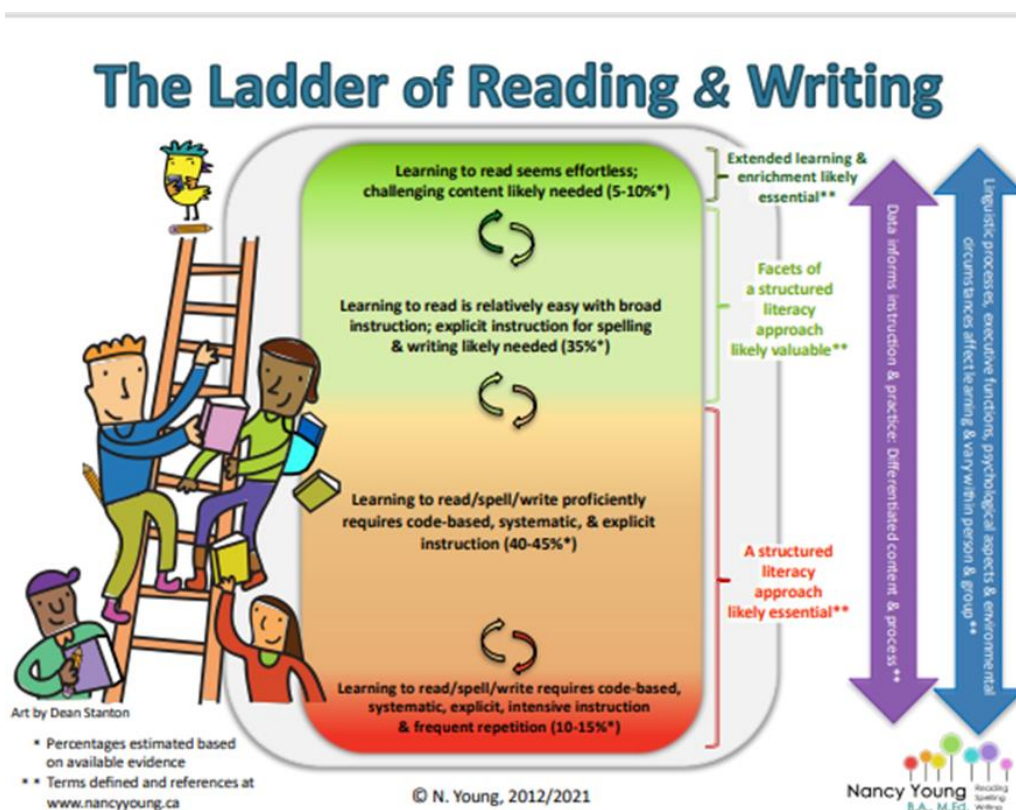
In our view, one of the impediments to the translation of research into teaching practice and to the resolution of the reading wars has been a relative lack of attention to aspects of reading acquisition that go beyond alphabetic decoding, which give rise to arguments that “reading is more than phonics”. (p. 16)

It is important to acknowledge that teaching children how to decode, while vitally important to their success with reading, is only a piece of the process (Castles et al., 2018). Ensuring that students also develop fluency and vocabulary is essential for comprehension to occur (National Reading Panel, 2000) so that students are able to analyze the purpose and intent of the text (Freebody & Luke, 1990). Although most children will benefit from a structured literacy approach to reading, for some it is necessary to be taught explicitly how to decode.

Young (2020) created the Ladder of Reading and Writing (Figure 4 below) to demonstrate the percentage of students for whom this approach is required, beneficial, or not necessary. She also points out that approximately 10-15 % of children will require intensive instruction that may not be achievable in the classroom.

**Figure 4**

***The Ladder of Reading and Writing***



*Note.* From "Ladder of Reading and Writing", N. Young (2021).

<https://www.nancyyoung.ca/research-and-links>. Reprinted with permission.

As Young states in Figure 4 above, a structured literacy approach to reading is essential or beneficial to almost all students; however, as the Ontario Human Rights Commission (OHRC,

2022b) discovered, it has been an “ongoing struggle for Ontario students to receive evidence-based instruction in these foundational [early word-reading] skills” (p. 8). In 2019, the Right to Read Inquiry was launched over concerns that Ontario schools were not meeting the needs of students with reading disabilities. The OHRC requested feedback from parents, students and educators across the province in order to make recommendations based on this response.

When the OHRC (2022a) released its report on the findings on Feb 28, 2022, the inquiry found that Ontario’s public education system had “failed” not only students with reading disabilities, but also students from disadvantaged groups, because they had not been using an evidence-based approach to reading (Ontario Human Rights Commission, 2022b). The report states,

For most students, but particularly vulnerable students, reading outcomes depend on the quality of reading instruction they receive. Nearly all students can learn to read words proficiently with science-based systematic and explicit instruction in foundational reading skills. Identifying and intervening early with the small number of students who may still struggle to learn to read words well, sets them up for future success in school, work and life. (OHRC, 2022c, p. 10)

In their report, the OHRC (2022c) called upon the provincial government, school boards, and faculties of education to work together to implement all 157 recommendations, noting that a collaborative approach will be necessary to ensure every student’s right to read is met.

### ***Socio-Economic Factors***

We know that social inequalities exist in the way schools are structured (Beswick & Sloat, 2006; Dolean et al., 2019; Foorman et al., 2005). Students from communities that are

marginalized must traverse environments that may be culturally, linguistically and academically different from their own (Grave, 2011). In Nova Scotia, differentiated data demonstrates that Indigenous students and those of African-Descent consistently score significantly lower on standardized tests of reading than their classmates (Nova Scotia Department of Education and Early Childhood Development, n.d.a; Nova Scotia Department of Education and Early Childhood Development, n.d.b). We know that standardized tests are often culturally and socially constructed and that marginalized groups are generally underrepresented (Arbuthnot, 2009; Graves, 2011). This is particularly true when it comes to tests of a student's "literacy." As Kearns (2011), contends,

High-stakes standardized literacy testing is not neutral and continues to build upon the legacy of dominant power relations in the state in its ability to sort, select and rank students and ultimately produce and name some youth as illiterate in contrast to an ideal white, male, literate citizen. (p. 121)

Despite this understanding, students who score lower on standardized tests continue to be the ones who are predominately referred for special education services and disproportionately placed on individual program plans (Government of Nova Scotia, 2016; Patil, 2016).

Family income levels play a significant role, as well, in student achievement (Kearns, 2011; Roos et al., 2006). In a longitudinal study of students from Manitoba, Roos et.al found that a child's socio-economic status was strongly correlated with their ability to meet the outcomes on standardized provincial assessments in language arts. Roos et al. followed Manitoba children born in 1984 through to their high school graduation to measure their academic achievement. The researchers studied the effects of key socio-economic risk factors

on a child's academic success, such as social assistance, neighbourhood prosperity, and the age of a child's mother when they were born.

In 2002, when these children were ready to graduate from high school, the authors studied what percentage had passed the provincial assessments in language arts and then disaggregated the results based on the three socio-economic indicators noted above. While nine percent of students from the original 1984 graduating cohort were from families who received social assistance, only 2.2% of all students who wrote the provincial assessments fell into this category. Compared to a pass rate on the exam of 80% for the overall student group, only 12% of youth in families receiving social assistance passed this exam (p. 684). The authors of this research state that while we may assume students from lower socio-economic status situations score lower on standardized tests than their peers from middle and higher income families, the results of their research confirm this condition. "The role of research is to attach numbers to the obvious, to make it undeniable" (p. 698). They suggest that, to change the trajectory of the lives of these students for the better, governments need to offer early childhood development programs, qualified teachers, and opportunities for parents to improve their socio-economic standing through increased educational attainment.

While students and families play a significant role in a child's ability to learn to read before the end of grade 3, the role of the school and the teacher can change the trajectory of a child's reading journey (Hattie, 2022; Visible Learning, 2022).

### ***Teachers' Levels of Self-Efficacy in Early Reading Instruction***

Ensuring that teachers feel confident in their ability to teach young students how to read, in particular, those who struggle, is an important aspect of teacher education. The

literature suggests that when teachers know more about the nature and characteristics of specific reading disorders, their levels of self-efficacy improve when it comes to teaching reading to students with the disorder (Martinussen et al., 2015) and they are more likely to use strategies and instructional methods that support these students. Pre-service teachers who receive relatively high levels of reading-related preparation in phonological awareness and phonics also perceive themselves as being more knowledgeable than those who do not (Spear-Swerling et al., 2005). It should be noted that high levels of perceived ability and knowledge do not always translate to actual high levels of competency. In fact, some studies have shown that pre-service teachers overestimate their knowledge and ability at the start of their degree program, only to have that confidence slide as they gain more classroom experience and education (Ciampa & Gallagher, 2018). According to Bostock and Boon (as cited by Ciampa & Gallagher, 2018) this may be because, as teachers start their practicums, they begin to understand the complexities of teaching and realize how much more there is to learn. In Canada, statistics show, for instance, that approximately 40% of new teachers in Alberta leave the profession within their first 5 years (Clandinin et al., 2015). The authors identified 4 main themes around why new teachers leave. These included: burnout, a lack of resilience, demographic features, and family characteristics. Helping new teachers remain confident in their abilities is an important factor in ensuring they stay in the profession. Research shows that while there are many reasons teachers may decide to leave the profession, those teachers who feel successful with their students and supported by their school communities tend to continue teaching (Johnson & Birkeland, 2003). For teachers to feel successful teaching reading, they



require pre-service teacher education that provides them with the most up-to-date information on what to teach and how to teach it.

## **Teacher Education**

In this section of the dissertation, I discuss how formal teacher education has grown and evolved in Canada since its inception. This section is significant in terms of setting the context for the contributions of the participants in this study. Teacher education has gone through many changes over the years and, since education is a field where one is always learning, it will most likely continue to evolve moving forward.

Today, while there are still concurrent teacher education programs in Canada enabling students to take a combined BEd along with a second degree, most new teachers graduate with a consecutive education degree that requires students to have an undergraduate degree before they are accepted into a teacher education program. The purpose of teacher education continues to change and grow to meet on-going societal changes.

Those involved in teacher education should remember that shifts, in fact, are not a problem and are instead indicative of how education, as a living practice, is alert to the issues of what is called for in initial teacher education. (Friesen, 2018, para. 8)

Contemporary teacher education is designed to meet the needs of our current social, economic, and educational systems; since, as these continually evolve, so too do the goals and expectations of teacher education programs.

Educational psychologist Lee Shulman (1987) was one of the first to study modern teacher education. He attempted to condense, categorize, and explain the vast knowledge base that teachers need to know. He stated that while it was a wonder that the “extensive

knowledge of teaching can be learned at all during the brief period allotted to teacher preparation” (p. 7), he believed that teachers should understand the specific needs of their students to best instruct them.

The key to distinguishing the knowledge base of teaching lies at the intersection of content and pedagogy, in the capacity of a teacher to transform the content knowledge he or she possesses into forms that are pedagogically powerful and yet adaptive to the variations in ability and background presented by the students. (p. 15)

Over the last 60 years, the population of Canada has become progressively more diverse (Evans, 2020), which means classroom teachers need to have a broader knowledge base, as well as a variety of culturally relevant pedagogical strategies. This theory is at the crux of adaptive teaching, which encourages teachers and researchers to acknowledge the necessity of situating their teaching practice within the socio-cultural backgrounds of their students and the communities in which they teach (Vaughn et al., 2020).

Schools contain students with a broad range of abilities, from different backgrounds and ethnicities, with emotional and social differences, and with widely varied approaches to learning, home lives, and out-of-school experiences. Canada’s teachers must be equipped to prepare all students for their roles in this diverse world. (Association of Canadian Deans of Education, 2018, p. 1)

Teacher education in reading often falls under the umbrella of literacy education, where a comprehensive approach to the many different aspects of literacy is considered important (Kosnick et al., 2017). Despite this desire for cohesiveness, policy makers sometimes attempt to exert their influence over the universities and colleges tasked with this education.

Teacher educators often feel pressure to focus on the individual elements of literacy because of government expectations (Brass, 2015; Marshall, 2016) leading to a fragmented approach. As a result, student teachers do not acquire an understanding of the 'big picture of literacy.' (p. 61)

Teacher educators in both Canada and the United States are facing increased pressure to narrow the curriculum and focus more on phonological awareness and phonics, as a means of improving student performance on standardized tests (Kosnick et al., 2017). This pressure also comes from parent and advocacy groups looking for ways to help children who continue to have difficulty acquiring basic literacy skills (International Dyslexia Association Ontario, 2020). In the US, some states, such as Delaware, have changed state law so that the science of reading is included in their education plan (Samuels, 2021). This plan includes professional development for teachers and improving new teacher education to include the science of reading (para. 5).

According to research (Binks-Cantrell et al., 2012; Joshi et al., 2002, 2009a, 2009b; Washburn et al., 2011, 2016, 2017), some university faculties of teacher education have neglected to include the science of reading in their program, thus graduating teachers who are unable to teach reading using a structured literacy approach. These teachers then enter the profession without valuable knowledge and instructional tools that would assist them in their early reading instruction. As we will see later in the Findings, this often leads to teachers becoming frustrated when they realize they do not know how to help their struggling readers.

Understanding teacher knowledge and perceptions about teaching reading in early elementary is important if we are to give teachers the tools they need to help all students. Although it may appear obvious, the literature shows that teachers need to *teach* reading, as

few students learn to read on their own (Rayner et al., 2001; Rupley et al., 2009; Young, 2020).

The most successful teachers are flexible in their teaching so they can provide explicit instruction to those students having difficulty learning to read. Some of the research demonstrates, however, that not all teachers have the knowledge of basic language constructs, such as phonological and phonemic awareness, the alphabetic principle/phonics and morphology, necessary to help those students who struggle to read (Adoniou, 2014; Bos et al., 2001; Bratsch-Hines, 2017; Moats, 1994, 1998, 2014, 2020; Wadlington & Wadlington, 2005).

Part of the issue arises from the opposition in some educational circles to engage in the “training” rather than “education” of pre-service teachers (Ball & Forenza, 2009). The Oxford Dictionary (n.d.) defines training as “the process of learning the skills that you need to do a job” and education as “a process of teaching, training and learning, especially in schools, colleges or universities, to improve knowledge and develop skills”. Although the differences are subtle, the two terms are often viewed differently. “Today, the word training is in disfavor because it seems to connote mindless and atomized repetition and, hence, to ‘deskill’ the professional work of teaching” (Ball & Forenza, 2009, p. 498). The authors point out that, like the medical training of doctors, teacher training is an appropriate term, as it refers to the highly skilled nature of the profession. These philosophical differences are often polarizing. According to some, teacher educators tend to focus more on literacy practice, not reading, while scientists, such as neurologists, tend to look at the specific steps involved in the reading process (Seidenberg, 2017). Kosnick et al. (2017) note the importance of unity among the many different elements involved in literacy education. “This may lead to student teachers appreciating the big picture of literacy and the importance of developing a vision where their

pedagogical choices are consistent, logical and support each other” (p. 60). Research has shown, however, that education students often lament that their programs are too focused on theory and “big picture ideas” and not enough on practical strategies and knowledge that they could use once they have graduated (Banbridge & Macy, 2008; Kosnick & Beck, 2008; Loudon & Rohl, 2006). In one study (Martinussen et al., 2015), pre-service teachers made significant gains in their levels of self-efficacy in early reading instruction after listening to a lecture on instructional practices they could use to support phonemic awareness in children. Anecdotally, I have found this to be true of the students I teach in the undergraduate education program as well. Before the term begins, they express concern that they don’t know where to start when it comes to teaching children how to read. By the end of the term, after many lectures, activities and assignments dealing with specific reading instruction, they often profess that they are feeling much more confident in their abilities; however, they are also quick to acknowledge that they are just starting their learning journey and that they expect to grow and change throughout their careers. Graduation from a teacher education program does not signify the end of teacher learning, but, rather, the beginning of a lifelong journey to become well-informed members of the educational community (Association of Canadian Deans of Education, 2018; Bainbridge & Macy, 2008).

Education is not only about children and teachers; when you add in government and business interests, you have a wide range of groups that want a voice in the decision-making around what is taught and how it is taught. “Like health care, education is a multi-billion-dollar industry involving multiple stakeholders – government, business, educators, parents, children, taxpayers, unions, interest groups, philanthropy – whose perspectives and interests often

conflict” (Seidenburg, p. 11). Governments want to be re-elected, parents want what is best for their children, and unions want to support their membership. With all these groups and individuals vying for attention, it is no wonder there is little consensus on how to move forward.

Due to their strong results on standardized reading tests, such as the PISA, Finland has often been recognized as a country to emulate in terms of reading education. Research from this country (Lerkkanen et al., 2004) examined early reading through a wider lens, considering early exposure to books and reading as a factor in the development of phonological awareness and phonemic development. Lerkkanen et al. contend that early reading practices influence a child’s sensitivity to phonemic awareness and the general sounds of words. In Finnish schools, along with consistent exposure to books, children are taught phonics, together with letter recognition and decoding, at the beginning of all instruction in reading.

The results revealed that there is a bi-directional relationship between phonemic awareness and reading performance: reading skills predicted phonemic awareness at the beginning of school, whereas phonemic awareness predicted reading at the end of the first school year. This result suggests that phonics provide a basis for reading performance even when children have mastered basic word reading by and large. (p. 149)

Lerkkanen et al. demonstrated that even if children learned to read words quickly at the beginning of their first year in school, the teaching of phonemic awareness still supported the development of more advanced reading ability.

Finland has a mostly homogenous population with most residents identifying as ethnic Finnish; Canada, by comparison, is considered to be ethnically diverse (World Population Review, 2022). While Finland has a much different population base than that of Canada and is much smaller (5.5 million compared to 38 million), the two countries still have much in common. In terms of socioeconomic factors, the “average household net-adjusted disposable income per capita” is approximately \$30,000 USD and both have wide disparities between the very rich and the very poor (The Organisation for Economic Co-operation and Development (OECD, n.d.a) It is interesting to note that while Finland is often regarded in Canada as the gold standard in reading achievement, the results of the latest PISA (2018) assessment show Canada and Finland with exactly the same score. Additionally, Canada scored well in terms of equitable education.

In fact, in Australia, Canada, Estonia, Ireland and the United Kingdom, all of which scored above the OECD average, more than 13% of disadvantaged students were academically resilient....Factors that PISA shows to be positively associated with academic resilience include support from parents, a positive school climate and having a growth mindset. (p. 10)

While the research from Finland notes that early reading practices and phonological awareness are important and work together in early reading development, in terms of the teaching of phonemic awareness, reports from the governments of the United States, the United Kingdom, and Australia also recommend that this be started as soon as students enter school (Government of the United Kingdom Department of Education, 2020; National Reading Panel, 2000; New South Wales Centre for Education Statistics and Evaluation, 2018). Despite

the uneven success of this recommendation in these countries, this recommendation does have support from a wide body of research. Phonemic awareness is therefore important for pre-service and practicing teachers to understand (National Reading Panel, 2000).

Knowing how to read, and knowing how to teach someone to read, especially someone with a reading-based learning disorder, are vastly different things. Before you can teach a student phonemic awareness, you need to understand it yourself. Studies have shown that teachers who receive explicit instruction in phonemic awareness in their teacher education programs make significant gains in their foundational knowledge of language constructs (Martinussen et al., 2015). Through surveys and questionnaires, pre-service teachers have indicated a strong desire to have more practical ideas and strategies and less theory in their education programs (Brown et al., 2021; Louden & Rohl, 2006). As well, pre-service teachers consistently scored poorly when answering questions about their understanding of dyslexia, or specific learning disorders in reading, and their knowledge of phonemic awareness (Hurford et al., 2016a; Washburn et al., 2011). University faculty members in education generally scored better than students (Waddlington & Waddlington, 2005), but many still held common misconceptions. An understanding of reading disorders is important for teachers, as we know that every teacher will most likely encounter at least one student in their career with a reading-based learning disability, as well as many others in need of additional support (Ontario Human Rights Commission, n.d.). An understanding of reading-based learning disorders is important for teachers so they can adapt their teaching methods to meet these needs.

