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Examining Educators' Perceptions About Teaching Students Identified with Reading Disabilities

by

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A THESIS

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Abstract

The purpose of this study was to explore the influence of secondary sociocultural artifacts on educators' perceptions about teaching students identified with reading disabilities (RD). This investigation offered an alternative to traditional special education research by considering sociocultural influences, rather than emphasizing innate characteristics within students. A definitive conceptual model that explained how secondary sociocultural artifacts shape educators' perceptions of teaching students identified with RD was not found in a review of related literature. Therefore, a specific examination of these perceptions of educators as situated within the unique context within which they were employed was sought.

Using a descriptive case study design, a detailed account of the themes within sociocultural artifacts and the perceptions of educators across various roles were gathered within one school district. Since RD tends to be identified in late elementary grades, educators with responsibilities for grades 4-7 were included. Data were gathered across three phases using the methods of document analysis, questionnaires, and interviews. Twelve participants completed the questionnaires and six participants completed interviews.

Four major findings were identified from this study. First, the contents of the secondary sociocultural artifacts salient to this school district aligned with either a special or an inclusive education model. Second, classroom teachers' perspectives on reading disabilities aligned with a fixed deficit model overall, rationalized by their personal experiences with artifacts of special education. Third, classroom teachers' beliefs about their own self-efficacy to teach students identified with RD varied, based on different aspects emphasized in their reflections on teaching students identified with RD. Fourth, those artifacts aligned with special education were perceived as inhibiting classroom teaching of students identified with RD. The findings from this study

contributed to a conceptual framework for how secondary sociocultural artifacts shape educators' perceptions. Given the important influence of educators' perceptions on their actual practices, this study was critical to understand how to stimulate actions aimed at improving teaching practices for students identified with RD.

Key words: sociocultural theory, secondary sociocultural artifacts, reading disabilities, special education, inclusive education, perspectives on disabilities, teacher self-efficacy

Preface

This thesis is original, unpublished, independent work by the author, Kirstin Funke Robinson.

The research methodology outlined in chapter 3 was covered by Ethics Certificate number REB20-0924, issued by the University of Calgary Conjoint Faculty Ethics Research Board (CFREB) for the study “Examining Educators’ Perceptions About Teaching Students Identified with Reading Disabilities” on October 5, 2020.

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Along with my family, my supervisor, Dr. Jennifer Lock, supported me from the very beginning. Her invaluable insight and pragmatic advice were always delivered with compassion and a genuine desire to see me succeed. She helped me to stay on track and keep moving forward despite inevitable challenges along the way. My committee members, Dr. Miwa Takeuchi and Dr. Barbara Brown, offered both validation and critique of my work that undoubtedly enhanced the final product. In addition, I am grateful to Dr. Man-Wai Chu, who added her timely guidance when it was needed.

Finally, I would like to acknowledge the camaraderie and support of my Learning Sciences cohort. We forged a team identity right from the start. Being able to share our collective challenges and successes enriched my experience immensely.

Dedication

For my dad, who would have bragged to the people he met in the post office about this.

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CHAPTER ONE: INTRODUCTION

It is a core problem, when school practices are built on assimilative assumptions that privilege a particular imaginary kid and everything else is differentiated to approximate that imagined person. (Alim et al., 2017, p. 7)

School experiences are central to children's lives. Within school settings, the pursuit of literacy to access and transmit information is foundational (DiSessa, 2000). The development of print-based literacy, as reflected in schools' aims for students to develop reading and writing skills, holds a privileged status, due to the historical link between knowledge and the medium of text (Papert, 1993). A critical problem in the efficacy of schools exists then, for the students whose school experiences are not characterized by smooth acquisition of print-based literacy skills (Elliott & Grigorenko, 2014).

The best estimate of the prevalence of learning disabilities (LD) in Canada is 3.2% (D'Intino, 2017; Learning Disabilities Association of Canada, n.d.), although published prevalence rates have been reported to be imprecise, given differing definitions used for LD (Calder Stegemann, 2016; D'Intino, 2017). Estimates from the United States have been reported to be as high as 15% of all school-aged children (American Psychiatric Association, 2014). In the province of British Columbia (BC), the importance of effective pedagogical practices for students with LD was underscored by the Supreme Court ruling on *Moore v. British Columbia (Education)* (2012), which exposed the shortcomings of one school district's practices.