In response to concerns raised about the lack of education and training of pre-service teachers in phonological awareness, some teacher educators have expressed that this latest



round of criticism is merely another in a series of unwarranted recurring attacks on their selection of textbooks and teaching focus. Bomer and Maloch (2019), Dean, College of Education at The University of North Texas and Senior Associate Dean, College of Education at The University of Texas at Austin, respectfully, addressed some of the external critiques faculties of education are facing.

As we write this, we find ourselves in a moment that seems to be cyclical - facing another round of criticism from individuals outside teacher education for the way new teachers are prepared to teach reading. The content of these critiques has been familiar for decades: that universities fail to instruct new teachers in the true science of reading, which focuses mostly on the relationships of phonemes to graphemes. (p. 262)

These literacy educators argue that the critiques are based on anecdotal evidence by people with something to gain, i.e., those who can sell instructional materials they say universities are not providing. Wetzell et al. (2020) assert that blaming teachers and teacher educators just pulls attention away from where it should be.

The targeting of teachers and teacher educators by policy makers and popular media writers pulls attention from the overwhelming influence of racist and other oppressive practices in schools and society that greatly constrain generative opportunities for teaching and learning to read, particularly for learners from marginalized communities. (p. S319)

Moats (2020) has recommended policy changes to teacher education to improve teacher preparedness in this area since the 1990s. She contends that many schools of education still fail to teach foundational reading skills, according to the research on the science

of reading, at the level necessary for teachers to implement it properly in the classroom. Moats, a strong advocate for children with dyslexia, is adamant that teachers need to be extensively trained in phonological awareness. “Lower level language mastery is as essential for the literacy teacher as anatomy is for the physician. It is our obligation to enable teachers to acquire it” (Moats, 1994, p. 399).

A study of the literature surrounding the preparedness of teachers to teach reading (Hikida et al., 2019) suggests that drastic reforms are not necessary, but “what seems clear is that preservice teachers benefit from instruction about reading processes and opportunities to practice teaching in tutorial and classroom contexts” (p. 190). The authors note that they find it ironic that reports (Hanford, 2018) proclaiming that reform is necessary based on the science do not actually have a strong research base. Still, they do not dismiss these concerns and recommendations out of hand; instead, they state that they should encourage teacher educators to structure their courses in a reflective manner.

Formal teacher education has undergone many iterations and changes since its inception and has faced both praise and criticism along the way. Currently, the institutions responsible for teaching the teachers are facing questions from individuals and groups concerned about children who have difficulty learning to read. Bos et al. (2001), in their study of pre-service and in-service teachers, concluded that schools of education need to offer training and education in these areas.

Given the accumulated knowledge with regard to the importance of teaching phonological awareness, and providing phonics instruction to children with dyslexia and struggling readers, teacher preparation programs should ensure that teachers possess

the foundational knowledge necessary for providing early systematic reading instruction. (p. 117)

Teaching is a demanding career. Ensuring that new teachers enter the school system with a strong foundation in early reading skills is one possible way to increase teacher self-efficacy and avoid high rates of attrition with new teachers.

## **Conclusion**

This review of the literature examined four models of reading development and three factors that affect reading proficiency, and has provided an overview of teacher education in early reading instruction. There are many influences that affect a child's ability to learn how to read. Students who have a specific learning disability in reading have additional obstacles to overcome and often require more intensive and explicit forms of instruction. The responsibility for supporting a child through the reading process is dependent upon schools, families, and societies working together to ensure equity and education for all students. No one group or individual can be held solely responsible. It will take all parties involved working together to help more children learn to read, allowing them the opportunity to achieve success in both school and life.

## **Review of Nova Scotia Curriculum Documents**

### **Introduction**

This review of three Nova Scotia Elementary English Language Arts curriculum documents is designed to provide instructional context for this study of educators and their early reading instruction. The participants teach in three of the Atlantic Provinces – six from Nova Scotia, 3 from Prince Edward Island and 3 from Newfoundland and Labrador. Although

the focus of this review is only on the Nova Scotia curriculum documents, it is important to note that all of the Atlantic provinces use the same framework for their Elementary English Language Arts curriculum. This framework, *Foundation for the Atlantic Canada English Language Arts Curriculum* (1996), was developed by the Atlantic Provinces Education Foundation and continues to inform the curriculum developed by each province. Over the past 36 years, while each province has made numerous changes to their curriculum, they have all continued to use this outcomes-based framework as a guide and the vision, as stated here, has remained the same. “The Atlantic Canada English language arts curriculum is shaped by a vision of enabling and encouraging students to become reflective, articulate, literate individuals who use language successfully for learning and communicating in personal and public contexts” (p. v). Since all three provincial English Elementary Language Arts (EELA) curriculums represented by the participants are built on a similar framework, and since the study involves students taking a Masters course at a Nova Scotia university, the decision was made to use the Nova Scotia documents as a reference.

In Atlantic Canada, reading proficiency is conceptualized using the notion of a continuum; that is, students may be at different points on a scale, moving toward proficiency, but these are not necessarily linear or tightly linked to a specific timeline. This perspective is reflected in the most recent Nova Scotia Department of Education and Early Childhood Development (NS EECD) Elementary English Language Arts (ELA) curriculum documents: *English Language Arts P-6: At a Glance Documents* (NS EECD, 2019), the companion document, *Using the Developmental Reading Continuum P-3 in a Balanced Literacy Program* (NS EECD, 2021) and

*Phonological Awareness and Phonics Instruction in a Balanced Literacy Program* (NS EECD, 2020).

### **English Language Arts P-6 Curriculum Documents At a Glance**

The updated NS English Language Arts P-6 curriculum (NS EECD, 2019) is divided by grade starting with grade Primary and ending with grade 6. The document divides the curriculum into three language and literacy-based skills: Listening and Speaking, Reading and Viewing, and Writing and Representing. These three areas also correspond with the province's report cards, which require teachers to either comment on the student's ability to meet the grade level outcomes (grades P-3) or comment on the same, as well as assign a letter grade (grades 4-6) for each area of study.

The curriculum then divides each of the three sections into four areas for teachers to use when structuring their lessons. As seen below, the curriculum states that teachers are to start with the rationale for why the lesson is being taught and concludes with suggestions for instruction.

1. Rationale
2. Competencies
3. Indicators
4. Concepts and Guiding Questions

The document is planned and organized well, and is highly reader-friendly. The Indicators section is the focal part of the curriculum and gives teachers guidance on the general and specific outcomes, by grade, in Speaking and Listening, Reading and Representing, and Writing

and Other Ways of representing. Each grade level document also includes information on assessments.

The one area of concern I have with this document is that the reading outcomes are separated by grade, so it is difficult to see how the word work (ie. phonological awareness and phonics) outcomes flow from one grade level to the next. To demonstrate this progression, I created an additional document (see Appendix C), which can be used by teacher educators when explaining Word Work to preservice and in-service teachers. It reorganizes the *Phonological Awareness and Phonics Instruction in a Balanced Literacy Program* (NS EECD, 2020) document so that teachers can see the changes in outcomes, such as phonological awareness and spelling, from one grade to the next.

The Reading Continuum (NS EECD, 2021) provides an overview of what students will typically have learned in the previous grade and what the learning goals, and indicators of those goals, are in the current grade, as well as those to come. It's important to note, however, that teachers will have students at differing levels of the continuum in a single grade classroom, based on varying levels of ability. As a teacher-friend of mine said one day, "Every class is a blended class." Having used previous curriculum documents over the years, this is one of the better iterations, as it is important for curriculum writers to remember that teachers, like their students, enter the classroom with a range of experiences and education. Making the documents clear and detailed provides teachers the information they need to help students.

The guide is divided into the following developmental stages of early reading: emergent (grade primary), early (grades 1-2), transitional (grade 3) and fluent (grades 4-6). Within each section are the areas that will be taught at each stage:

- Selecting text
- Concepts of Print
- Strategic processing of text
  - searching for and using information to make meaning
  - monitoring and self-correcting
  - solving words and vocabulary development
  - maintaining fluency
  - adjusting
- Responding to Text
  - Summarizing
  - Predicting
  - Making connections
  - Synthesizing
  - Inferring
  - Analyzing
  - Critiquing

Under the heading, *Sources of Information*, the document also includes a reference to the *MSV* (meaning, structure, and visual) approach, more popularly known as the three-cueing system of assessment of individual readers. Teachers in Nova Scotia are advised in the curriculum documents (Government of Nova Scotia, 2012; Nova Scotia Department of Early Childhood and Education, 2021) to use the MSV approach as a strategic way to assess students' reading at all stages of reading development. These documents recommend that it is to be used when

recording and analyzing running records and when working with students who demonstrate difficulty with decoding. Teachers are advised to ask students to use multiple strategies to decode an unknown word, such as looking at the picture, skipping the word and going back to it later once context has been established, and sounding it out.

Under the category of *Strategic Processing of Text*, the NS DCEE advises teachers to encourage students to:

Search using all sources of information (MSV) - meaning (personal experiences, context, picture clues) - structure: knowledge of oral language and book patterns (syntax) - visual: sound-symbol relationships (initial consonants, final consonants, medial letters).  
(Nova Scotia Department of Education and Early Child Development, 2020, p. 3)

Contrary to the Nova Scotia stance, the New Brunswick Department of Education and Early Childhood Development (NB EECD, 2021a) has recently objected to the use of the cueing approach in new curriculum documents for its teachers. They cite Burkins and Yates (2021) and Hempenstall (2003) when arguing that this approach is “not supported by compelling or promising research and runs counter to research supported theory that describes how children learn to read” (p. 6). Based on the research and my practical experience teaching early reading, I agree with the position taken by the NB EECD. I do not believe the MSV approach has any legitimacy in its current form as I have watched too many students “pretend” to read by using the three-cueing approach. The validity of this method, although widely used, has been criticized based on a wide body of research on how strong readers decode written material (Adams, 1998; International Dyslexia Association Ontario, 2020; Seidenburg, 2016). Davis et al.



(2021) raised the question of whether this model should be discontinued; their answer was “probably”.

It is now well established in the literature that reliance on contextual information to predict unknown words is characteristic of readers who are early in their development and is not desirable for proficient reading (Ehri, 2017; Foorman et al., 2016; Pressley & Allington, 2014; Stanovich, 2000). (p. 303)

Calkins (2020) recently released a public response statement acknowledging that, while her organization, The Teachers College Reading and Writing Project, only recently introduced a phonics component to their reading program, they have always advocated that schools needed to use a “research-based, systematic approach to teaching phonics” (p. 2). She has since continued to revise her stance on best practices in early reading instruction through online posts and statements. Hanford (2020) states that this move towards a more science-based approach to reading by someone as influential as Calkins could mean a significant change to reading instruction.

Burkins and Yeats (2021) have attempted to reinvent the three-cueing system by suggesting teachers start with the visual (orthographic processing system) and then check for accuracy by using the other two cues. This, they say, aligns the three-cueing system better with the science, in particular, the Simple View of Reading. “By reorganizing our prompting priorities to elevate the use of visual information, we situate meaning and structure to better support making the leap to the correct word, cross-checking for accuracy, and sense making” (p. 118).

As noted earlier, the NS language arts curriculum also contains information for teachers on what is to be taught with regards to phonics and phonological awareness. The section on

*Concepts of Print* discusses print awareness and letter-sound relationships, while the section titled *Solving Words*, specifically states that teachers should be teaching consonants, vowels, blends, and digraphs, as well as syllabication, onset and rime, and segmenting and blending.

### **Phonological Awareness and Phonics Instruction in a Balanced Literacy Program**

The *Phonological Awareness and Phonics Instruction in a Balanced Literacy Program* (NS EECD, 2020) document offers teachers a structured timeline of when, and in what order, to introduce different aspects of phonological awareness and phonics instruction. The authors of this document describe why this area of instruction has been targeted and developed into curriculum guidelines for teachers. “Purposeful and frequent instruction in phonological awareness and phonics, with support to transfer these skills to connected text, will contribute to reading comprehension, reading fluency, vocabulary development, and the enjoyment of reading” (p. 1). A spokesperson for the NS EECD confirmed that although this document has been published and distributed to teachers, there has not yet been any professional development on how to implement it (Noddin Bona, M., personal communication, October 28, 2021). Professional learning in phonological awareness and phonics instruction may be needed, as shown by the literature, as some teachers may not have a strong foundation in these areas (Al Otabi et al., 2016; Meeks et al., 2016; Moats, 2014). While this document could prove helpful to teachers who are already familiar with teaching phonological awareness and phonics, it may prove frustrating for those who have little background or training in this area. By comparison, the Department of Education and Early Childhood Development in New Brunswick (2021b) has recognized this need for further teacher education in what they have named, *Building Blocks of Reading*.

These five blocks include:

1. phonological awareness skills/knowledge
2. phonics skills/knowledge
3. fluency skills/knowledge
4. vocabulary skills/knowledge
5. comprehension skills/knowledge

The NB EECD has developed detailed online teaching modules for teachers for each of the five components and paid professional development days have been set aside to aid with this learning process. They have also provided their teaching staff with an easy-to-read document that outlines the research behind their decision to develop and implement this new early reading instruction method.

### **Impact of the Pandemic**

The pandemic has increased stress levels across the world in all professions and teachers are not immune (Santomauro et al., 2021). Evidence shows that, even before the pandemic, teachers reported high levels of stress in their jobs (Lopez & Sidhu, 2013). Data from the Lopez and Sidhu study found that, alongside nurses and doctors, teachers had the highest levels of stress of all occupations surveyed. In a survey done by the Canadian Federation of Teachers (CFT, 2020a), three-quarters of teachers reported that they were worried about the mental health of their students (2020a). In another survey done by the CFT (2020b), more than 46% of teachers reported that they were concerned about their own well-being and mental health, noting that they are struggling to cope with the demands of the job.

Teachers across Canada are sharing similar concerns of being overwhelmed, stressed, and exhausted, uncertain if they can sustain the pace and complexity of teaching in the current pandemic environment. These feelings have led many teachers to question how long they are able to continue, despite their love for education, and desire to support young people in publicly funded public education. (p. 1)

I also believe it cannot be overlooked that the teaching profession is pre-dominantly female, with women making up 84% of the elementary school teaching positions in Canada in 2016 (Statistics Canada, 2018). Teaching has been described as a *feminized* profession, with the term, feminization, “often used to express that a feminized profession is slightly inferior, less serious, or less weighted” (Schmude & Jackisch, 2019). This stereotype can have serious effects on the teaching profession.

This cultural disregard for teaching has a gendered consequence: The status of a given career tends to correlate with the share of men in that profession—higher status equals more men, generally speaking. And that has its own consequence: Research has found that employers place less value on work done by women than on that done by men. These trends reinforce each other in perpetuity. (Wong, 2019, para. 7)

The pandemic has put added stress on teachers and this needs to be taken into account when governments consider professional development in early reading instruction in the coming year(s).

## **Conclusion**

The NS EECD introduced new documents in 2019, 2020 and 2021 to provide more specific direction for teachers involving the instruction of phonological awareness and phonics

in a “balanced literacy program” (NS EECD, 2021). The documents reflect the government’s position that, in grades P-3 in particular, the teaching of these concepts needs to involve direct, explicit instruction (NS EECD, 2020). While these documents illustrate a positive move towards a more detailed framework for the teaching of phonological awareness and phonics, Nova Scotia teachers will need professional learning opportunities in this area. Since research demonstrates that some teachers do not have the background knowledge or training necessary to teach these concepts effectively, teachers unfamiliar with these concepts will have to learn this information independently. If they are unable or unwilling to do so, these curriculum directives will not make it into the classroom. It is clear from the research that the middle of a pandemic is not the time to ask teachers to do more work outside their regular school day. It stands to reason that the implementation of the new NS EECD documents on phonological awareness and phonics need to include training and resources for teachers if student needs are to be addressed in a comprehensive way.

## **Methodology**

### **Introduction**

This research is situated within the constructivist paradigm. I understand constructivism as both a learning theory and a pedagogical approach (Neutzling et al., 2019). Although a large body of research indicates that explicit teaching is a necessary component of early literacy learning for most children, I believe it is still possible to teach in a way that allows students to be participants in the process, learning from the teacher and their peers through on-going interaction.

The information that has been gained from the focus groups and interviews in this study has been used to co-construct meaning. The stories of individual teachers have been analyzed and the findings have been considered alongside the research that has been done in this area, as well as the background and epistemology that I, as the researcher, bring to this investigation.

This section of the dissertation starts with a description of the chosen methodology, constructivist grounded theory. This is followed by an overview of how the research questions were developed and the data was collected. Following this, I include an explanation of how initial and focused coding, necessary steps in the CGT process, were conducted following the model set forth by Charmez (2006, 2012) using the data collected. Memoing, theoretical sampling, drafting, and constructive critiquing are also briefly reviewed. Finally, I outline how the rights of the participants have been protected through the ethics review process.

### **Constructivist Grounded Theory as Method and Methodology**

Constructivist grounded theory is a popular method of research and is often used in the areas of education, psychology and nursing (Mills et al., 2006). Kathy Charmaz, a sociologist, writer and researcher at Sonoma State University, developed constructivist ground theory after studying under, and working with, Barney Glaser and Anslem Strauss. Grounded theory (GT) originally emerged from their research in the 1960s. Glaser and Strauss (1965) collaborated on a study of how hospitals dealt with people who were dying. “The theory that emerged from this intense investigation presented an eye-opening view of how patient care was affected by the awareness level of the dying process by nurses, physicians, and patients” (Andrews & Nathaniel, 2015, p. 4). This research led to their ground-breaking book, *The Discovery of Grounded Theory*, where Glaser and Strauss (1967) advocated for developing theories from

research grounded in the data, rather than presuming testable hypotheses from existing theories. They believed that, with certain topics, the data contained all the information needed for researchers to create grounded theory of their own.

Grounded theory is a methodology that seeks to construct theory about issues of importance in peoples' lives (Glaser, 1978; Glaser & Strauss, 1967; Strauss & Corbin, 1998). It does this through a process of data collection that is often described as inductive in nature (Morse, 2001) in that the researcher has no preconceived ideas to prove or disprove. (Mills et al., 2006, p. 26)

Data collected can be performed either inductively or deductively. Strauss & Corbin (1998) described the inductive approach as being one where the researcher begins with an area of study and permits the theory to come forward from the data. It is the opposite of a deductive approach where the researcher starts with a hypothesis, or theory, and then sets out to prove or disprove it using the data.

The placement of grounded theory, or objectivist grounded theory (OGT) as it is also known (Ong, 2012), in a research paradigm was a source of division between grounded theorists. Glaser (Urquhart, 2002) argued that grounded theory was a research method separate from philosophical considerations, asserting that researchers begin their investigations with as few predetermined notions about the topic as possible. Glaser (as cited in Mills et al., 2006) contended that this is what allows the researcher to "remain sensitive to the data by being able to record events and detect happenings without first having them filtered through and squared with pre-existing hypotheses and biases" (p. 3). Placing grounded theory into the research paradigm of constructivism was the work of Kathy Charmaz (Mills et al.,

2006). This move subjected Charmaz to criticism from Glaser, a former professor of hers, who said that she was incorrect in her assertions and that constructivist grounded theory (CGT) was, in fact, not grounded theory at all. In an article addressing Charmaz's claims, Glaser is adamant in his opposition.