Students with reading-based LD appear to be especially impacted by ineffective pedagogy, given data from the United States that showed that 97% of children identified with disabilities in grade 4 were not proficient in reading (Horowitz et al., 2017), and more recent data that showed a further decline in results on a national assessment of reading (U.S. Department of

Education Institute of Education Sciences, National Center for Education Statistics, 2019).

Within the Canadian context, the Education Quality and Accountability Office of Ontario reported that over 25% of all students in grade 3 and 53% of students in grade 3 identified with special educational needs did not meet provincial standards in reading (Education Quality and Accountability Office, 2019). Public concern with reading pedagogy has increased to the point that the Ontario Human Rights Commission (OHRC) recently published the results of a public inquiry into the circumstances known as “Right to Read” (OHRC, 2022). Considering this current state of educational affairs, insight into the teaching of students identified with reading-based learning disabilities (RD) is needed.

Statement of the Problem

Historically, dominant discourse from the fields of educational psychology and medicine has emphasized characteristics of individual learners and failed to focus upon the settings within which learning is expected to occur (Connor, 2013). This has resulted in a “deficit model” (Connor, 2013; Dudley-Marling, 2004; Dudley-Marling & Burns, 2014) that has driven the development of policies and procedures within a special education framework. Such perceived distinction or “separate-ness” of the practices of teaching students with high-incidence learning disabilities from the teaching of all students has been reinforced by influential legislations such as the Individuals with Disabilities Education Improvement Act (IDEIA, 2004) in the United States and provincially legislated special education policies in Canada (e.g., British Columbia Ministry of Education, 2016).

In contrast to the empiricist tradition of a deficit model, the sociocultural approach endeavours “to create an account of human mental processes that recognizes the essential relationship between these processes and their cultural, historical, and institutional settings”

(Wertsch, 1993, p. 6). Drawing from the work of Esmonde (2017), all sociocultural theories of learning are thought to share the following common elements: (a) cultural artifacts mediate human activity and are part of human cognition, (b) learning should be studied in naturalistic contexts, (c) learning persists and shifts when people cross boundaries between contexts, (d) multiple timeframes in history must be studied to understand learning, (e) learning should be studied using a developmental method focused on process, versus outcomes, and (f) in joint activity, people are simultaneously exercising agency and being constrained. Rather than emphasizing deficits in individual students, this perspective recognizes that students are learning to read and write within educational settings that are shaped by epistemological assumptions and history (Hall et al., 2015; McDermott, 1993).

In order to improve the learning of students identified with RD, a sociocultural stance calls for uncovering influential social, historical and cultural factors rather than only considering the characteristics of individuals (de Valenzuela, 2014; Gibbs & Elliott, 2015; Thorius, 2016, 2019a, 2019b). Attention to the sociocultural elements at play within school settings draws attention to the forces that both constrain and empower individuals (Freire, 2002), including those who are responsible for teaching students identified with RD. Given the strong link between educators' perceptions and their actual practices (Benton-Borghi & Chang, 2012; Gibbs & Elliott, 2015; Jordan & Stanovich, 2004; Siwatu, 2011; Siwatu et al., 2017; Tschannen-Moran & Johnson, 2011), improvement efforts must attend to how educators' beliefs develop.

One of the most important goals of current educational reform is the movement towards inclusive education (Gilham & Tompkins, 2016; Vaz et al., 2015; Waitoller et al., 2016). Given that students with high-incidence disabilities such as specific learning disabilities (e.g., reading disabilities) spend most, if not all their days in general education classrooms, effective teaching

in classroom settings is seen as an essential element of the inclusive education movement (Lanterman & Applequist, 2018). It is critical that all educators, not only those in formal roles as special educators, are prepared to meet the needs of these students.

According to a recent, widescale survey and follow-up focus group research conducted in the U.S. by the National Center for Learning Disabilities (NCLD) and Understood (2019), only 17% of general and special educators reported feeling prepared to meet the needs of students with LD. Perhaps even more interestingly, amongst those teachers who completed supplementary post-baccalaureate training in inclusive education practices, very few reported that their training prepared them to teach students with LD. Instead, “on-the-job training and trial-and-error learning” (p. 11) were cited as the most effective means by which they acquired relevant skills and strategies. Given teachers’ reported lack of confidence, there is scope for professional learning for not only preservice, but also in-service teachers. It is imperative that school districts endeavour to improve teachers’ preparedness to meet the needs of students identified with RD. By examining teachers’ own perceptions, including their efficacy to teach students identified with RD, critical, influential, sociocultural factors can be identified and explored for how they contribute to educators’ perceptions of preparedness. This understanding can then stimulate educators’ efforts to improve teaching practices and shape future efforts in professional learning.