Again, absolutely NO, the GT researcher does not "compose" the "story." GT is not description, and the unfolding is emergent from the careful tedium of the constant comparative method and theoretical sampling—fundamental GT procedures. These are not story making, they are generating a theory by careful application of all the GT procedures. (Glaser, 2002, p. 11)

In response, Charmaz (2017) explained that CGT is a “contemporary version” of Glaser and Strauss’s original theory that situates CGT theory in “historical, social, and situational conditions” (p. 34). In an effort to further define and separate CGT from OGT, Charmaz (2006) stated that a “constructivist approach places priority on the phenomena of study and sees both data and analysis as created from shared experiences and relationships” (p. 130). She asserted that the theories generated from the data are co-constructed by the researcher with the input of research participants; that is, the “understanding gained from the theory rests on the theorist’s interpretation of the studied phenomenon” (p. 126). This was also a significant departure from original GT, which put the researcher at arms length from the research. CGT assumes that the researcher is a vital part of the research process. “Researchers, in their ‘humanness,’ are part of the research endeavor rather than objective observers” (Mills et al., 2006, p. 26).



One of the reasons I chose CGT for this research is because this study is situated in the “historical, social and situational” times in which we currently live (Charmaz, 2017, p. 304). The teachers interviewed were working within the confines and complexities of the Covid-19 pandemic and their responses reflect this reality.

Another advantageous aspect of CGT was Charmaz’s approach to the language used when discussing the theory and application of CGT. As Charmaz writes, “simple language and straightforward ideas make theory readable” (Charmaz, 2006, p. 173). Her own work reflects this belief as her writing is clear and interesting to read. I have sought to write in this manner as well. My book (Hollis, 2016) was written specifically for teachers and used clear language, absent of jargon, and employed humour as a way to keep readers interested. While the structure of a dissertation is different from that of a book written specifically for teachers, I believe it is important to engage readers no matter the format. To move this research into practice, it is important to ensure that the material is accessible. Charmaz advocates using a “human voice” in one’s writing. She writes, “We can weave our points of view into the text and portray a sense of wonder, imagery, and drama” (p. 174). I find this direction appealing as a researcher, writer, and teacher. The findings of this dissertation seek to tell a story of the teachers involved and illustrate clearly their experiences, beliefs and perceptions around the teaching of early reading.

### **Development of Research Questions**

The research questions for this study emerged from both my personal experience teaching early reading in the public school system and later, teaching early reading instruction to pre-service teachers at a university. The extensive literature review and the curriculum

document review also provided me with a context upon which to build my questions. The overall research question (as stated in the Introduction) dealt with how early elementary teachers deliver reading instruction, what avenues they explore when they need support, and their level of confidence, in particular when dealing with students who are not meeting grade level outcomes. The specific questions outlined in the Introduction were written into interview guides to aid in facilitation of the focus groups and semi-structured individual interviews.

### **Participant Selection**

My research questions determined the criteria for the participants I sought to recruit for the interviews and focus groups. I chose to use a *purposive sampling* approach for participant selection. Purposive sampling involves the “intentional selection of informants based on their ability to elucidate a specific theme, concept, or phenomenon” (Robinson, 2014). Employing this model, I was able to use my knowledge of the teaching profession to target practicing, early elementary, public school teachers who had taught or were currently involved in early reading instruction. I knew that there were elementary school teachers who were taking Masters level education courses at their local university and felt this was the best way to reach a wide group of potential participants. Due to the restrictions on conducting research with human participants due to Covid-19, this process was challenging and required a great deal of coordination with university instructors and the teachers themselves.

### **Recruitment Process**

After receiving ethics approval from a Nova Scotia university, teachers were recruited from elementary graduate education classes. Professors and instructors teaching graduate-level elementary school classes were sent an email (see Appendix F) requesting permission to

present the research during their class, and ask for volunteers to take part in a focus group or individual interview. The criteria for selection required teachers to have prior or current teaching experience in Grades P-3. Emails were sent to 24 instructors teaching a Master's course. Of this number, 16 responded positively and invited me to show my 10-minute PowerPoint presentation during their online class. Each presentation ended with a request for participants. At the end of the PowerPoint presentations, the graduate education students were provided with a link to an online webpage (Socrative.com) where they were asked to give their name and email address if they were interested in learning more. A link to the Letter of Participants (see Appendix A) was sent to 23 students who expressed interest. Of this number, 4 participants chose to take part in a focus group together, while 2 others chose to complete an individual interview. In order to increase the number of participants, follow up emails were sent to all 23 students who originally expressed interest; however, this did not result in any additional responses.

These low numbers were not unexpected. Because of Covid-19 restrictions, many of these teachers had had to alternate between face-to-face teaching and online teaching, sometimes numerous times over the previous year and half. As well, the teachers identified for this study had to juggle not only online teaching, but also online learning as part of their master's program. Some of the university instructors contacted said their students had reported feeling stressed and overwhelmed by their work, graduate school, and home responsibilities.

To increase the number of teachers for the focus groups and/or individual interviews, a recruitment strategy modification form was submitted to the university Ethics Committee. A

request was made to expand the parameters of the research to include teachers from other parts of Atlantic Canada also taking master's courses in Education through an extension program offered by the same Nova Scotia university that the previous participants attended. This was approved and a recruitment focus on teachers from across Atlantic Canada began.

With the aim of attracting more teachers, two instructors offering distance learning courses in the Masters program agreed to allow me to present my study to their classes. One instructor was working with teachers from Prince Edward Island, while the other was working with teachers from Newfoundland. The instructor from Newfoundland granted me access to a portion of her class time so students in her class willing to participate in a focus group format could do so at that time. From this group of Newfoundland teachers, I collected focus group data from 3 participants. The second instructor, who was offering a distance learning education class in Prince Edward Island, sent my PowerPoint directly to their students, inviting them to contact me if they wished to take part. 2 teachers from this group agreed to take part in individual interviews. In the end, I ended up with 6 participants from Nova Scotia, 4 who took part in a focus group and 2 participants who took part in individual interviews; 3 participants from Newfoundland who took part in a focus group; and 2 teachers from Prince Edward Island who engaged in individual interviews. A total of 11 early elementary teachers from across Atlantic Canada shared their experiences, beliefs and suggestions about early reading instruction.

All 11 participants were teaching at elementary schools located in one of three Atlantic provinces: Nova Scotia, Prince Edward Island, and Newfoundland and Labrador. During the recruitment phase, participants were asked to choose whether they wanted to participate in an

online focus group or an online semi-structured interview. Of the 11 participants, 2 participants teaching in Nova Scotia and 2 participants teaching in Prince Edward Island chose to take part in an individual interview (see Figure 5 below for more detailed information). The remaining 7 participants became members of 2 separate focus groups. In the first group, there were 4 participants teaching in Nova Scotia, and in the second group, there were 3 participants teaching in Newfoundland and Labrador. None of the 11 participants took part in both an individual interview *and* a focus group.

**Figure 5**

*Details of Recorded Semi-Structured Interviews and Focus Groups*

<b>Date 2021</b>	<b>Semi-structured Individual Interview</b>	<b>Focus Groups</b>	<b>Length of Interview recorded on Microsoft Teams</b>
May 26		<p><i>Focus Group 1</i> – included 4 Nova Scotian teachers.</p> <p>Group includes: <b>P1, P2, P3, P4.</b></p> <p>All 4 participants in this group are referred to in a composite format as <b>FG1, NS.</b></p>	59:34 min.
May 27	<p><i>Individual Interview 1</i> was held with a teacher from Nova Scotia.</p> <p>This participant is referred to as <b>P5, NS</b></p>		26:14 min.
June 2	<p><i>Individual Interview 2</i> was held with a teacher from Nova Scotia.</p>		1:04 min.

	This participant is referred to as <b>P6, NS</b>		
June 12		<i>Focus Group 2</i> – included 3 Newfoundland teachers  Group includes: <b>P7, P8, P9</b> .  All 3 participants in this group are referred to in a composite format as <b>FG2, NL</b> .	39:50 min.
June 17	<i>Individual Interview 3</i> was held with a teacher from Nova Scotia.  This participant is referred to as <b>P10, PE</b>		18:17 min.
June 17	<i>Individual Interview 4</i> was held with a teacher from Nova Scotia.  This participant is referred to as <b>P11, PE</b>		22:34 min.

Note: **P** refers to participant. **FG** refers to Focus Group. **NS** refers Nova Scotia, **PE** refers to Prince Edward Island, and **NL** refers to the province of Newfoundland and Labrador.

Prior to taking part in a focus group or semi-structured individual interview, the teachers were advised, both in the Letter to Participants (Appendix A) and verbally before the interviews began, that participation in the study was voluntary and their identity would not be revealed. All teachers who took part in the semi-structured individual interviews were given the opportunity later to read the transcript of their interview and complete a member-check. This involved allowing the participants to request that parts of the interview be removed or added to, and also gave them the opportunity to ask for a follow-up interview. Participants in the

focus groups were not given this opportunity as their interviews were transcribed using a composite approach, whereby all comments were attributed to the group as a whole, and not to individual participants.

Each participant completed an online demographic questionnaire through Google Forms on the University's server (Appendix E). This is where I gathered general information about their combined education and experience (see Figure 6 below). These teachers were employed in three different Atlantic Canadian provinces (Nova Scotia, Prince Edward Island, and Newfoundland and Labrador) and all identified as female. As a token of appreciation, each of the 11 teachers received an online gift card worth \$15.

Figure 6 below provides a general overview of the levels of education, experience and other possible designations the teachers may have earned without attaching any particular descriptors to any one teacher. All information found in Figure 6 is part of a composite presentation of the data collected. As indicated in the diagram, the years of experience for this group of 11 teachers ranged from 4–24 years, with the average being 12.5 years. Based on the recruitment strategy used in the study, we know that all participants were enrolled in a Master of Education degree program. Although all study participants indicated they had experience teaching reading in the early grades, not all were teaching in the lower-elementary grades during the year the study took place. Teaching positions differed amongst the 11 participants with six teaching in the Grades Primary - 3, one each teaching Grades 5 and 6, and three teachers working with students with diverse needs in the Learning Centre, and through Reading Recovery and Early Literacy Support.

**Figure 6**

*Demographic Questions and Responses of Research Participants*

1. Gender	All 11 teachers identified as female
2. Current teaching position	Grade 1 (1)  Grade 3 (3)  Grade 5 (1)  Grade 6 (French Immersion) (1)  Kindergarten or Primary (2)  Learning Centre (P-6) (1)  Reading Recovery (See definition 1 in Note below) (50%) and Early Literacy Support (See definition 2 in Note below) (50%) (1)  Reading Recovery (50%) & Grade 1 classroom (50%) (1)
3. Years of teaching experience	1. 22  2. 7  3. 9  4. 5  5. 18  6. 4  7. 15  8. 24  9. 11



	10. 4 11. 19
4. Highest degree achieved	2 <sup>nd</sup> Masters degree achieved (2) 1 <sup>st</sup> Masters degree achieved (5) Currently enrolled in 1 <sup>st</sup> Masters degree (4)
5. Other professional designations	Early literacy diverse needs - Special Education (1) Educational technology (1) Reading Recovery Certificate (2) Librarian (1)

*Note.* 1. Reading Recovery (RR) is an early intervention program for grade 1 students. It offers students at the earliest levels of reading development one-on-one support, for 30 minutes a day, over a period of 12-20 weeks. Elementary classroom teachers are trained to offer RR through an intensive, on-the-job, one year program. 2. Early Literacy Support teachers (ELS) in Nova Scotia work with students in Grades Primary to 3 who have been identified as requiring additional support in literacy. They often work with students in groups of three to four students. Teachers who wish to offer ELS in the schools must be lower elementary teachers; they are also required to take on-the-job training through their regional educational centre.

To understand some of the terms used by the teachers in the findings, it is important to know how each of the three provinces referenced in this dissertation defines the starting grade for their school system. These are outlined in Figure 7 below.

**Figure 7**

*Starting School Age*

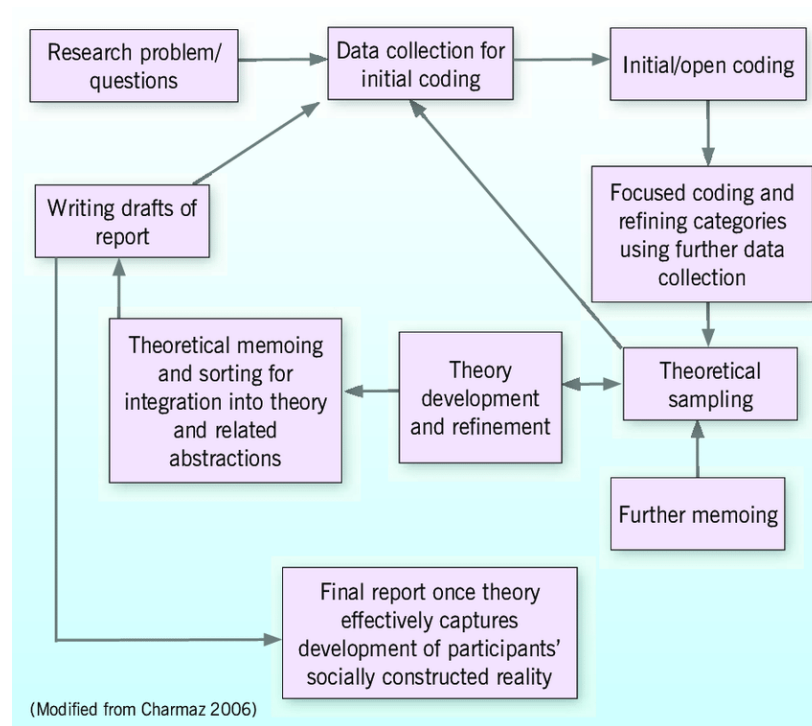
Province	Minimum Age of Students to Start	Name of Grade
Newfoundland and Labrador	5 years old by December 31	Kindergarten
Nova Scotia	5 years old by December 31	Primary
Prince Edward Island	5 years old by December 31	Kindergarten

**Following the Process of Constructivist Grounded Theory**

My research process followed CGT with the understanding that the process was fluid and involved going back and forth between the stages, as illustrated in Figure 8 below.

**Figure 8**

*The Process of Constructivist Grounded Theory*



Note. From “The roots and development of constructivist grounded theory” by G. Higginbottom and E.I. Lauridsen, 2014, *Nurse Researcher*, 21(5), p. 11.

In the following section, I describe how I observed the CGT process starting with the development of my interview questions. This is followed by data collection and outlines how the 3 data points were collected through focus groups, semi-structured interviews and a review of the EEAL curriculum documents for Nova Scotia. After that, I include a description of how the study allowed me to collect rich, thick data. I later explain how I used the process of constructivist grounded theory to code and analyze the data, and then write my dissertation. I

conclude this piece with a discussion of how research standards and ethical requirements were maintained throughout this study.

### ***Development of Interview Questions***

Agee (2009) states that “good qualitative questions should invite a process of exploration and discovery” (p. 431). The development of the research questions started with my own personal curiosity based on my experiences teaching reading in the early grades, as well as teaching pre-service teachers in the undergraduate education program. After learning about the Science of Reading (SoR), I began to take workshops and teach myself. As I did so, I began to question whether other teachers felt as I did, that this was the missing piece in their educational knowledge. As I developed my literature review, I expanded my focus to include other aspects of early reading instruction and began to formulate the questions I wanted to ask teachers. The final iteration for developing the questions was based on a gap I identified in the literature. Despite an extensive literature search, I could find very little Canadian data, in particular Atlantic Canadian data, that engaged and valued teacher voices on the instruction of early reading.

Based on my research questions, I developed semi-structured interview questions that dealt with teachers and their beliefs and methods around early reading instruction (see Appendix D). These included questions about their instructional methods, access to resources (i.e., human and material), levels of self-efficacy, and recommendations for pre-service and in-service education on early reading instruction. The sixth and final question was developed to situate the study within the Covid-19 pandemic. This question referred to how the pandemic affected the way participants were adapting their practice of teaching reading to meet Covid-19

protocols. This choice to situate the study within this extraordinary time of a global pandemic is part of the CGT methodology. Charmaz (2006) maintains that we construct texts for specific purposes and situate them within the times and circumstances in which people find themselves.

### ***Data Collection***

The data for this dissertation was collected using three methods: focus groups, individual semi-structured interviews and a review of the Nova Scotia English Language Arts Curriculum documents. Each method, as explained below, brought new insights and allowed for different types of interactions and discussions with participants and the data.

#### **Focus Groups.**

“The hallmark of focus groups is their explicit use of group interaction to produce data and insights that would be less accessible without the interaction found in a group” (Morgan, 1997, p. 2). There are three types of focus group interviews used for data collection: self-contained, where the focus group is the principal source of data; supplementary, where the data relies on some other primary method, such as a survey, a focus group then elaborates and adds to; and multimethod studies, where focus groups are part of two or more means of gathering data, none stronger than the other (Wilson, 1997). My research involved the third option, as the focus group data has been triangulated with semi-structured interviews and the curriculum document review.

Focus groups are carefully designed discussions designed to elicit information from a group on a specific topic (Arcelay-Rojas, 2018). Krueger and Casey (2014, as cited in Arcelay-Rojas) explained that these groups are made up of people who have certain things in common.

Gathering the 4 focus group participants from Nova Scotia together in one group allowed them to bounce ideas off one another. This process was later repeated with the 3 participants from Newfoundland who also chose to take part in a focus group.

These 7 participants, divided into 2 separate focus groups, were eager to interact with each other, often talking over one another before apologizing and telling the other person to go first. The focus groups included both commiseration and laughter.

The focus groups involved initial open-ended, semi-structured questions, with follow-up questions and probes, to extract as much detailed information as possible (see Appendix D for focus group interview guide). Although the groups were small, it is important to acknowledge the significance of their responses. The difficulty involved in recruiting teachers during Covid restrictions cannot be overstated. The amount of pressure and stress that teachers find themselves under has been great (Santamaría et al., 2021). Including the voices of difficult-to-recruit individuals is an important element of my study and, according to Toner (2009), “to cancel a group because of small size, or to discard the data that emerge, would be an incredible loss of situated knowledge and an affront to the people who sought to participate” (p. 190).

### **Individual Semi-Structured Interviews.**

Semi-structured interviews are a popular method of qualitative data gathering; “however, the degree to which this technique is effective rests considerably on the relationship, rapport and level of trust established between researcher and the researched” (Brown & Danaher, 2019, p. 86). While the following discussion regarding the interview process is placed within the interview section, the information can also be applied to the discussion of the focus groups above. Charmaz (2006) emphasizes that the establishment of rapport demonstrates

respect for the participants. She maintains that this is a major difference between CGT and OGT, the latter of which she says promotes a “smash and grab collection strategy” of data collection (p. 19). Charmaz uses the term, *intensive interviewing*, to discuss the interview process used in CGT. She says this type of interviewing narrows the topics being covered in order to focus on specific data necessary for the research. Intensive interviewing is a more in-depth, directed conversation. Charmaz states that by asking open-ended questions in a safe non-judgemental environment, the participant is allowed to explore and discuss their experience in a way they may not have before.

The intensive interview process I employed followed the guidelines set forth by Charmaz (2014). Ensuring participants felt safe and respected was of utmost importance. I was able to establish this level of trust by adopting what Brown and Danaher (2019) call the CHE (Connectivity, Humanness and Empathy) principles. The interviews and focus groups were conducted using the online Microsoft Teams video platform. In terms of the connectivity principle, I kept my camera on so they could see I was smiling or empathizing with them through the discussion. I shared some of my past experiences as a teacher, when the conversation warranted it, as a means of strengthening the connectivity between myself and the participants.

In terms of the Humanness principle, Brown and Danaher (2019) assert that a key element is ensuring participants feel that the researcher is truly interested in what they have to say. The way to do this, they maintain, is to let participants know that they did not consider themselves to be the “experts” and that they did not wish to be viewed as such (p. 83). I felt that it was important for my research to make clear to the participants that I valued their

stories and expertise and that I considered them to the experts in this area. I also tried to remove any sense of formality to allow the participants to feel free to talk not only with me, but with their fellow focus groupmates. “The Humanness principle incorporates an expectation of informality and removing the traditional distance between researcher and the researched from the semi-structured interview process” (p. 82). As Brown and Danaher suggest, I often used humor as a way to create a relaxed atmosphere that conveyed collegiality.

The final component of the CHE approach is empathy. It was not difficult to convey honest feelings of empathy during the focus groups and interviews. Having worked as a public school teacher for many years, I know how complex and challenging the job can be; what I didn’t know was how that job had changed and become even more demanding due to the pandemic. I approached the participants with a sense of humility and gratitude for taking the time to speak openly and honestly with me during such an uncertain time.

By taking all aspects of CHE into consideration, I believe I built a positive and comfortable rapport with participants that allowed me to gather valuable information about early reading instruction and the beliefs and methods attached to them. All focus groups and semi-structured individual interviews were conducted online and were recorded using Microsoft Teams, as approved through the Mount Saint Vincent University Ethics Committee.

### **Review of Nova Scotia Curriculum Documents.**

The third method of data collection involved a review of the NS curriculum documents for Elementary English Language Arts. (A detailed review of the documents can be found in the previous section of the dissertation.) This overview of the curriculum lays the groundwork and provides context for the interviews and focus groups. Throughout the discussions, the



participants referred to the curriculum outcomes often; therefore, it was important to give an example of what is included in one of the three provinces' curriculum documents. As was explained in the above Review, all three provincial EELA curriculums were built using the same framework set forth in the Foundation for the Atlantic Canada English Language Arts Curriculum (1996), therefore, despite the differences between provincial EELA curriculums, I felt the Nova Scotia curriculum documents were a reliable source for background information. These Nova Scotia documents provided an extensive amount of background data that I used write my research questions and take part in the conversations with the participants. Charmaz (2006) refers to documents such as these as *extant texts*. These are texts, such as technical manuals, medical records, and government reports, that reflect everyday life. Charmaz says, "Researchers treat extant texts as data to address their research questions, although these texts were produced for other – usually very different – purposes" (p.45). The curriculum documents reviewed for this paper were essential in constructing my grounded theory. Without them, it would have been impossible to properly analyse the data collected from the participants.

### **Conclusion.**

The triangulation of the three data sources presented above (focus groups, individual interviews and document review) allowed me to analyse all of the data in order to create a full, detailed picture of how the teachers were instructing their students and what curriculum outcomes they were required to base this instruction on. The triangulation of this data involved each of the three data sources contributing to the analysis and findings.

### ***Gathering Rich, Thick Data***

Charmaz (2006) asserts that rich data involves gathering information that is detailed and full. “Data collecting may demand that researchers ask questions and follow hunches, if not in direct conversation with respondents, then in the observers’ notes about what to look for. Researchers construct rich data by amassing pertinent details” (Charmaz, 2000, p. 257; as cited in Ong, 2012, p. 429). Rich data reveals the participants’ thoughts, beliefs, intentions, and actions. It is gathered using detailed narratives, which may include transcriptions of interviews or written personal accounts.

Charmaz (2006) notes that researchers should allow their research questions to determine the methods they choose. My research questions required me to speak with teachers currently working in the public school system. I wanted thoughtful, engaged participants who were willing to take part in a discussion and share their beliefs and experiences around early reading instruction. The use of focus groups and individual semi-structured interviews allowed me to invite participants to respond to the research questions in detail. The focus groups offered participants the opportunity to listen to, and engage in conversation with, their colleagues and myself. This often led to interesting and robust discussions whereby the teachers would agree or disagree with each other, as well as add to each others’ stories and opinions. The individual interviews granted me the opportunity to have a more thoughtful one-one-one discussion with the participants, often leading to a deeper understanding of their beliefs and practices. These two data collection methods also allowed me to conduct interviews online, which was an ethical requirement of the University due to Covid-19 restrictions.

By using an intensive interview approach, I was able to gather rich data that I believe gets to the heart of what one NS participant referred to as the “nitty gritty” of early reading instruction. Charmaz (2006) affirms, stating that rich data “reveals participants’ views, feelings, intentions, and actions as well as the contexts and structures of their lives (p. 24).

The first step in the coding process for CGT involves initial coding, which is defined below. By coding for common themes, the researcher is forced to stay close to the interviews themselves and the transcriptions of what the participants said. As Charmez (2014) notes, this keeps the researcher close to the data so that any codes given are grounded in the data. “Careful coding also helps you to refrain from imputing your motives, fears, or unresolved personal issues to your respondents and your collected data” (p. 133).

### ***Initial Coding***

Each of the interviews and focus groups was recorded using Microsoft Teams. Following each interview or focus group these were forwarded to a transcriptionist, who had signed a letter of confidentiality, using the University’s webmail. Once they were transcribed, they were emailed back to me in Microsoft Word format. I then transferred the data to an Excel document to make it easier to complete line-by-line initial coding. Following the CGT approach shown earlier in Figure 8 above, I went through each document and ascribed thematic codes to each line. An example of how my initial coding method can be seen below in Figure 9:

**Figure 9**

*Example of Initial/Open Coding*

Initial/Open Coding Example:		
FG:	Well, we've had to go back, I teach grade three and I've had to go back and do letters with our students. I guess they don't come to school with a high level of literacy, and we've gone back to just doing letters and letter sounds. And I'm teaching two languages, so it's even more of a challenge at that point in time in grade three.	<ol style="list-style-type: none"><li>1. Teaching letters and sounds with Grade 3 students</li><li>2. Had to go back</li><li>3. Not coming to school with high level of literacy</li><li>4. Causes bigger challenge in Grade 3</li></ol>

On the far left side column of Figure 9, you will see the identifier for the speaker(s). Moving right, there is the word-by-word transcription of what the participants' discussed. The final column demonstrates how I conducted initial coding by naming individual lines with a label that categorizes, summarizes and/or accounts for each piece of data. Once the initial coding was complete, then it was time to start sifting through the data in order to sort, synthesize and analyze all of the interviews and focus groups with not just each other but also with the data from the literature and document reviews. This allowed me to move from the verbatim statements of the participants into the ideas and theories that they generated.

***Focused Coding and Memoing***

For the next step in the coding process of CGT, I went back and expanded on these basic initial codes with more focused coding. I applied these methods to each of the four individual interviews and both focus groups, as seen in the example shown in Figure 10 below. This process led to the emergence of a number of themes.

Finally, I used the process of memoing to keep track of any thoughts, ideas, or questions that arose throughout the process. Memoing has been defined as:

...the designated space in a grounded theory project for the analytical and creative work that the method requires to strive toward novel theory building. Memoing is where the cycling back and forth between data, extant theories, and emergent concepts can take place and where hypothesizing about what might deepen, confirm, disrupt, or close out the conceptual category or theory building underway is articulated. (Conlon et al., 2020)

I added memos to my spreadsheets in order to keep track of any ideas, questions, or concerns that I had with the data. Figure 10 below provides a visual of how I conducted the coding and memoing process.

**Figure 10**

*Focused Coding and Memoing Example*

Focused Coding and Memoing

Example:

Transcription	Initial Coding	Focused Coding	Memo
<p>A: Well, I know that they have some wonderful literacy coaches who do amazing things in the school. But I think if they could come in and work with teachers to teach them right from the beginning, the basics of how to teach kids how to read. And I mean, the basics. This is how you teach the word, &lt;u&gt;b&lt;/u&gt;. It sounds like, if you know your sounds, if you know your letters, &lt;u&gt;b&lt;/u&gt;, sounds like it should be &lt;u&gt;ix&lt;/u&gt;, right? So, how to go about teaching kids those little words. And then, I know there're word families, and I know those kinds of things, we did that kind of stuff because I did my practice teaching in a kindergarten class. But still, I mean, how do you move forward beyond those word families and things? How do you teach them the bigger words? And I know the jump from H to I, is quite a jump in terms of the size of the words, and how difficult they are to decode and stuff. So, if we had literacy coaches for professional development that could come in, and just almost go back to the basics and say, at the beginning of the year if your kids don't know these things, then you're not going to be of any help to them because they have to know the basics, which would be the sounds of the letters, which they don't know. Or even some simple rules of words. Like they don't know the bossy &lt;u&gt;E&lt;/u&gt;, they don't know when two vowels are together the first one, there're just lots of gaps in that. And it's not the previous teacher's fault. It's just that it's sort of been overlooked I feel, both in terms of BEd programs and practicum, and then in lack of professional development. Because things change, they're always changing and there're always new ways. How effective are those new ways though?</p>	<p>1. Literacy coaches could work with teachers to learn the basics of reading instruction</p> <p>2. How do we move forward from word families?</p> <p>3. Literacy coaches work with teachers at the beginning for PD</p> <p>4. Reading instruction for teachers overlooked in BEd., practicum, and PD.</p> <p>5. Things are always changing</p> <p>6. How effective are new ways?</p>	<p>1. Literacy coaches could work with teachers to learn the basics of reading instruction</p> <p>a. Ex. This is how you teach the word "is"</p> <p>2. How do we move forward from word families?</p> <p>a. How to teach bigger words?</p> <p>b. Jump from H to I</p> <p>c. Words that are more difficult to decode</p> <p>3. Literacy coaches work with teachers at the beginning for PD</p> <p>a. How to teach the basics, like sounds of letters, simple rules</p>	<p>Similar to the focus group from May, there is a desire for in-house PD. There are lots of people with lots of knowledge within a school. These people could be called upon to provide PD or support or ongoing training.</p>

*Note:* While I recognize that this figure is far too reduced to read properly; its inclusion here is designed to give the reader the opportunity to see the *process* that followed from: oral interviews, to transcription, to initial coding, to focused coding, and finally to the writing of memos. The writing of memos goes hand-in-hand with theoretical sampling, which is what I cover next.

### ***Theoretical Sampling***

After the researcher has finished coding and has come up with some tentative categories, the next step is to see if more information is needed to begin forming their grounded theory. Charmez (2006) asserts that the next stage to gathering more data includes a strategy called *theoretical sampling*. She defines it as such:

Theoretical sampling means seeking pertinent data to develop your emerging theory.

The main purpose of theoretical sampling is to elaborate and refine the categories constituting your theory. (p. 96)

Due to the challenges that arose during the recruitment process, I was unable to conduct follow-up interviews or recruit new participants. I did, however, go back to the literature and curriculum documents to help define my emerging theories. One example of this occurred when I was looking for further information about comments that arose during the interview with regards to adapting the curriculum outcomes in order to meet individual needs. Theoretical sampling led to the discovery of adaptive theory (Vaughn, 2015, 2015, 2020), which I used in the development of my grounded theory. Through the use of theoretical sampling, I

was able to focus my analysis in an area I hadn't previously considered. This led to the writing of my draft.

### ***Writing the Draft***

Once I had completed the coding, memoing and theoretical sampling components of CGT, I felt prepared to start the final draft of my dissertation. Charmez (2014) maintains that the only reason one should engage in constructivist grounded theory research is to make an original contribution to the literature. As I believe the Findings section which follows demonstrates, this dissertation offers new insights into reading instruction through its highlighting of teachers' voices from Atlantic Canada and the creation of my constructivist grounded theory which attempts to bridge the gap between the research, in particular in the Science of Reading, and actual classroom practice. Through every revision of the draft, I updated and changed each one to better reflect the new ideas and theories that arose from my interaction with the data, as well as the constructive critiques I received from others. The value of constructive critiques is outlined in the following section.

### ***Constructive Critiques***

Throughout the multi-year process of writing this dissertation, I have requested and received constructive critiques from my supervisor, doctoral committee, external examiner, and other experts in the field of early reading instruction. I have used this feedback throughout, writing and submitting multiple drafts, in order to improve and strengthen my work. Finally, I relied on my own experience and expertise in the matter and wrote my dissertation in a way that honours the voices of teachers and respects the rights of all students to learn to read. As Charmez (2014) states:

Writing is a social process. Draw upon friends and colleagues, but write for yourself and your grounded theory first. You are now the expert; the theory is yours. Let the voices of teachers and earlier researchers grow faint while you compose the manuscript. (p. 318)

## **Research Standards**

Qualitative research that uses a CGT approach needs to ensure that it meets the standards of reliability and validity. Because constructivism denies the existence of an impartial, objective reality, it is important to have other measures to ensure its legitimacy. Miles and Huberman (1994, p. 278 as cited in Meijer et al., 2002) discuss the importance of internal validity by asking: “Do the findings of the study make sense? Are they credible to the people we study and to our readers? Do we have an authentic portrait of what we were looking at?” (p. 145).

By including a detailed literature review along with the focus groups, individual interviews and curriculum document review, I have demonstrated that this research makes sense in the light of the seminal and current research that has been done on the topic of early reading instruction. Incorporating the teachers’ actual words in this dissertation ensures a credible and realistic rendering of their observations and beliefs. Participants who took part in individual interviews were also involved in member checking, with each of the teachers being sent a transcript of the conversation and asked to verify it for accuracy. They were also told they could request that information be omitted and that they could ask for a follow-up interview if there was anything they wanted to clarify.



## **Ethics**

Minimizing harm, protecting privacy, and respecting autonomy are all factors we need to consider when conducting research. “The bedrock of ethics is particular judgements about what would and would not be ethically acceptable in particular situations” (Hammersley, 2017, p.59). As part of my preparation for my research, I successfully completed the Canadian Tri-Council Policy Statement – Ethical Conduct for Research Involving Humans Course on Research Ethics (Appendix B).

No sensitive data was asked for in the collection of this research. The information requested was similar to what teachers may be asked in their everyday life, and teachers were not asked to disclose any personal, sensitive information. There were no physical risks involved in taking part in the research; although teachers may have experienced slight anxiety when answering the questions, none of the teachers mentioned any concerns at the end of the focus group or individual interview. The privacy of the teachers was protected through the use of initials not associated with individual names and any identifying information regarding the teachers or their students or schools was removed from the data.

Teachers were informed, in both the Letter to Participants (Appendix A), and throughout the focus group and interview process, of their option to skip any question they were not comfortable answering and of their choice to stop the interview at anytime. They were also informed that their participation was not related in any way to their teaching position or their master’s coursework, and that there were no penalties for choosing not to participate. The participants and I were not, and had never been, in an instructor/student relationship; therefore, there was no power differential.

Video recordings of the interviews completed through Microsoft Teams were downloaded and saved as password protected computer files on the university server. The file was then sent by email and transcribed by a transcriptionist. The transcriptionist signed a confidentiality agreement ensuring that all information was to be kept confidential.

All data will continue to be saved on a password protected computer file on the MSVU server for five years following the study's start date and following publication and completion of the project. After five years, the data will be deleted. The data will only be accessible by the researcher.

Teachers who wished to receive a copy of the results wrote their email address on the consent form and, once the study has been accepted and finalized, results will be emailed to them. They were made aware that this research was designed to inform the development of the researcher's dissertation and that the results may also be used to inform journal articles, conference presentations, and in other educational forums.

Throughout the process, the requirements set forth by the University's Ethics Committee were closely followed so that the rights of the participants were protected.

## **Conclusion**

For this research study, I used constructivist grounded theory as both a method and a methodology. My research method followed the CGT process developed by Charmez (2006, 2014) as shown in Figure 8 above in order to collect, sort and analyze data. The three methods of data collection chosen included: (a) focus groups; (b) semi-structured interviews, and (c) review of the Nova Scotia English Language Arts curriculum. The information collected allowed me to triangulate the data to develop a comprehensive understanding of the teachers' stories.

Following the CGT process, I was able to develop my grounded theory, write my dissertation and make recommendations that I hope will influence practice.

## **Findings**

### **Introduction**

The findings from this study are based on the data gathered from: (a) a documentary analysis of the Nova Scotia curriculum guides; (b) 2 focus groups (1 with 4 participants and 1 with 3 participants); and (c) 4 individual semi-structured interviews held online with teachers between May and July of 2021 (see Figure 5 above for more detailed information on the interviews). The participants were all teachers enrolled in Master of Education classes and taught in one of three Atlantic provinces in Canada, PEI, NFLD and NS. The aim of this study was to understand and present the perceptions and experiences of teachers who were currently or who had recently taught reading in the early elementary grades. My past teaching experience, supported by the literature, suggests that many teachers struggle with teaching phonemic and phonological awareness due to a lack of education and training in this area. This study has been designed to address these issues and help support both teachers and students moving forward.

The same set of guided questions and prompts were used with both the focus group participants and the individuals who took part in semi-structured individual interviews. (see Appendix D for interview questions). Although the same questions were asked in both formats, the focus group questions often triggered conversations amongst participants, while the individual interviews allowed for the participant to take time formulating responses and engage in a more in-depth conversation with the researcher. The questions dealt with three primary

categories, the respondents' current methods of teaching reading, their perceptions of the training and education they had received in early reading instruction, and finally, the effect that the Covid-19 pandemic has had on them and their teaching methods. This study was designed to give teachers a voice in the discussion of reading instruction in early elementary, particularly during the time of a global pandemic. Since all respondents were teachers and all identified as female, this study uses the term "teacher" and the pronoun "she" when referring to study participants. Each teacher is identified in Figure 5 as P, for participant, and then assigned a number from 1-11 in chronological order according to when their interview took place. The first 4 participants are part of Focus Group 1 from Nova Scotia or FG1, NS. They are individually referred to as P1, P2, P3, and P4; however, since all their comments have been amalgamated into one composite response, they are simply referred to in the Findings as FG1, NS.

Two individual semi-structured interviews were conducted next with participants from Nova Scotia and are identified as P5 and P6. The second and final focus group is labelled Focus Group 2 from Newfoundland and Labrador, or FG2, NL. Although the individual participants are known as P7, P8, and P9, their individual answers have been attributed to FG2, NL, similar to the earlier focus group from Nova Scotia. Finally, the last two individual interviews involve participants from Prince Edward Island. They are referred to in the Findings as P10, PE and P11, PE.

In the descriptors for each participant, each province is identified by its abbreviation, ie. Nova Scotia is referred to as NS, Prince Edward Island as PE, and Newfoundland and Labrador as NL.

## **Themes**

Using constructivist grounded theory methodology, the recordings of the focus groups and semi-structured individual interviews were transcribed, and initial coding was undertaken (further information on the coding process can be found in the Methodology chapter). As I progressed through the coding process, issues of importance to the participants surfaced from their stories (Mills et al., 2006), which ultimately led to the development of six prominent themes:

1. Adapting instruction to students' need
2. Reading resources and supports
3. Self-efficacy in early reading instruction
4. Explicit education in early reading instruction
5. Professional development in early reading instruction
6. Stress and growth during a pandemic

The following is a description of the findings according to each of the above themes.

### ***Adapting Instruction to Students' Needs***

In this section, I highlight how my findings reflect the way teachers' planning and instruction require them to use both the curriculum outcomes and their knowledge of their students' needs. It was clear that they used their professional decision-making to adapt their teaching of the curriculum to meet their students' needs. When asked, "When you think about teaching elementary English language arts, what comes to mind?" most of the teachers said they thought of it in parts and planned for it in sections based on the curricula and report card

layouts (ie. Speaking and Listening, Reading and Viewing, and Writing and Other Ways of Representing). One teacher shared:

I guess I do think of it like report cards, but when I think about literacy, I mostly think about reading and writing. And sometimes some tech integration, I guess in there as well. But for the most part, how well can they read, how well can they write is what comes to mind. (P5, NS)

Another teacher agreed:

I also think of reading and writing predominantly. Speech and language, hearing and listening doesn't immediately come to mind, and I think it's because I often incorporate those in all my other subject areas. (FG1, NS)

In one of the semi-structured interviews, the teacher said she thought of English Language Arts as one entity: "I think of it as a whole, but that is after immersing myself into learning about literacy" (P6, NS). She went on to say that her favorite part of the ELA curriculum was teaching the Word Study component because this often spread to other subjects: "[T]hat has taught me more about the importance of word study into the writing process, reading, math, you name it" (P6, NS).