Context of the Study

In the province of British Columbia, to assume a teaching position with predominant responsibilities for special education (referred to in the policy manual as Learning Assistance), specific requirements are determined by individual school districts. Requirements listed under the guidelines published by the British Columbia Ministry of Education (2016) include a number

of specific aspects of knowledge and skills, in addition to active membership with the Teacher Regulation Branch, a Bachelor of Education degree or equivalent, successful classroom teaching experience and “university-level courses in the following areas: students with special needs, assessment/testing theory and practice, (and) strategies for adapting and modifying curriculum to meet the diverse needs of students” (p. 25). University level coursework in specific unique learning, emotional and behavioural needs, as well as technology for the classroom is also recommended (although not required). In their Position Statement on Educational Professional Development (2011), the Learning Disabilities Association of British Columbia asserted that such qualifications should be required, rather than “recommended”, as the policy manual currently states.

Policies from the province of BC regarding qualifications to teach in special education positions are quite consistent throughout both the United States and Canada (although they are increasingly rigid in some locations). In some jurisdictions, state and provincial licensure governing bodies maintain separate tracks for qualifications to teach in general classrooms and special education (Killoran et al., 2013). Within general teacher education programs, opportunities to acquire skills and knowledge about the types of learning issues relevant to students identified with LD are often minimal or non-existent (NCLD & Understood, 2019). Overall, one third of teachers surveyed by the NCLD reported that they had not accessed professional learning on the challenges of learning and attention experienced by students identified with LD. With respect to Individual Education Plans (IEPs) which may be considered the hallmark practice of special education, the NCLD found that only 56% of teachers surveyed believed that IEPs provide value to students (2019). Only 38% believed that they helped them to teach better (NCLD & Understood, 2019). This is highly problematic, given that IEPs are the

tool designed to bridge practices recommended by special educators to general education classrooms.

To compound the complexity of current inclusive educational practices in Canada, the policy-driven procedures guiding educators' work vary across the thirteen different provincial and territorial contexts (Calder Stegemann, 2016; Killoran et al., 2013). Given that inclusive education research is typically tied to practices stipulated by the regulations of special education, rather than consideration of broader ideologies underpinning practices (McGhie-Richmond et al., 2013), it is difficult to generalize research in Canadian provincial contexts to other provincial settings. An in-depth analysis of the phenomenon of teachers' experiences of inclusive education in the BC context is therefore warranted.

Rationale for the Study

Despite many decades of research focused on specific learning disabilities (Grigorenko et al., 2019), students identified with reading disabilities continue to experience a higher prevalence of negative outcomes in comparison to their peers in terms of vocational outcomes, graduation rates, psychiatric challenges, and involvement with the justice system (Calder Stegemann, 2016; Grigorenko et al., 2019; NCLD & Understood, 2019; Willcutt et al., 2007). As opposed to the research that has explored reading disabilities through a traditional, special education lens focused on deficits existing within individual students (Gibbs & Elliott, 2015), broader research is needed that considers "What is going on here?" rather than asking "What is wrong with this student?" or "What is wrong with this teacher?" (Dudley-Marling, 2004, p. 488). As part of the impetus for a study of this nature, it is imperative to consider the social justice implications of practices in special education.

The foundational tenets of special education that still pervade government-dictated policies and procedures (e.g., BC Ministry of Education, 2016) may serve to maintain the marginalization of students with disabilities, despite apparent efforts to do the opposite (Artiles, 2009; Thorius, 2019a). This is further problematized by the intersectionality of race, socioeconomic factors, and disability, as students of colour and students from impoverished environments are disproportionately identified with special education labels of disability (Baustien Siuty, 2017; Collins, 2013; OHRC, 2022; Thorius, 2019a). In the Canadian and BC context, this is especially true for Indigenous students (Nelson, 2017). Although research from a sociocultural theoretical lens is beginning to examine issues within inclusive education in general (e.g., Baustien Siuty, 2017; Thorius, 2016), research focused on teaching students with reading disabilities specifically, seems to be lacking. To fill this gap in empirical knowledge, nuanced understanding of the constructs that shape educators' perceptions about teaching students identified with RD is needed.