For some teachers their initial thoughts about ELA instruction brought to mind specific published programs as their main source and approach for teaching the literacy components in their classrooms (see Figure 10 below). A teacher from Prince Edward Island (PE) referenced the importance of a specific literacy program in her planning of her literacy block: "Well, we start off, we have the Lucy Calkins readers' kit and writers' kit, so we do that in our literacy block. So, it's usually one day we have readers' workshop and the other day we have writers'

workshop” (P11, PE). This teacher went on to say that the kindergarten teachers in PE were piloting a new program for their province called, Foundations. She explained that this was part of the Wilson program. Foundations is described on the Wilson website as:

Based on the Wilson Reading System® principles, Wilson Foundations® provides research-based materials and strategies essential to a comprehensive reading, spelling, and handwriting program. Wilson Foundations makes learning to read fun while laying the groundwork for life-long literacy. (Wilson Language Training, 2021)

She noted that she had previously used the Jolly Phonics program (Jolly Reading, n.d.) to teach foundational reading skills to her students, but is, so far, enjoying piloting Foundations. This participant highlighted the significance of transitioning to this new program within the next three years since it means that, “all primary to grade three classes [in Prince Edward Island] will be using Foundations. This will mean all teachers in the province will be using the same language, and the same drill sound cards” (P11, PE).

While most of the teachers stated that they follow the provincial curriculum guidelines for reading, they also acknowledged that their instruction was often adapted to match their students’ needs and levels of ability. For several educators, this meant having to re-teach material meant to be learned in earlier grades. As one participant explained,

I’m grade three, so we’re supposed to be beyond initial letter sounds, but at least 50% if not more [of my students], are English language learners and they don’t speak English at home. And so, my reading program consists of a lot of phonics and initial letter sounds, and initial letter blends, as well as, and this is grade three, but vowel blends. (FG1, NS)

In a separate interview, another teacher echoed these sentiments and said that even though she was also teaching grade 3, she often went back and taught initial vowel sounds, an outcome that was expected to have been covered in an earlier grade. This teacher expressed further concern for her learners by stating that,

I feel it's a huge detriment to the kids that they don't know those things. And even in grade three, they don't even know what vowels are ... It's almost like we have to start back at the very beginning. (P5, NS)

Another thematic aspect of curriculum outcomes in relation to student ability to emerge from the data concerned the COVID pandemic, which a number of teachers saw as having an impact on students' reading progress. One of the teachers in the Nova Scotia focus group noted that teaching grade one this year was different due to the previous year's requirement that they move from in-person to online learning. She felt that the primaries who came into her class had basically missed out on their entire third term, despite it having been offered online:

Quite a few of our grade ones came in, not having those early reading behaviours under control. So, they were picked up for service [extra support] in January, [and] they were all grade ones for ELS and Reading Recovery. All of my students required instruction and support in various early reading behaviour. (FG1, NS)

A grade 3 teacher from Nova Scotia shared this perspective:

So, even though I was teaching grade three this year, really, I was teaching the late part of grade one, kind of grade two, and then early grade three by now. They're just so far behind, and in every aspect, but especially in reading and writing, which go hand-in-



hand. But it's really been a challenge. Not their fault; nobody's fault. But we're going to have some work to do, to bring them up to their right levels. (P5, NS)

All the teachers acknowledged that no matter the grade or the year, children start each new grade at different levels of ability. The participants felt that this creates an instructional challenge from the start as they try to develop programs that address their grade level curricular outcomes, as well as the needs of the students in front of them. As one participant explained, this situation can at times make it challenging to know where to begin:

So, as a classroom teacher, I feel as though the struggle is real. When the students come in to you, and you have half of them where they really should be at grade level, and the other half is trailing a little bit behind, or a crazy amount being behind, it's hard to know where to start, how to go, where to focus. (FG1, NS)

To ensure that her instruction matches the varying levels of student ability in her class, one teacher who taught grade 5 the previous year said that she stocks a wide range of materials that range from primary and up and uses them depending on student need; "whatever you've got in your arsenal, you hand it to them" (FG1, NS).

All teachers agreed that the most important thing a teacher could do at the beginning of any school year was to get to know her students, both as people and as learners. They noted that if they start trying to work with a student without understanding them as a person, that student may be resistant to accepting their help.

But if you take the time to build the relationship, all of a sudden, they start to take a [few] more risks and feel more comfortable, and they're willing to try different things. (FG1, NS)

One teacher noted that while it was important to acknowledge when a child met the grade level outcomes, it was also vital that students who didn't meet the outcomes, but met individualized goals, were also celebrated. Her perception was that children are coming to school at younger ages than they have in the past, and some do not have a strong awareness of the concepts of print. In her view, judging them as lacking or behind because they haven't achieved a grade level outcome by a certain date seemed unfair.

And you know, you'll get teachers looking and say, oh, well they're only at an A, or they're only at a B. Well, when they came in, they didn't even know how to hold a book. They didn't know how to turn a page. It was upside down. And now, they can hold it, and now they understand that pictures tell a message. (P11, PE)

This teacher also made a connection to students' oral language development, speculating that their (over)use of technology in out-of-school settings may be part of the reason she has noticed a delay in students' oral language acquisition.

Teachers responded to the question, *How do you plan your reading program?* in a variety of ways, with some indicating frustration that the students did not enter their classroom with sufficient understanding of curriculum outcomes from previous grades. Others took a view that a variety of reading levels is inevitable in any classroom and teachers must rely on their professional decision-making in planning their program. Some talked of having to covertly add in elements related to alphabet (letter) knowledge or phonological awareness they found were missing from the current curriculum in their province, while others stated these were central components in their province. One teacher said that she needed to go back and re-teach material that, according to the curriculum, should have been covered in the earlier grades.

I teach grade three and I've had to go back and do letters with our students. I guess they don't come to school with a high level of literacy, and we've gone back to just doing letters and letter sounds. And I'm teaching two languages, so it's even more of a challenge at that point in time in grade three. (FG2, NL)

Two of the teachers in the English program from Newfoundland said they were discouraged by senior staff from teaching alphabet knowledge independently in the early grades, "which you know, it's kind of hard to wrap your mind around....they often need to be reintroduced to those foundational skills" (FG2, NL).

When asked how they teach these skills if they couldn't teach letters independently, one of the teachers explained that they tended to teach blended sounds, which she said had its merits; however, she felt she still needed to teach each letter individually before moving into the blending stage, "because that's a lot to put on a small child" (FG2, NL). The teacher went so far as to say that she and her co-workers had to sneak in any direct teaching of letter sounds: "It was almost, like, **taboo**; like you couldn't talk about it if you taught a letter independently" (FG2, NL).

In another interview, one of the participants noted the importance of teachers' trusting their instincts and experience so as to do right by their students. Taking into account instructional materials and curriculum guidelines, she said that teachers needed to think of their students as individual learners first and then work from there. She referred to the use of the Lucy Calkins readers (2015) noting that they may work in "a perfect school, in a perfect world, you know, the perfect class" but might not be appropriate for every teacher and every student. "I think, you know, just go with what your heart tells you" (P11, PE).

The teachers in this study demonstrated through their responses that although they follow the provincial curriculum guidelines, they also use their professional experience and their knowledge about their individual students to aid them in developing their reading instruction. The participants often followed their instincts when trying to meet the varied needs of the children in their class.

### ***Resources and Supports used for Assessment and Teaching of Reading***

In this section of the Findings, I share the resources and supports the participants said they drew upon when they had difficulty knowing how to help a student with their reading. The teachers reported that they used a variety of resources and prescriptive reading programs to plan their reading lessons. While some of them were piloting new reading programs prescribed by their respective schools and/or districts, others said that they were working with those that had been around for many years. The reading programs and authors discussed by the teachers are included in Figure 11 below.

**Figure 11**

#### ***Reading Programs and Authors Referenced by Participants***

<b>Author(s)/Publishers</b>	<b>Programs</b>
Irene C. Fountas and Gay Su Pinnell	Fountas and Pinnell (2021) offer one of the most popular literacy systems in North America for Pre-K-Grade 6. They also offer an intervention system known as <i>Leveled Literacy Interventions</i> – a program specific to struggling readers, as well as an assessment system for grades K–8, an extensive professional book base, and professional learning opportunities. These programs are so well known in this area that they are often simply referred to as <i>Fountas and Pinnell</i> or <i>the LLI program</i> . (Fountas & Pinnell Literacy, 2021)

Lucy Calkins	Calkins is best known for the reading, writing, and phonics <i>Units of Study</i> series and the accompanying student and teacher texts. (Calkins, 2015)
Words Their Way	The <i>Words Their Way</i> series offers teachers a method of assessing their students' spelling in order to sort them into groups where they focus on one of five stages of spelling and orthographic development. The program offers reproducible sorting activities and detailed directions for teachers working with students in each stage of spelling development. (Words Their Way Series, 2021)
Wilson Academy	<i>Foundations</i> is part of the <i>Wilson Academy</i> multisensory, structured language program. The program involves instruction and activities in reading, spelling, and handwriting. (Wilson Language Training, 2021)
Marie Clay	The Reading Recovery (RR) program was developed by Clay in the mid 1970s and began to be implemented around the world in the mid 1980s. It was designed to provide one-on-one support to students who struggle to read. One of the main assessment tools used in RR is <i>An Observation Survey of Early Literacy Achievement</i> (Clay, 2016). It provides a systematic way of capturing early reading and writing. (Reading Recovery Community, 2022)
Jennifer Serravallo	Serravallo is the author of books on strategies for teaching reading and writing, such as, <i>The Writing Strategies Book</i> ; <i>Teaching Reading in Small Groups</i> ; <i>The Literacy Teacher's Playbook, Grades K–2 and Grades 3–6</i> ; and <i>Teaching Writing in Small Groups</i> . (Serravallo, 2021)
Jan Richardson	Richardson is the author of <i>The Next Step Forward in Guided Reading</i> , <i>Guided Reading Teacher's Companion</i> , <i>Next Step Guided Reading in Action</i> , and other texts. (Richardson, n.d.)

Before doing any formal reading assessments, the teachers said they started the process by getting to know their students through conversations, observations, and one-on-one conferences. As a participant of the NL focus group pointed out, these methods often allowed them to identify students who were having difficulty.

I find they avoid a lot of tasks that have to do with reading and get bored or frustrated.

They don't really always let you know they're struggling with reading, but to us, it's

probably obvious because they hate anything that has to do with reading. Avoidance, for sure. (FG2, NL)

Another teacher noted that watching her students in action was important in terms of determining their reading and writing ability. She said this allowed her to see if they knew the sounds that corresponded to the letters and how to form them (FG1, NS).

One teacher said it was essential to watch her students carefully to see if they knew what a just-right book for them looked like and if they could select one independently. Checking for early reading behaviours, such as one-to-one matching, was something else that could be done through observations. Once this was done then the teacher could move on to more formal methods of determining a student's strengths and challenges in reading. She said this meant employing running records using the Fountas and Pinnell kit to "gather some more information in regard to finding a specific or appropriate instructional reading level for them, and to assess their comprehension and fluency" (FG1, NS).

At the beginning of the school year, some of the teachers said that they also went through a student's previous school records to see what types of interventions the child may have had in previous years.

So, I'll dig deep...to see if there're any personnel files there that I need to be aware of, some special things going on. Check out their report card and the comments from grade primary, as well as, if possible, chat with their previous teacher, just to kind of get a grip on how they were as a student before they came to me. (FG1, NS)

Another teacher noted that if they were having concerns about a child's reading progress, they may also call the student's parents and talk to some of the school specialists,

such as the Early Literacy Support or Reading Recovery teachers to gather more information. When asked what other assessments they used to assess reading, the teachers from Newfoundland said they tended to go with the running records included in the program that was mandated by their school board: “Fountas and Pinnell is pretty pushed with our Board, so we are focused on that” (FG2, NL).

A teacher from Nova Scotia said her staff also used Fountas and Pinnell in conjunction with texts by author Jan Richardson:

What we’ve discovered is that the Jan Richardson is a great way to teach us as teachers, how to do the same thing that the Fountas and Pinnell phonics book is having as activity ... I love things that come in an order. (P6, NS)

Using running records to determine a student’s reading level was common amongst the teachers, with fall and spring assessments designed to determine students’ fluency, accuracy and comprehension. One of the teachers noted that these reading records can help the teacher uncover hidden challenges the student may be facing:

Sometimes it’s a real eye opener because a lot of kids can sort of fake it until they make it, until it gets right down to the nitty gritty, and you ask them, what would be another title for this story if you could change that title? And they go, uh, like they don’t even know what the story is about. (P5, NS)

Despite the popularity and, sometimes requirement, for teachers to use running records to assess their students’ reading progress, some teachers pointed out that they didn’t feel confident in their ability to fully understand and use the results of these assessments to plan further instruction and assist their students. Some said they tended to just use them to assign

the student a reading level. One teacher said she remembers being taught, in her undergraduate education program, how to *complete* a running record with a student, but not what to do with it after it was completed. She said she was not taught the next steps.

So, it's those next steps on what to do once you have collected, let's call it the data, so you know where to go. Instead of....do the running record, throw it in your binder so you have something to work on for report cards, I want to know how to use that information to better my teaching, whether it's a whole group lesson, or small group, or even one-on-one. (FG1, NS)

In terms of where teachers found support for their questions around early reading instruction, the teachers in this study reported that they found their best source of support came from within their own school.

I mean, my biggest PD is the teacher down the hall, really, right? The more experienced teacher or what they do. I've had to learn from them in a way, because it's either that or do a lot of research online on my own time or whatever. (P5, NS)

This sentiment was also expressed by a teacher from Newfoundland.

I even find for myself, some of the most beneficial learning experiences I have had, is just going into other teachers' classrooms and watching them teach ... But often, we're too busy prepping or correcting, or preparing for the next day, that we don't have that time to do those things, and to learn from our colleagues. Because you know, our colleagues are the best resources we have. (FG2, NL)

This support was particularly important when the teachers noticed that a student was having difficulty with some aspect of the reading process. One teacher noted that schools are



full of teachers and specialists with a vast range of experience; taking your concerns to one of them can result in gaining new strategies before going the official route of taking a student to the school support team (FG1, NS).

All respondents reported that once they had tried a variety of informal strategies and instructional methods on their own, and did not see success, they followed a similar process to access more formal support. This involved referring their students to a group most often referred to as “team”, which they described as a school-based group made up of school specialists, like the school psychologist and speech pathologist, resource and learning centre teachers, literacy coaches, administrators and others. The role of the team is to provide additional guidance to the teacher for classroom instruction and to suggest or offer additional reinforcements, such as resource support or an assessment by a school specialist. Despite the support the teachers said they received from the members of their school team, some admitted that this didn’t always lead to a quick solution. “That process can be really daunting and really long and can take quite a while to get those students the services they need” (FG2, NL).

The teachers in the Newfoundland focus group explained that their system for reading support for students was based on a “pyramid of need”. For French Immersion students, the process was even more challenging, “So...very rarely do we ever get extra support in our classroom” (FG2, NL). Another teacher in this group added, “We’ve often been told that if students are having difficulty in French Immersion, then they should come out and go back to English. That’s been their support” (FG2, NL). They acknowledged that moving a child out of French Immersion and into the English program does not necessarily solve the problem:

“Even within the English [program], we don’t see the resource teachers as much as we need to” (FG2, NL).

There was general agreement amongst the participants that there were often “huge waiting lists” for specialists, such as school psychologist and speech language pathologists, that could span 1-4 years before a child could be seen. One teacher from the Newfoundland focus group described the very long, detailed process of accessing these services as “scary” noting that she worried about how these children would continue to move forward without this support.

One of the teachers from PE praised the *Foundations* program, that she was piloting in her kindergarten class, as being pivotal in terms of allowing her struggling students access to resource support.

One great thing about Foundations is that you have a mid-unit check. So, you do a little assessment, and if the children do not reach 80%, those children are then moved on to resource. Before, here, we never had resource in kindergarten, but now with Foundations, those children that did not make the 80% are moved to resource, and she works with them to bring them up to that 100%. So, it’s phenomenal. (P11, PE)

The teachers interviewed for this dissertation were clear that they thought their strongest support network came from within their own school; however, they also noted that it was helpful to have materials and programs to assist with their lesson planning and instruction.

### ***Self-efficacy in Early Reading Instruction***

As was illustrated in the Literature Review above, the importance of teachers having strong self-efficacy in the area of early reading instruction is vital if they are to help their students learn to read.

When asked how confident they were about their ability to teach reading to early elementary students and, in particular, those who have difficulty learning to read, approximately half the teachers expressed self-doubt.

I know I was trained in a more whole language approach. And more and more, I don't know if it's because I have more English language learners, but I feel like they need a systematic phonics instruction, a lot of my kids. And I don't have training in systematic phonics instruction, and all of my students are not able to go to early literacy support...I have skills on my own, and I know how to read, and I think I have a lot of knowledge, but in order to reach a whole class of kids, I oftentimes feel overwhelmed and swamped, and underequipped. (FG1, NS)

Another teacher also expressed concerns that she felt she lacked the ability to help some of her students. She said that working as a classroom teacher for years has helped build her confidence but "almost every year there were one or two students who, I couldn't get them to move. They struggled with reading, and I didn't know what to do" (FG1, NS).

She acknowledged that her frustration with not knowing how to help these students led her to enroll in the *Reading Recovery* training program. This training, she said, has helped her develop the skills necessary to reach many of the students she couldn't help before. It also led to an increased level of confidence about her ability to teach early reading.

It has totally changed my lens in regard to assessments and instruction for literacy. It has been such a gift, and I wish I knew then what I know now... And my confidence is growing, but I'm getting a lot of professional development and support from my teacher leaders. (FG1, NS)

One teacher from Nova Scotia expressed that she felt that she hadn't been properly prepared to teach early reading. She noted that neither her undergraduate education nor the professional development she had received once she started teaching had ever offered explicit instruction on how to teach reading. This has led to her trying to teach herself using online resources, after school hours, in an effort to develop her understanding of early reading instruction.

I don't know if I'm very confident in my ability to help those very struggling students. So, the average kid that just needs a little bit of extra guidance, I feel pretty good about that. But I don't think I'm qualified to help those really struggling kids that need a lot more attention, and a lot more strategies. (P5, NS)

One of the teachers expressed that she felt confidence was a process that comes with experience, education, and a desire to always keep learning. As well, knowing that she could rely on her fellow teachers and the specialists in her schools was essential. "So, when I'm not as confident as I should be, I have a good team behind me that can help me" (P10, PE).

One of the teachers from Newfoundland pointed out that despite having been a teacher for over a decade, she still finds she learns something new every year and that this helps her to be a better teacher of reading.

Every time I do a new course, I've learned different methods, I've learned different strategies. What I did was good, I thought at the time, but until you know better you do better. [For sure.] So, I guess I'm still learning and yeah, I've done the best I could I guess at the time. (FG2, NL)

Her fellow focus group participants agreed.

Yeah, 100%. And I find what works one year with a set of students might not work the next year. So, I mean, you're constantly having to learn and to grow, and to practice new things. (FG2, NL)

During a later discussion in the Newfoundland focus group, the teachers agreed that with enough resources and time to really understand a child's needs, they believed they could help more children, as the following statements from the transcript show.

- I think it's more about what to do when you see this problem. Identify different areas, but what works for one doesn't work for all. Having the available resources to be able to help all children, it's so vast. It's I guess having many resources to choose from, would be helpful.
- Yeah, and time, just having more time. I think most of us professionals, like teachers, we could go find a way that'll work, if we had the time.
- Absolutely. I think that's the key thing there, and being able to plan for your different learners.
- Yeah. I feel confident that I could reach most children if I really just could focus on them enough. (FG2, NL)

Although some of the teachers said they had concerns about their ability to teach early reading, in particular in the area of phonological awareness, it was positive to note that they felt they had somewhere they could turn when they ran into difficulty. All of the teachers mentioned the importance of having a strong school support team. They also referred to the lack of time needed to give attention to individual students, due to the size and make-up of their classes.

### ***Explicit Education in Reading Instruction for Early Elementary Grades***

The teachers interviewed for this study overwhelmingly expressed that they felt schools of education needed to explicitly teach teachers how to teach reading, some referring to it (as I did), as the “missing piece” in their education.

I don't feel like I really learned the nitty gritty of how to teach reading. It was just sort of like a theory, oh, in grade one they learn how to read these little words. In grade two, they learn bigger words. But there weren't any real tangible lessons on how to go about doing that. (P5, NS)

Some said that the focus of their undergraduate reading program was on, what they referred to as, whole language and fostering a love of reading, and that they wished there had been more focus on explicit instruction in phonological awareness. As stated in an earlier section, others noted that they learned how to administer reading records in their Bachelor of Education (BEd.) program, but said knowing what to do with that assessment after it was completed wasn't discussed in as much detail. They said they would have liked to work through different reading strategies - which are most effective, how to you employ them, use them in the classroom, what do you do after problems have been identified? One teacher was adamant

that the BEd. program needed to change. She said students should have been assigned texts that taught the “bare bones basics on how to read”.

They need to teach us to teach the subjects. So, in the math they did the Van de Walle book for math, which I still use now because that math teacher did teach us how to teach math, by teaching us where to find the resource that would link up best with the curriculum. So, that’s what needs to happen in literacy. (P6, NS)

She added that this lack of instruction of pre-service teachers did a disservice not only to them but to their future students. Another teacher agreed that more explicit instruction was needed so that teachers graduated knowing what to look for in terms of early learning behaviours and skills.

We did talk about running records and lots of great things, but just really explicit instruction on what early reading behaviours are, what they need to have under control before, the kind of progression would have been kind of nice. (FG1, NS)

One of the teachers who had recently received her Reading Recovery Certificate admitted that she took the training, in part, to help fill the gaps in her reading education.

One of my biggest reasons why I decided to take this on is because of my struggles with teaching reading and writing in the classroom. And this was my way to get full training PD for a whole year, that I could then bring into the classroom. (FG1, NS)

Another teacher in the group who also took the Reading Recovery program said she wished that some of these lessons had been taught in her undergraduate education program. In particular, she said that the Observation Survey, an assessment tool that is part of the Reading

Recovery program, was a valuable asset in terms of learning more about a student's reading level.

I wish I'd had that as an early elementary teacher, to have training in those tasks because it's such a great way to gather that information, and find out your students' strengths and challenges. (FG1, NS)

Another teacher stated that this lack of explicit training in reading instruction for early elementary grades has led to a lack of confidence in her teaching ability. "I still don't feel very confident in teaching all those things, in case I make a mistake or say something wrong" (P5, NS). She said this type of knowledge was necessary to her, even as a grade 3 teacher, because she often had to go back and teach her students basic reading concepts. "And it's not the previous teacher's fault. It's just that it's sort of been overlooked I feel, both in terms of BEd. programs and practicums, and then in lack of professional development."

The teachers from Prince Edward Island noted that they came from a different educational background from the other teachers in the study. When Prince Edward Island integrated kindergarten into their public school system in 2010, they invited certified early childhood educators, who had previously worked with this age group, to complete a special, one-time, education program that would allow them to teach in the public school system (P. Annear, personal communication, October 27, 2021; University of Prince Edward Island (UPEI), 2010). UPEI created an expedited, two-year Bachelor of Education (Kindergarten) program that allowed kindergarten teachers who had previously worked in the private sector to continue working in the new public system.



When they were asked if “there was anything they wished they had learned in their degree program that they had to learn through experience” the PE teachers responded that they generally felt well prepared because their degree was focused solely on kindergarten. While they noted that they often relied on the support of their colleagues when they had concerns about a child’s reading ability, they did not mention a lack of confidence in this area.

During the focus group discussion on training in phonological awareness during their BEd. programs, one NS teacher said she didn’t remember being taught much in this area; however, she wondered aloud if any education program can really prepare for all of the different scenarios one will encounter as a teacher.

I do remember ... teaching about and fostering a love of reading, using rich literature to engage the children. Yeah, I don’t know. Sometimes I wonder, can a program prepare you for the insanity that is a classroom? (FG1, NS)

Another teacher in the same focus group agreed and said that while she would have appreciated having been explicitly taught the basics of early reading instruction, she felt BEd. programs couldn’t possibly prepare student teachers for every situation they may face in the classroom, “which is why PD later on, once you know what’s going on, or have an idea and know what you need to know, would be beneficial” (FG1, NS).

In summary, the teachers interviewed for this study were practical about the limits surrounding what can and should be taught in an undergraduate education program, making it clear that they knew it couldn’t cover everything they needed to know; however, they were also adamant that they felt more attention should be paid to the teaching of phonological

awareness, as they believed this knowledge was essential to them being able to teach early reading to all of their students.

### ***Professional Development in Early Reading Instruction***

As the participants noted in the section above, the Bachelor of Education program cannot reasonably be expected to teach everything teachers need to know about reading before they enter the classroom. This means that professional development in this area is essential if teachers are to stay up to date with the most recent research on early reading instruction.

All of the teachers in this study expressed interest in having professional development (PD) around reading instruction for early elementary; but most specified that they would prefer to have that PD offered in their own schools by their own resident experts (e.g., Early Literacy teachers, Reading Recovery teachers, Resource, and Learning Centre). They expressed that ongoing training in this area would help to ensure that they continued to learn new and updated ways of helping their students achieve success with reading.

Although a number of the teachers reported that previous PD in early reading instruction had been useful and transferrable to the classroom, none of the teachers reported having had any specific PD in this area in years. Many of them said that even the PD days that have been held in their own schools haven't been focused on literacy; instead, they have been concentrated in other areas, such as culturally informed pedagogy. Some said that due to Covid restrictions and a shortage of substitute teachers, PD in general has been seriously curtailed.

I know my last PD for literacy that was out of the building was eight or nine years ago, and it was around grade two reading assessments. ... I was a new teacher [and] I

understood that I don't know what to do, so I went there with an open mind, and it was amazing. But since then, there's been nothing offered for literacy. (FG1, NS)

One teacher was frustrated that reading instruction PD for the early elementary grades was not a priority.

It baffles me that that is not a focus....to me, it's a crisis. Especially watching the expectations lower and lower, and lower and lower, I'm thinking, well why can't we just have some help, so that we don't have to lower the bar? We can just keep the bar the same, and just meet it. (P5, NS)

She went on to say that she thought it would be helpful to have literacy coaches work with classroom teachers to teach them the basics of how to teach students to read. This could include letter sounds, which she said many of the students don't know, and simple rules around decoding and spelling.

When asked if she had received much PD in reading, a PE teacher noted that while she had received a number of reading resources over the years, she had been offered little or no PD on how to use them. Resources without proper instruction for implementation are not particularly useful to time-crunched teachers, she said, as they have little free time available in their day to teach themselves how to use them.

We had this huge resource...on phonological awareness. And it had great information in it, but it's this huge, thick book where you have pages and pages. It's not reader friendly. It's not teacher friendly. You know how busy we are. (P11, PE)

Another teacher from a different province added that this lack of training made it difficult for teachers to best utilize the resources they have been given:

I was supposed to receive professional development on those LLI [Leveled Literacy Intervention] kits this year, and it kept getting canceled. So, I mean, it's something that I'm supposed to be using. It's something that has been in our schools for years, and I still don't have training on it. So, I have been using it, but probably not as well as I could be using it. (FG2, NL)

While one teacher said she wished that teachers could request specific PD on early reading behaviours as necessary, another noted that she and her co-workers took matters into their own hands and organized the school-based PD they felt they needed. The *Early Literacy Support, Resource, and Reading Recovery* teachers offered "lunch and learns" and coordinated workshops during school-based PD days (Note: Descriptions of these positions can be found in the Definition of Terms).

And those are always great because you're already friendly with those people since they're your colleagues. So, you don't feel silly asking ridiculous questions, and most of the time they know the students that you're asking questions about, and it's a really good chance to get some tips and tricks. (FG1, NS)

Another teacher noted in her interview that they had done a similar thing at her school.

We were able to sit down and look through old running records of our own kids, and assess who should go in what group, where we were having misunderstandings in the running records, what we could do both whole class, small group. (P6, NS)

One of the teachers stated that, in her experience, sometimes PD is given without considering what teachers already know or need to know. Teachers may be required to complete PD that is repetitive because they have moved from one school to another. "[The]

Fountas and Pinnell [training] with our reading records? I did that one, three times. So...some things are really redundant, and then in other areas there are huge gaps" (FG2, NL). A teacher in the same focus group added that she had been required to attend an introductory course on reading records, despite having already done one. When she asked if she could attend a more advanced version of the PD, which was also being offered, she was refused:

So, I went to it, and I felt like, I mean, I'm a new teacher and I have a lot to learn. But I felt like with that [professional learning] it was a waste of time. I felt like I already knew what I was learning, so I could have probably been doing something else. (FG2, NL)

Another participant expressed that she felt the provincial Department of Education doesn't understand that teachers want practical explanations and says what they give instead is often a "band-aid solution" (P6, NS). She noted that some of these suggestions fail to take into account actual school conditions, such as crowded classrooms and the various needs and abilities of the students. Another teacher reported that trying to implement some of these recommendations, such as working with students in small groups, is often not feasible.

The needs alone, behavioural, academic, and even health needs, I mean, they're astronomical compared to what I feel they were even 15 years ago. So, it's really difficult to identify those small groups, or not just identify them, but have the time to work with them the way that you should work with them. Because sometimes, I mean, a kid could be throwing a chair across the room as you're trying to work with this small group, and it's nearly impossible. So, that's a real struggle as a classroom teacher, I find. It's a real thing. I know everybody goes through it. (P5, NS)

Most of the teachers agreed that the majority of the PD they have received has been offered in their own schools; some, like the teacher quoted below, felt it was the best.

I will be quite honest; I don't like the PDs from the Board. The PDs from the Board are by people who are out of the school system, not in the classrooms. They don't know the specific kids you have that year. So, whatever example they're pulling is a child you don't know. (P6, NS)

She went on to say, "I think if they use the ELS, Reading Recovery teachers more for the PDs, I think a lot of teachers would feel more comfortable requesting their aid."

The teachers interviewed here expressed frustration that professional development in early reading instruction has not been offered in many years. While they recognized that the pandemic made any PD difficult, they said this lack of specific PD in reading had started before the onset of Covid-19. The teachers said that they would like to see future PD in early reading instruction, but most said they preferred that instruction to be offered in their own schools, given by their own staff who had been trained in this area.

### ***Stress and Growth Throughout the Pandemic***

In Atlantic Canada, students and staff left school for March Break, 2020 not knowing they would not return until September. With the onset of the pandemic, schools were closed from March Break to the end of the 2019-2020 school year. Like the rest of the world, everyone scrambled to find a way to continue to support student learning amid the growing Covid-19 restrictions and the ever-changing isolation protocols. Schools moved online and teachers rushed to make their lessons suitable for distance learning. Governments set re-opening dates

throughout the spring, only to change them at the last minute based on rising levels of infection. This was a time of great uncertainty.

When asked how the pandemic affected their teaching of early reading, one teacher summed it up simply by saying, “A lot. The short answer is a lot” (P6, NS).

The teachers shared that teaching during a global pandemic had been “stressful”, “exhausting”, and “challenging”. One teacher said that the “not knowing” what was going to happen from one day to the next made things tense. “I found you were always on edge waiting to be sent home again and trying to make sure you had a plan in place if you were” (P10, PE).

One teacher said she missed the opportunities to collaborate with colleagues and gain knowledge and strength from these interactions.

That’s the one thing I love about this profession, is the collaboration and coming together and problem solving. [D]oing this online stuff and not being able to gather, that has been a very difficult thing for me. And I think it has affected the collective efficacy in our buildings and student achievement. (FG1, NS)

This sentiment was echoed by a kindergarten teacher from PE who said the lack of interaction with other kindergarten teachers affected her professionally and personally.

Even at conventions, I would run into other kindergarten teachers, and you could just talk with them about what they’re doing, and what you could be doing. So, I kind of really missed that whole social, seeing other kindergarten teachers part. (BB, PE)

The teachers were quick to point out that the March 2020 sudden move to online instruction left them feeling unprepared. They had little time to change their lessons and had to resort to instructional methods they would never have considered in the past. “So, really it was

like, here's some busy work, good luck, see you in the fall. I mean, it was almost a nightmare" (P5, NS). In terms of helping students move forward through the curriculum outcomes, some agreed that their focus was on "maintenance not progression", with one teacher referring to online Covid-learning as "lost time".

In the NS focus group, participants got into a discussion about online teaching and how their expectations had changed, as the following quotes from the teachers illustrate:

- Teaching online is completely different, and it takes a lot longer to get through things...I mean, you just can't do literacy intervention...it is impossible to do these evidence-based literacy interventions online. So, it's been very challenging, and my students have not been progressing. Right now, I'm just trying to keep maintenance and not regression.
- Well said, [Name]. Trying just to keep them going, and keep them interested while online, rather than progressing because that's exactly what I see when I'm working one-on-one with my students too. (NS, FG)

In terms of equity during online learning, the teachers acknowledged that while some students had computer access and parental support, others did not. This meant that not all students logged on during scheduled class-times or completed the online assignments. One teacher referred to a group of students she called her "faithful nine", referring to the small cohort of nine students who turned up regularly for online lessons (P6, NS). When teachers were told they couldn't send class books home with students, due to Covid cleaning protocols, some teachers said that while they offered access to online books, few students accessed this



resource. One teacher said she missed that “book in hand” that they used to use to encourage a love of reading, adding that reading books online just wasn’t the same.

One of the teachers observed that some of her students’ reading skills regressed when they had to move to reading online. During online assessments, she noticed that those students, who had previously been reading paper books fluently, started skipping lines and demonstrating weaker processing and fluency skills.

Another teacher offered a different perspective, noting that some of her students thrived without the distraction of being in a busy classroom.

I had some kids that excelled with their writing and reading, I guess, well, probably more writing for what I’m talking about right now. They excelled in that kind of learning environment because the distractions were so much less. And I praised them up so much, and then when we went back, I tried to get them to keep going, and they reverted kind of right back to where they were before. (FG2, NL)

In September 2020, the teachers in this study returned to the classroom to begin a new school year with new students; however, things had dramatically changed since they had left in March. When asked how teaching reading in the classroom during Covid-time was different from the *before* times, they shared that the restrictions meant that there were a lot of things missing from their reading program. Maximizing physical space to ensure the required distancing measures were in place meant that they often had to give up some of their guided reading spaces or quiet reading nooks. Since students were not allowed to share classroom supplies without sanitizing every time an item passed hands, valuable classroom materials were

often not used. One teacher pre-emptively taught her young students how to use a keyboard to prepare them for the possibility of more online learning.

Some of the teachers said that the use of masks adversely affected how their students learned to pronounce sounds and words:

I feel like there was such a step back for kids learning how to pronounce. So much of it has to do with mouth formation, like the position of the tongue. And yeah, COVID has affected all of those things. (FG1, NS)

Another teacher agreed and added that not being able to hear because of masking made things difficult for both teachers and students.

I can't hear them, they can't hear me, I can't see their mouth moving, they can't see mine moving to try to pronounce words. And it's very important, your teeth and your lips and your tongue, and all of those things when you're trying to read is so important, especially for the kids that don't know how to pronounce some of their words. (P5, NS)

One of the primary teachers who participated in the study noted that her students arrived in September 2020, less prepared for school than students in the past.

Well, I found the class completely different from any other class because they didn't have any daycare or home care experience really. They'd been home up until they came, so that kind of stalled us a bit because we had to learn more of the rules, and how to be in kindergarten before we could really switch into the really hardcore stuff. And a lot of kids came in without some of the basic skills that they normally would have come in with. (P10, PE)

Some teachers found that after being online from March 2020 until the end of the school year, they had to do more assessments in September 2020 than normal to determine student reading levels. They understood that some of their students may have regressed from their previously held reading level, so this meant going back and trying to determine what level was appropriate for them.

When students came back into the classroom, they weren't necessarily at the same level where they were the year before. So, it took a lot more work to figure out where they were with regards to the scale that we use. So, for some children we were doing [approximately] four and five reading records. (FG2, NL)

In my experience as a classroom teacher, when elementary students return to school in September, teachers generally conduct reading records using their reading level from the previous year as a baseline from which to start. It usually takes one, maybe two reading records to determine the child's reading level. The above quote illustrates the difficulty teachers faced when students returned in September 2020. Completing one reading record per child represents a significant time commitment on behalf of the teacher; completing four to five would be extremely difficult.

The teachers did make clear that despite the many challenges the pandemic threw their way, their perception was that they learned a great deal from the experience. When the new school year started in 2020, they were able to transition back and forth between face-to-face and online teaching, when necessary, with much more confidence: "I think in September there was a big change, but this past lockdown this year, we went seamlessly into online, and then seamlessly back to in person" (FG2, NL).

Another teacher in the same group agreed:

So, this year when we got shut down, we had a much better idea of how to implement our language arts programs virtually. And you really saw people working together and coming up with resources. You made one-on-one conferencing connections with your kids, and you could still do the small group activities and whole group activities, and it was definitely challenging. (FG2, NL)

Another positive to come out of the changes made during the pandemic was that some teachers were given additional resources including a collection of new online readings for French Immersion, Chromebooks, and access to Google Read and Write. The teachers who were able to access these resources agreed that they were of great benefit to their students but were unsure if these resources would continue to be offered long term.

There can be no doubt that Covid-19 changed the way schools operate. The rise and fall of cases as well as the discoveries of new strains of the virus has meant moves from lockdowns to online learning back to face-to-face learning, sometimes with only a few days' notice. The teachers interviewed here demonstrated their dedication to their students by adapting and changing their approach to reading instruction as the circumstances demanded. They continued to keep students at the forefront of their instructional planning and, despite the many challenges they faced, kept working to help their students develop their reading skills.

## **Conclusion**

The participants in this study were very forthcoming with their answers to the interview questions resulting in a great deal of valuable information on early reading instruction being shared. Individually, each of these themes tells its own story; together, they illustrate the

environment, beliefs, challenges, and aspirations of the teachers interviewed. When analysed in conjunction with the curriculum documents and the literature review, I was able to construct the grounded theory and recommendations described in the next and final chapter.

## **Discussion**

### **Introduction**

This research gives voice to the lived experiences of a compassionate, well-educated group of educators. Each of the 11 teachers who took part in this study shared their experiences and beliefs around the teaching of early reading. In this section of the dissertation, I first go through each of the identified themes from the previous chapter and discuss how they relate to the research literature, and then discuss my grounded theory. Finally, I conclude with the limitations of this research, and discuss recommendations for implementation and future research.

### **The Themes as they Relate to the Research Literature**

The first theme that emerged from the data dealt with how the participants taught the required curriculum outcomes in a way that met the needs of the children in their class. Vaughn et al. (2015) state that adaptive teaching is a strategy used by exemplary teachers. They describe adaptive teaching as when “teachers use their knowledge of students to carefully construct learning opportunities with and for their students” (p. 541). It involves teachers being responsive and improvising when they realize a lesson requires a change.

Students enter school with vast differences in prior knowledge, English language proficiency, and life experience (e.g., Farkas & Beron, 2004; Hart & Risley, 1995, 2003;

Lesaux, 2012), and it is incumbent upon teachers to adapt to these students' differing needs. (p. 540)

The authors note that adaptive teaching aligns with social constructivism, as students and teachers work together to shape instruction.

The participants in this study demonstrated adaptive teaching methods when teaching early reading. One teacher shared that if her students didn't understand a concept that they were supposed to have learned in a previous grade, she would change her instruction to go back and teach to those gaps. Another teacher created materials specific to individual students: "I like to pick books that are going to give them success. In the past, I've written books for the kids using their pictures. I kind of set them up for success before we start" (P10, PE).

Some of the teachers stressed the importance of getting to know their students well, noting that this knowledge is beneficial not only to build trust, but also to help guide instruction. Vaughn et al. (2015) state that teachers who know their students well are able to adapt their instruction on the fly. This allows them to adjust their instruction in the moment to meet the needs of their students.

The second theme that emerged from the data dealt with the significance of reading resources and human supports. The teachers interviewed for this study spoke about the importance of working in conjunction with the teaching support team at their schools. This collaborative approach to student success is one of the main messages put forth in Nova Scotia's Inclusive Education Policy (Njie et al., 2019). The report notes that while classroom teachers are responsible for the education of all of their students, they are not expected to do this alone. "Learning support teachers support classroom teachers by developing and

implementing strategies to promote students' well-being and achievement. They may also work directly with individuals or small groups of students" (p. 3). It appeared that the teachers in this study experienced and appreciated this important support.

According to Hattie (Visible Learning, 2022), collective teacher efficacy is the number one factor that influences student achievement. Donohoo et al. (2018) explain that collective efficacy refers a group's level of confidence as a determinant of their success. All the teachers in this study referred to the importance of having a team they could rely on if they needed support.

I know we all have so much experience in all of our buildings, so bringing it forward to somebody else to get an outside opinion before going through the team can also give tips and strategies before going the other route. (FG1, NS)

The importance of teacher self-efficacy in early reading instruction was the third theme identified from the data. Research demonstrates that teachers with a strong sense of self-efficacy set the tone for the class, resulting in positive outcomes for both students and teachers (Zee & Koomen, 2018). As Zee and Koomen observed, some studies have indicated that students demonstrate improved academic achievement, motivation, and self-efficacy when teachers demonstrated higher levels of job satisfaction and lower rates of burnout.

Unfortunately, approximately half the teachers in this study reported having low levels of self-efficacy in early reading instruction. One teacher responded that she doesn't feel confident teaching students who have difficulty learning to read. She said she has tried to teach herself about phonics and the sounds of letters by researching the topic online, but hasn't had much success. She said she thinks she should have been taught these things in either her pre-

service program or through in-service professional development (P5, NS). Another teacher noted that although she had times during her career where she didn't feel confident teaching reading on her own, she felt like she had support within her school that she could access:

I know one year, I wasn't sure how I was going to work with that class, and she [the resource teacher] was really good to help me. She took me to see other kindergarten classes and what they were doing, and it was very beneficial (P10, PE).

The data demonstrates a link between self-efficacy and collective efficacy, whereby creating a school culture that promotes a team approach appears to offset some of the negative effects of low self-efficacy. Bandura (1993; as cited in Donohoo et al., 2018) states that "in schools, when educators believe in their combined ability to influence student outcomes, there are significantly higher levels of academic achievement" (p. 1). Although students' academic achievement was not a focus of this study, it seems likely that students benefitted from the schools' collective efficacy.

The fourth theme that emerged from the data involved the early reading instruction that the participants received in their pre-service education program. Hikida et al. (2019) found that there were gaps in pre-service teachers' foundational knowledge of early reading instruction. A significant body of research (EdWeek Research Centre, 2020; Fielding-Barnsley, 2010; Louden & Roul, 2006; Meeks et al., 2016) has found that pre-service teachers feel they haven't received enough instruction on how to teach foundational reading skills, such as phonological awareness. Bratsch-Hines et al. (2017) found that "many early elementary school teachers are not prepared to teach struggling readers or students with or at risk for learning disabilities" (p. 270). The Nova Scotia Commission on Inclusive Education (Njie et al., 2019)



reported on a Nova Scotia survey that asked recent NS graduates to rate their experience in the BEd program. The results showed that 89% of graduates recommended that greater priority be placed in the future on “adaptations to meet diverse student learning needs”, while 84% recommended that priority be placed on “teaching strategies for literacy” (p. 11).

Some study participants suggested that pre-service education programs should include explicit training on how to teach according to the SoR. “It needs to be the science of literacy that needs to come in, science of reading, science of writing, science of word study. It needs to change” (P6, NS). While some felt that this was a serious gap in their education, others, like the participant quoted below, also recognized the challenge of addressing everything involved in teaching in a two-year program.

Just in terms of the B.Ed. program in itself...it is so important to know the ins and outs of reading instruction, and how complex it is. But at the same time, until you’re in a classroom of your own, faced with doing it day in and day out with all these little people staring at you, trying to figure out what they’re supposed to do too, I think until you get to that point, you don’t fully understand how complex it is. (FG1, NS)

As discussed previously in the literature review, there is a large body of research that demonstrates the importance of instructing students using methods identified by the SoR as soon as they start school. One of the biggest issues researchers have identified involving the implementation of this instruction is how teachers can combine SoR with culturally responsive pedagogy. Vaughn et al. (2020) recommends that researchers work together to teach SoR in a way that respects the knowledge and past experiences of teachers and students (p. S303).

This type of research will advance the SoR and understandings of effective teaching of reading, thus fracturing this historical debate into an accessible space for scholars and educators to explore and examine the complexities associated with the teaching of reading that values students' resources and backgrounds and acknowledges the complexity of teaching. (p. S303)

I believe this approach is the path forward to support teachers in their quest to help more students learn to read in the early grades.

The fifth theme of ongoing professional development (PD) for teachers acknowledges that teachers are professionals who never stop learning and growing. The participants in this research recognized the importance of professional development and indicated that they appreciated when it was offered; however, most of the teachers stated that they hadn't received PD in early reading in many years, if at all. A study by Al Otaiba et al. (2016) demonstrates the significance appropriately designed PD can have on teachers' early reading instructional ability. Their study found that teachers who took part in professional development in early reading instruction "improved their differentiation of instruction relative to controls and that students in treatment classrooms outperformed students in control classrooms" (p. 471). One of the participants in this research study summed up the importance of PD by expressing:

I don't know if any previous teaching in the B.Ed. program would fully prepare you for what happens once you actually are in the trenches and going through it. Which is why PD later on, once you know what's going on, or have an idea and know what you need to know, would be beneficial. (FG1, NS)

The final theme that emerged from the findings was the impact the pandemic has had on the teachers in this study. As one teacher noted, “It’s not your typical year, and it’s not pleasant at times” (FG1, NS). Moving from teaching in person, to teaching online, and then back again was difficult, but the participants said they learned how to adapt to these new worlds of online instruction and in-class instruction with masking and social distancing. “I think in September there was a big change, but this past lockdown this year, we went seamlessly into online, and then seamlessly back to in person” (FG2, NL).

Baker et al. (2021) noted that although the pandemic has had negative impacts on teachers’ mental health, it has also provided some benefits.

Teachers experienced considerable stress as a result of the COVID-19 pandemic, which was related to poorer mental health, coping, and teaching. At the same time, teachers reported resiliencies, which were related to better coping and teaching. Supporting teachers’ well-being is critical to prevent significant adverse consequences for teachers, their students, and the education system as a whole. (p. 491)

Teachers have proven their resiliency and commitment to education throughout this pandemic, and the teachers in this study are no exception. Their dedication to their students and their decision to continue learning and growing as educators makes them powerful examples of how teachers have risen to the challenge of teaching reading during a pandemic.

### **Combining the Themes and Theories**

As the research literature demonstrates, there are a myriad of reasons a child may have difficulty learning to read; however, as Beswick and Sloat (2006) point out, teachers and schools should not be expected to correct all the challenges a child may face. What teachers can

influence, however, is the environment of the classroom and the type of instruction they deliver, with the goal focused on teaching children how to read well before Grade 3. “While preventive early intervention during grades K-2 is the most effective way to reduce the rate of reading failure for all children, it holds the greatest promise for those who are disadvantaged” (p. 25).

One of the participants, who stated that she was rather “trepidatious” about teaching reading, said she felt that her students’ reading was compromised because they were unable to decode.

And I see more and more kids, because I’ve taught a range of grades, and I feel like there are discrepancies, and there are so many things that they lack. They can’t really decode words, and then of course, in their writing it’s not great either because they can’t spell or they don’t know their sounds, and things like that. So, I feel like the reading is really tough. It’s the biggest problem actually, I feel in grade three. (P5, NS)

She went on to say that for her to be able to help them in this area, she needs training.

I know that they have some wonderful literacy coaches who do amazing things in the school. But I think if they could come in and work with teachers to teach them right from the beginning, the basics of how to teach kids how to read. And I mean, the basics. This is how you teach the word, “is”. It sounds like, if you know your sounds, if you know your letters, “is”, sounds like it should be [iz], right? So, how to go about teaching kids those little words. (P5, NS)

Another participant stressed the importance of having in-school support when she was struggling with parts of reading instruction.

And so, then I asked one of our ELS teachers if she could give me a hand with, how do I get, because again, they know their letter sounds, but I can't seem to get them to understand that in the middle of reading, maybe you need to switch your vowel sounds. If the word that you're saying as you're trying to, not saying the word, sound it out, but read it like a word and listen to the sounds and saying all of the parts doesn't make sense. I couldn't get that lesson in their heads, no matter how I would rephrase it. (P6, NS)

Although the participants were not specifically asked about their approach to reading as it relates to sociocultural and cognitive differences, some did mention the challenges faced by students who were new to Canada and spoke very little English. One participant said that if a student at her school was receiving English as an Additional Language (EAL) support from an EAL specialist, they were unable to access any additional supports, including resource, for the two years they received those services.

It's a little challenging because sometimes you have children who get to be on the English language caseload for two years, but they're not able to receive any other services. But we oftentimes get a lot of kids who also need that extra help, they could do with early reading support. (FG1, NS)

Much of the literature acknowledges the importance of considering curriculum and pedagogy within the context of sociocultural and cognitive differences (Beswick & Sloat, 2006; Ontario Human Rights Commission, 2022a; Vaughn, 2015; Vaughn et al. 2015, 2020, 2021; Whitley & Hollweck, 2020). It's important to note that almost all participants stressed the importance of getting to know their students as individuals in order to establish a relationship

of trust. While this makes for a much safer and enjoyable classroom environment, it is also helpful when it comes to identifying a student's strengths and challenges. "I think it's important...whenever you can, to do one-on-one conferencing with the child, and really pick up on where their strengths lie in reading, and maybe where they're having some difficulties" (FG2, NL).

Ensuring that early elementary school teachers are capable and confident in their ability to make these decisions independently means they require both pre-service and in-service instruction in research-based methods that include the teaching of phonological awareness and phonics. The data from this study, as well as a solid body of research, demonstrates that many of them do not have this understanding, and therefore cannot teach these concepts to their students (Binks, 2008; Binks-Cantrell, 2012; Bos et al., 2001; Ciampa & Gallagher, 2017; Moats, 2014). Adaptive teaching allows for early reading education that is grounded in evidence-based research, and also allows teachers to alter their instruction in the moment, based on the specific needs of their students. All of the participants in this study shared how they modified their pedagogy and their approach to the curriculum based on the restrictions in schools and the gaps in education brought about by the pandemic.

Reading instruction involves an understanding of what Vaughn et al. (2020) call the "in-the-head" processes (phonics, fluency, problem-solving, vocabulary, and reading), while still paying attention to the "cultural and social dimensions that affect learning" (p. S301). In order for this to occur, teachers needed to be trusted to make instructional decisions based on their day-to-day observations, assessments, and understanding of the students they teach. Paige et al. (2021) state: "Teachers with a solid understanding of the SoR should absolutely modify,

adapt, and innovate to move the field forward and improve student reading. An important part of implementation is learning to adapt the SoR to the local context” (p. S346-S347). An understanding of adaptive theory, combined with the literature review and the data collected in this study, helped me to develop my constructivist grounded theory, which is explained below.

### **Development of Constructivist Grounded Theory**

My theory that students are best supported by teachers who are well educated and trained in a variety of approaches to early reading is grounded in the data and literature review found in this study. These approaches need to include, but are not limited to, the ability to teach phonological awareness and phonics, using an explicit, systematic approach, in a manner that engages students and makes them active participants in the process (Castles et al. 2018; Nova Scotia Department of Early Childhood and Education, 2020, 2021; Petscher et al., 2020). The data that emerges from the Findings illustrates that social justice and constructivist theories are evident and present in the study. As well, the data clearly supports a theoretical framework that combines both self-efficacy and collective efficacy. The participants share the positive belief that they can make a difference through their actions; however, they understand that in order to ensure all of their students meet the goal of being able to read by the end of grade 3, they require the support of both provincial departments of education, local school boards and centres for education, and schools of education. They understand that they need access to PD that supports the most recent research on how children learn to read. The teachers in this study know what they need in order to meet the needs of their students;

despite this knowledge they face a range of systemic challenges and barriers to access the knowledge and skills they know they need to teach beginning readers effectively and well.

The overarching aim of this study was to gain an understanding of elementary school teachers' perceptions of early reading instruction and how they learned, and continued to develop, their instructional skills in this area. In keeping with CGT methodology, this study acknowledges that the voices of the participants are conditional and situated in time and space. By its nature, however, CGT aims for an interpretive understanding of historically situated data. As evidenced in this study, the teachers' comments reflected their determination to learn evidence-based practices and approaches to reading instruction. Their comments further reflect the need for collaboration not only at the school level, but across the system as a whole. In keeping with constructivist grounded theory, however, I am mindful that the generalizations drawn from my work are partial and conditional.

My theory is based on my vantage point and what I bring to the conversation as a former teacher and current researcher. Theorizing about how to improve early reading instruction for all students involves many different approaches and may not fit into one particular box. As Charmez (2006) stressed:

In research practice, theorizing means being eclectic, drawing on what works, defining what fits (see also Wuest, 2000). For that matter, neither positivist nor constructivist may intend that readers view their written grounded theories as *Theory*, shrouded in all its grand mystique, or acts of theorizing. Instead, they are just doing grounded theory in whatever way they understand it. (p. 148)

This definition by Charmaz is also applicable to what teachers do on a daily basis.



The data from this study indicates that teachers want to help their students learn to read and are doing everything in their power to make this desire a reality. They are building relationships with their students, working as a team with other professionals in their schools and adapting their curriculum and instructional methods to meet the individual needs of the children they teach. But, through their stories, they are telling us that this is not enough. They need to be provided with the education and training necessary to understand the basic constructs of language, including phonemic and phonological awareness so that they can, in turn, teach these concepts to their students. Ensuring that teachers have a full tool kit of the best methods and strategies, developed from evidence-based data, is essential if we want to help more children learn to read.

### **Conclusion**

This dissertation has focused on the voices of 11 Atlantic Canadian educators teaching early reading during a global pandemic. The findings that emerged from this data were analyzed alongside the research that has been done on various models of reading, some of the issues that affect reading achievement, the evolution of teacher education, the curriculum of the province where the research is set, and the effects that Covid-19 has had on the participants and their reading instruction.

The review of the literature and the data collected illuminate the gaps that exist in some teachers' understanding of phonological and phonemic awareness. Some of the participants expressed lower levels of self-efficacy when it came to early reading instruction, in particular when dealing with students who had difficulty meeting curriculum outcomes; however, they were quick to add that this was partially offset by being part of a strong school team that could

offer support and guidance when it came to developing strategies and instructional techniques. The participants highlighted that they needed more instruction in this area if they were to meet the reading needs of all of their students. This was confirmed by a large body of research that shows that this is an area where many teachers lack understanding. The teachers did make clear, however, that they did not expect an undergraduate education program to provide *all* the training and education needed to teach early reading in an expert manner. They understood that teaching is a profession where learning continues throughout a teacher's career and is developed through practice, mentorship, and professional development. They recommended that professional development in early reading be on-going and informed by the most up-to-date research.

The participants also recognized that getting to know their students as people and establishing a trust-based relationship was just as essential to their reading instruction as the science behind it. This, they said, allowed for students to take risks and engage in the learning process.

Finally, the participants demonstrated that they cared deeply about their students and their success with reading. In spite of a global pandemic raging around them, they were focused on doing whatever they could to help their students meet their potential. The 11 teachers interviewed for this study have demonstrated resilience, strength, and dedication to learning over the past few years and have earned our gratitude and appreciation.

### **Limitations**

All research has its limitations, and this dissertation is no exception. The pandemic put a number of constraints on the recruitment process causing a need to expand the search

parameters. This meant that the participants were drawn from three separate provinces with three separate ELA curriculums. This resulted in responses that may have been influenced by those differences; however, since all of the curriculums used by the participants were developed from the same Foundation document, I believe this helps to offset some of the differences. Another limitation of this study was that participants were working within the unprecedented restrictions brought on by the pandemic. This may have facilitated a more emotional reaction than would typically be the case; although, based on my personal experience and the results of studies that took place before the pandemic, not being able to meet the needs of struggling readers is often an emotional issue for teachers. A third limitation that may have affected the responses was the requirement from university ethics that all individual interviews and focus groups be conducted online. Meeting in-person and establishing a different level of familiarity and collegiality may have resulted in the participants responding differently. I found interviewing participants online awkward at times and got the impression from some of their responses, tone of voice and body language, that they did as well.

### **Recommendations for Future Practice**

My recommendations for future practice would involve the cooperation and coordination of a number of different bodies and organizations. First, based on the findings and the abundance of research in the area of SoR, I believe the teaching of the SoR, as well as the instructional methods needed in order to use a structured literacy approach, need to be incorporated into undergraduate education programs. I have taught the basics of SoR to undergraduate education students for the past 4 years, as part of the second year Elementary English Language Arts course at a Nova Scotia university. While it is not feasible to teach

everything involved in SoR, it is possible to lay the foundation so that pre-service teachers can continue the learning process once they graduate. It is important that new teachers enter the field with the self-efficacy of knowing that they have at least a basic understanding of the concepts of phonemic and phonological awareness, and how to teach these concepts to beginning readers.

Second, government departments of education, as well as school boards and regional centres for education, need to ensure that early elementary school teachers receive ongoing training, through professional development, in both sociocultural awareness and early reading instruction that is grounded in the most current research on how children best learn to read. This will help them to develop instruction that better meets the needs of their students, resulting in inclusive pedagogy that offers the possibility of early reading success for all students.

Third, teachers need to be respected as the professionals they are. Due to their education, and experience, they offer a vast body of knowledge about both young readers and instructional practices that engage and educate students. It's essential that teachers are part of the research on early reading instruction if we want more students to become successful readers. This will not only improve the trajectory of the lives of individual students, but will help us to build a better, stronger, more inclusive society.

Finally, early research is demonstrating that the pandemic has had a distinctly negative affect on the development of basic reading skills amongst early elementary school students (Spector, 2021). According to a recent Stanford University study, "It seems that these students, in general, didn't develop any reading skills during the spring [of 2020] – growth stalled when

schooling was interrupted and remained stagnant through the summer” (para. 3). The study found that second and third graders were most affected, with overall student fluency dropping by approximately 30%. Although students experienced growth once schools reopened in the fall, it wasn’t enough to make up for the interruption in learning that occurred when schools went online and/or shut down. Inequities that existed before the pandemic were only exasperated by the changes.

It’s quite likely that lower-achieving schools are dealing with a whole battery of problems that educators in more affluent districts aren’t facing,” said Domingue [researcher]. “But there was still growth. The teachers were probably moving heaven and earth to help their kids learn to read, and it’s reflected in the gains. But it’s important to recognize the differential impact on students. (para. 14)

Addressing the widening of the gap between the strong readers and those who struggled before the pandemic will be a focus of schools, governments and researchers around the world in the months and years to follow. My final recommendation for future practice involves providing for immediate identification of struggling readers, so that they can be assessed and appropriate, intense interventions can occur. This will ensure that all students can continue to grow as readers. Governments need to be prepared not only to spend the money to offer extensive reading support to those students who need it, but to also commit to training teachers and specialists so that they can offer these interventions in a variety of formats, from full class instruction to small group support to one-on-one tutoring. A study conducted by the University of Alberta between October 2021 and February 2022 found that students who received 30 minutes of intense phonics instruction, 4 days a week, for 5 months, demonstrated

strong gains in their reading abilities. 82% of participants improved their reading abilities by 1.5 years (Grummett, 2022), while 72% of them no longer required further reading support upon completion of the program. According to one board superintendent involved in this study, teachers have reported that increased reading scores have not been the only positive results to come out this intervention. The superintendent reported, “What they [teachers] are also seeing is a change in their students’ confidence and their joyfulness when they’re coming to the intervention groups” (para. 13). Considering all the challenges students have faced since this pandemic started, anything that brings joy to the learning environment should be a welcome addition.

### **Recommendations for Future Research**

The opportunities for future research in this area are vast. The importance of validating and listening to teachers’ voices is essential when structuring and implementing teacher education programs and in-service professional learning. I believe my research contributes to this line of research inquiry, policy, programming, and practice. As well, my study contributes findings that support the existing literature on the importance of teachers’ ongoing professional development in the area of early reading. To address the reading challenges that students had before the pandemic, as well as those that have been exasperated by the changes to education since the start of it, there will be a need for a great deal of research to be done in this area. To expand upon the research presented here, once the effects of the pandemic on education subside, and the stress on teachers has been lowered, a survey could be sent to early elementary teachers across Nova Scotia, designed to collect a large sample of quantitative data on both teachers’ beliefs about early reading instruction and their levels of self-efficacy in this

area of teaching. This could act as the basis for more qualitative research in the future. Since approximately 30% of NS students are not meeting the basic grade level requirements in reading, we know that more needs to be done; the onus is on governments and schools of education to lead this process. Additionally, existing differentiated data from the province indicates that the reading instructional needs of African Nova Scotian and First Nations students are not being met (Nova Scotia Department of Education and Early Childhood Development. (n.d.b). Understanding the needs of individual communities is crucial if we are to help more students learn to read by grade 3. In terms of a more global approach to future research, this study could be replicated to ascertain the similarities and differences in teacher beliefs and instructional methods in terms of teaching early reading. The need for information that will support students and teachers is vital; involving teachers as trusted and well-informed partners in this research is essential if we are to ensure future reading success for children and youth.

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## **Appendix A - Letter to Participants**

Note: The Letter to Participants was posted on the researcher's website. Teachers were asked to click on a link at the top or bottom of the page to verify their consent.

### **Teacher Information Research Study**

**Title of Project:** Addressing Efficacy and Equity in Early Reading Instruction:  
Listening to the Voices of Primary to Grade 3 Teachers

#### **Researchers**

Heather Hollis, PhD student, Nova Scotia Inter-University Doctoral Program in Educational Studies. Email: Heather.Hollis@msvu.ca

Mary Jane Harkins, PhD, Professor, Faculty of Education, Mount Saint Vincent University, Phone: (xxx) xxx-xxxx, Email: MaryJane.Harkins@msvu.ca

#### **Purpose of the Research**

The purpose of this study is to explore the perceptions of Primary – Grade 3 teachers who teach early reading. This study is looking for information about an understanding of early reading and best practice. This study values the voices of teachers. The findings will have the potential to inform future pedagogical approaches for teacher educators working in the area of elementary language arts curriculum and for teacher education policy as well as recommendation for teacher supports and resources.

#### **The Research Process**

As a teacher, you will be asked to participate in a 45 minute to one-hour online focus group session. You will be asked questions such as: When you think about teaching elementary English language arts, what comes to mind? How has the COVID virus affected your teaching of the ELA program? What specific strategies do you employ when teaching early reading? Have you had to adapt your reading instruction due to Covid-19 restrictions? Data from the focus group will be confidential. If the researcher receives any identifying information, it will be deleted or changed. The focus group will last approximately 45 minutes to 1 hour and will be recorded on the online program. This focus group is part of a research study. The researcher requires that the information discussed remain confidential. Teachers will be instructed not use any identifying information, such as student, staff or school names, in order to ensure confidentiality. If you decide to be a teacher in this study, you will also be invited later to be a teacher in an individual interview that will extend on the information received in the focus group. You may choose to participate only in the focus group and not take part in the individual interview.

## Who Can Participate in this Study

Primary to grade 3 teachers enrolled in a Nova Scotia an Atlantic Canadian Masters program in Education will be recruited from graduate level courses to take part in an initial focus group discussion.

## Consent

Due to COVID-19 restrictions, this study is being conducted online. By clicking on the link and joining the group, you are giving your consent to be a teacher in this research. Once you join the focus and/or individual interview session, the consent will be reviewed by the researcher to ensure that you are fully informed of the study.

## Possible Benefits and Risks

This is considered minimal risk research. There will be no questions of a sensitive data nature. This focus group is not related to any aspect of your Graduate Education program or your Job as a teacher. **There are no negative consequences if you choose not to take part in the focus group.** If you do choose to take part, you may skip any questions you do not feel comfortable answering and may withdraw at any time.

## Confidentiality and Risks

The researcher, Heather Hollis, has emailed this Letter of Invitation to all students who expressed an interest in taking part in the study. The selection criteria are specific to graduate students in an Education program at a Nova Scotia an Atlantic Canadian university, who are also Primary-Grade 3 teachers. If you do not meet the criteria of being a Primary-Grade 3 teacher, we thank you for your time and ask that you not continue with the process.

Focus groups will be recorded through an online program called Microsoft Teams and will be transcribed. All identifying information will be changed or removed and teachers will be assigned a pseudonym. This information will be kept strictly confidential, and all written records will be kept in password protected files on the computer. Following completion of the study, all data will be kept for five years, after which time, all data will be erased and destroyed.

Teachers can expect full confidentiality with one exception. If there are any disclosures, during the focus group or the individual interviews, that deal with the abuse or possible abuse of a child, this information will be reported to the proper authorities.

## Withdrawal

You have the option to opt out of the focus group at any point. Once you have begun to participate in the focus group or any aspect of the focus group, the researcher is unable to withdraw your input, as they have no way of identifying individual input. Teachers are not named in the responses during the focus group session(s). Findings are recorded using a compilation of responses and not by individual responses. By participating in the focus group, you have given permission for your data to be used for future publications, such as Journal articles, and/or presentations, such as conferences or other professional/scholarly events. If



you decide to be a teacher in the individual interview but then withdraw from the study, your input will be deleted and not be used in the study.

### **Questions**

Please feel free at any time to contact the researcher, Heather Hollis, [Heather.Hollis@msvu.ca](mailto:Heather.Hollis@msvu.ca), or Dr. Mary Jane Harkins (Thesis Research Supervisor) by email ([MaryJane.Harkins@msvu.ca](mailto:MaryJane.Harkins@msvu.ca)) about your concerns or questions about this research study

This study has received clearance from Mount Saint Vincent University's Research Ethics Board. If you have any questions about this study is being conducted and wish to speak with someone not involved in the study, you may contact the Chair of the University Research and Ethics Board (UREB) c/o MSVU Research Office at xxx-xxx-xxxx or by email at [research@msvu.ca](mailto:research@msvu.ca).

Appendix B - TCPS 2 Core Certificate



## Appendix C – Working Document: Summary of Word Work for Nova Scotia (2019)

Primary	Grade 1	Grade 2
<p><b>Rhyming</b></p> <ul style="list-style-type: none"> <li>▪ generate rhyming words with a beginning sound prompt</li> </ul> <p><b>Segmenting</b></p> <ul style="list-style-type: none"> <li>▪ segment the sounds in a word with three sounds (CVC)</li> </ul> <p><b>Isolating</b></p> <ul style="list-style-type: none"> <li>▪ tell which word does not end with the same sound, with three spoken words</li> </ul> <p><b>Deleting</b></p> <ul style="list-style-type: none"> <li>▪ delete ending sounds from words</li> </ul>	<p><b>Rhyming</b></p> <ul style="list-style-type: none"> <li>▪ recognize and generate spoken words that rhyme</li> </ul> <p><b>Segmenting</b></p> <ul style="list-style-type: none"> <li>▪ segment the sounds in a word with three to four sounds</li> </ul> <p><b>Isolating</b></p> <ul style="list-style-type: none"> <li>▪ identify the beginning, middle, and ending sounds in words</li> </ul> <p><b>Deleting</b></p> <ul style="list-style-type: none"> <li>▪ delete beginning or ending sounds from words</li> </ul> <p><b>Blending</b></p> <ul style="list-style-type: none"> <li>▪ blend an increasing number of sounds to make a word (three to four or more)</li> </ul> <p><b>Substituting</b></p> <ul style="list-style-type: none"> <li>▪ use an increasing number of letters to represent sound)</li> </ul> <p><b>Word Study</b></p> <ul style="list-style-type: none"> <li>▪ How do parts of words that you know, help you to write new words?</li> <li>▪ What are some strategies you could use to write a new word?</li> </ul>	<ul style="list-style-type: none"> <li>▪ use meaning, syntax patterns, and sound cues to spell words</li> <li>▪ spell many high-frequency words conventionally</li> <li>▪ use a range of spelling strategies</li> <li>▪ use a variety of strategies to edit for spelling</li> <li>▪ demonstrate increasing knowledge of spelling patterns, including long vowel patterns (ai, ay, oa, ou, ee, ea)</li> <li>▪ chunk words into syllables</li> <li>▪ begin to use an appropriate short vowel in each syllable of a word</li> <li>▪ begin to use apostrophes for contractions</li> <li>▪ begin to use plurals and past tense</li> <li>▪ sequence letters when spelling words</li> <li>▪ use an increasing number of accurately spelled words</li> <li>▪ apply a wider range of spelling strategies resulting in more conventional or close to conventional spellings</li> </ul>

Grade 3	Grade 4	Grade 5	Grade 6
<ul style="list-style-type: none"> <li>▪ demonstrate an increasing knowledge of spelling patterns and use patterns from simple words to spell more complex multisyllabic words</li> <li>▪ use increasing numbers of accurately spelled high-frequency words</li> <li>▪ use meaning and syntax patterns as well as sound cues to spell words</li> <li>▪ use a range of spelling strategies with independence</li> <li>▪ begin to use other vowel combinations (au, aw, ui, oo, oy, oi, ow)</li> <li>▪ begin to spell the r-controlled vowels (ir, er, or, ur, ar) with more consistency</li> <li>▪ use apostrophes for contractions</li> <li>▪ begin to use possessives</li> <li>▪ begin to consider meanings of homophones</li> <li>▪ begin to use double consonants when necessary</li> <li>▪ use plurals and past tense consistently</li> <li>▪ spell many words conventionally</li> </ul>	<ul style="list-style-type: none"> <li>▪ What strategies can be used to spell new words?</li> <li>▪ How does the prefix/suffix/root of the word, help you to use related words in your writing?</li> </ul>	<ul style="list-style-type: none"> <li>▪ How do the word parts that you know help you to learn unfamiliar words?</li> <li>▪ How does the prefix/suffix/root of the word, help you to use related words in your writing?</li> </ul>	<ul style="list-style-type: none"> <li>▪ How can you use word patterns to write unfamiliar words?</li> <li>▪ How can you grow your vocabulary (word categories, academic language, playing with words, word games, reading, wow word wall)?</li> <li>▪ How does the prefix/suffix/root of the word, help you to use related words in your writing?</li> </ul>

## Appendix D - Focus Group and Semi-Structured Individual Interview Questions

Research Questions	Focus Group and Semi-Structured Individual Interview Questions
1. From the perspective of early elementary teachers, how are teachers instructing their students to develop their early reading skills, specifically in the area of phonological awareness?	<p>1. When you think about teaching elementary English language arts, what comes to mind? (Prompt: Do you think about it as a whole or in terms of individuals areas, like reading and writing?)</p> <p>2. What specific strategies do you employ when teaching early reading? (Prompt: Do you teach phonological awareness or phonics separately?)</p>
2. What resources do teachers draw upon when their students have difficulty learning to read?	<p>3. What are some of the ways in which you support students who are struggling to read? (Prompts: What resources do you draw upon when a student in your class is struggling to learn to read? Who at your school could you go to for support? What procedures are in place at your school?)</p> <p>4. How do you know if a student is struggling in reading? (Prompts: How do you identify a student's strengths and challenges in reading? What types of assessments do you use? Are there other options for assessment available to you?)</p>
3. What are teachers' levels of self-efficacy with regards to helping students who struggle to read?	5. How confident are you in your ability to successfully teach early reading to all of your students, including those who have difficulty learning how to read? (Prompts: What would you make feel better about your ability to help your students? How has your experience changed the way you approach teaching reading?)

4. What recommendations do teachers have for pre-service instruction in terms of preparing new teachers to meet the early reading needs of all their students?	6. What would you have liked to have learned more about, in terms of reading, in your education program? (Prompt: What do you think universities could be doing differently to better prepare teachers to teach reading?)
5. What recommendations do teachers have for in-service instruction in terms of helping practicing teachers to meet the early reading needs of all their students?	7. What types of supports, in terms of reading instruction, have you been offered in terms of professional development? (Prompt: How do you think we can better support teachers who are currently teaching reading? What type of professional development do you feel would be helpful in terms of helping teachers support students who have difficulty learning to read?)
6. How has the Covid-19 pandemic affected the way teachers teach early reading?	8. Have you had to adapt your reading instruction due to Covid-19 restrictions? Prompts: Have you had experience teaching online? If so, what did you find worked well in terms of reading instruction?
7. Is there anything you would like to talk about that we haven't yet discussed?	

## **Appendix E - Background Information Form for Teachers in Focus Groups and Individual Interviews**

(Note: This information was gathered using a Google Form on the secure Mount Saint Vincent One Drive.)

1. Gender

- ☐ Male
- ☐ Female
- ☐ Non-binary
- ☐ Prefer not to say

2. Current teaching position (Grade or assignment only. Do not include school name.)

Enter your answer.

3. Years of Experience

Enter your answer.

4. Highest degree achieved

- ☐ Undergraduate
- ☐ Bachelor of education
- ☐ Currently enrolled in a Masters degree
- ☐ Masters degree achieved (1)
- ☐ Masters degree achieved (2)
- ☐

5. Other professional designation (ex. Reading Recovery certificate, certified in Special Education, etc.)

Enter your answer.

6. Thank you for your time. Please write your choice of \$15 e-card below. (ex. Walmart, Amazon, Chapters, Skip the Dishes, or any other outlet that offers e-cards.) You must include your full name, your email address, and the name of the gift card you would prefer so that I can process your request. Your ecard will be processed before the end of day.

Enter your answer.

## Appendix F - Email to Instructors

Dear (Name),

My name is Heather Hollis, and I am doing my PhD in early reading instruction through the Mount under the supervision of Mary Jane Harkins. I recently received approval from the Ethics Committee to begin my research for my dissertation and am looking for teachers to take part. I'm interested in talking with early elementary teachers enrolled in a Nova Scotia graduate education program.

My request is to join one of your virtual classes this term for 10 minutes, sometime during weeks of **(insert dates)**, in order to present my research and ask for volunteers to take part in an hour-long focus group. My presentation would incorporate a short PowerPoint, which would include a site where students could easily enter their email as a way to express their interest. Entering their email would not be considered consent to take part in the focus group; it would only be an expression of interest.

If you agree to grant me permission to Join your class, I would respect your time and not take more than the allotted 10 minutes. Any students who want to ask further questions will be directed to contact me through the email link. I would greatly appreciate hearing from you by **(insert date)**.

If you require any further information, please feel free to contact me.

I hope to hear from you soon.

Sincerely,

*Heather Hollis*

Heather Hollis, PhD. (candidate)

Mount Saint Vincent University



## Appendix G - Definition of Terms

For clarity, I have included of some of the terms being used throughout this paper. I understand that many of these terms have different definitions depending on the source. These are the definitions that fit closest to my understandings of the terms.

Term	Definition
<b>Alphabetic Principle</b>	The concept that letters or groups of letters in alphabetic orthographies (i.e., written systems) represent the phonemes (sounds) of spoken language (International Literacy Association, 2020c).
<b>Balanced Literacy</b>	Balanced literacy was designed to combine a top-down approach to reading instruction, with a focus on reading for meaning, with systematic phonics.
<b>Comprehension</b>	“Comprehension is the understanding and interpretation of what is read. To be able to accurately understand written material, children need to be able to (1) decode what they read; (2) make connections between what they read and what they already know; and (3) think deeply about what they have read” (Reading Rockets, 2021).
<b>Decoding</b>	“[D]ecoding is word recognition accomplished through alphabetic coding, which relates the letter sequences within a given word to the phonological structures underlying its pronunciation thereby allowing access to the word’s location in the mental lexicon” (Hoover & Tunmer, 2018).
<b>Dyslexia</b>	“Dyslexia is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. Secondary consequences may include problems in reading comprehension and reduced reading experience, which can impede growth of vocabulary and the development of background information” (International Dyslexia Association, 2021).

<b>Early Literacy Support Teacher</b>	Early Literacy Support (ELS) teachers in Nova Scotia work with students in Grades P-3 who have difficulty with reading.
<b>Literacy</b>	The ability to identify, understand, interpret, create, compute, and communicate using visual, audible, and digital materials across disciplines and in any context. Over time, literacy has been applied to a wide range of activities and appears as computer literacy, math literacy, or dietary literacy (International Literacy Association, 2020c).
<b>Orton-Gillingham</b>	The Orton-Gillingham approach is a direct, explicit, multisensory, structured, sequential, diagnostic, and prescriptive way to teach literacy when reading, writing, and spelling does not come easily to individuals, such as those with dyslexia (Orton-Gillingham Academy, n.d.).
<b>Morphology</b>	Morphology is the study of where words originate and how they are structured.
<b>Phoneme</b>	A phoneme is the smallest unit of speech. An example of a phoneme would be the “h” sound in hat or the blend “sh” sound in shut.
<b>Phonemic Awareness</b>	Phonemic awareness is the ability to detect and manipulate the smallest units (i.e., phonemes) of spoken language. For example, recognition that the word cat includes three distinct sounds or phonemes represents phonemic awareness. Individuals with phonemic awareness can blend phonemes to form spoken words, segment spoken words into their constituent phonemes, delete phonemes from spoken words, add phonemes, and substitute phonemes (International Literacy Association, 2020c).
<b>Phonics</b>	Phonics instruction focuses on the acquisition of letter-sound correspondences and their use in reading and writing (Nova Scotia Department of Education and Early Childhood Development, 2020).
<b>Phonological awareness</b>	Phonological awareness is an awareness of sounds in spoken (not written) words that is revealed by such abilities as rhyming, matching initial consonants, and counting the number of phonemes in spoken words (Stahl & Murray, 1994).
<b>Reading</b>	Reading is the process of simultaneously extracting and constructing meaning through interaction and involvement with written language (International Literacy Association, 2020c).

<b>Reading Recovery</b>	Reading Recovery (RR) is a short-term, early intervention program that offers 1:1 support to students in grade 1. RR teachers are trained to offer RR through an intensive one-year program (Reading Recovery Canada, 2020).
<b>Resource Teacher</b>	The Resource Teacher supports the classroom teacher and ensures that Public Schools Program, curricula, Inclusive Education Policy and Special Education policy are implemented in a way that maximizes student learning experiences and is responsible for the instruction and evaluation of all students within their teaching assignment (Halifax Regional Centre for Education, 2021).
<b>Science of Reading (SoR)</b>	The science of reading (SoR) represents a view of reading instruction that emphasizes the need for explicit teaching of discrete skills to support reading acquisition (Vaughn et al., 2020).
<b>Structured Literacy</b>	To support the development of decoding/word recognition, accuracy and fluency, structured literacy includes the systematic and explicit instruction in the following areas: phonology (the structure of language across the speech sound system e.g., phonological awareness); handwriting; orthography (the spelling system e.g., letter-sound knowledge); morphology (the meaningful parts of words); fluency (IDA Ontario Submission to the OHRC Right to Read Inequity, 2020).
<b>Three Cueing System Model</b>	The cueing system model posits that readers use three sources of information, or cues, to recognize a word (Adams, 1998; Clay, 2005; Goodman, 1967). The spelling of the word provides graphophonic information, sometimes called visual information. The structure of the sentence in which the word appears provides syntactic information. Finally, the reader uses the meaning of the surrounding text (and illustrations, if they are available) as a clue to word recognition (Davis et al. 2021).
<b>Whole Language</b>	Whole language is an approach to, or attitude toward learning that sees language as a whole entity, and writing, speaking, reading, and listening should be integrated when learned (Palzelt, 1995).