Significance of the Study

The purpose of my study was to explore how educators' perceptions about teaching students identified with reading disabilities (RD) are shaped by sociocultural influences, as represented in relevant artifacts (Wartofsky, 1979), from the context of one school district in Canada. Given established links between teachers' perceptions, their actual practices, and the academic success of their students (Gibbs & Elliott, 2015; Gibbs et al., 2020), influences on teachers' perceptions merit attention. Specific to the teaching of students identified with RD, there continues to be a lack of consensus on what constitutes effective teaching (Grigorenko et al., 2019), which leaves these students to continue to struggle. Classroom teachers are left on the

frontlines, tasked with doing their best, yet they may or may not feel confident in doing so (Gray, et al., 2017).

This study offered an alternative lens to much of the existing research that is framed by a medical model of disability that assumes that deficits lie within the bodies of students and positions teachers, particularly specialist teachers, as “benevolent helpers” with the task of remediating students’ weaknesses (Thorius, 2019a). Instead, in my study, I recognized the historical situatedness of teaching within a given context. The specific sociocultural artifacts that teachers identified as having shaped their perceptions of RD generally, and their own efficacy, specifically, were the foremost consideration.

Following my review of the current literature, studies that examine how perceptions of educators are shaped by the specific sociocultural context within which they are employed are needed. Further, a conceptual model that explains how sociocultural artifacts shape educators’ perceptions of teaching students identified with RD would be valuable for informing change efforts. Given the important influence of educators’ perceptions on their actual practices, the results of this study are critical to provoke educators to shift their thinking to improve their teaching of students identified with RD, and to inform future professional learning. They may have similar implications for pre-service teacher learning, as well. The detailed description this study provided can aid in the development of guiding policies and procedures for inclusive teaching practices. Although the findings are especially applicable to the context of the district where the research took place, they also contribute to the growing body of research that has examined inclusive education practices through a sociocultural lens, as well as the field of Learning Sciences as a whole, given the focus on teaching and learning in a real-world situation.

Definition of Key Terms

Special attention to the definition of key terms used in this proposal is necessary, given the preponderance of varying definitions that are present throughout the literature on reading-based learning disabilities and inclusive education, in general.

Boundary: The concept of boundary represents a figurative border between members of different groups of people, defined as “a socio-cultural difference leading to discontinuity in action or interaction” (Akkerman & Bakker, 2011, p. 133).

Educator: Drawing on the definition developed by the *Learning Forward* (Campbell et al., 2017) coalition of education professionals who study professional learning across North America, for the purposes of my study, “educator” refers to not only those professionals in the field of education currently employed as teachers, but also school and system leaders who also possess teaching degrees and experience.

General Education: This refers to the other side of the dualist distinction created by government-mandated policies and procedures governing special education. General education is also commonly referred to as the “regular” or “mainstream” classroom.

Inclusive Education: This definition is drawn from the work of Artiles and Kozleski (2007) to refer to efforts aimed at creating schools that are “belonging, nurturing, and educating [of] all children and youth, regardless of their differences in culture, gender, language, ability, class, and ethnicity” (p. 357).

Individual Education Plan (IEP): The BC Special Education Policy Manual (BC Ministry of Education, 2016) defines it as a prescribed plan, required for all students identified as eligible for special education services.

Reading Disability: “These disorders affect learning in individuals who otherwise demonstrate at least average abilities essential for thinking and/or reasoning. As such, learning disabilities are distinct from global intellectual disabilities...Learning disabilities range in severity and may interfere with the acquisition and use of ...reading (e.g., decoding, phonetic knowledge, word recognition, comprehension)” (BC Ministry of Education, 2016, p. 47). The term “reading disability” is used synonymously with “specific learning disorder” in reading and “dyslexia” (American Psychiatric Association, 2013).

Sociocultural Artifacts: Of central consideration within this study, is the uniquely human ability “to make representations” (Wartofsky, 1979, p. xiii) of cognition, known as artifacts. “Secondary artifacts play a central role in preserving and transmitting modes of action and belief. They include recipes, traditional beliefs, norms, constitutions, and the like” (Cole, 1996, p. 121).

Special Education: This refers to government-mandated policies and procedures required only for those students who have “characteristics which make it necessary to provide a student undertaking an educational program with resources different from those which are needed by most students.” (BC Ministry of Education, 2016, p. VI).

Organization of the Dissertation

In the first chapter of this dissertation, I have provided an overview of the problem, context, rationale and significance of the study. Within the second chapter, a critical review of existing research literature is presented. It begins with an overview of the sociocultural theoretical framework that underpins the research design and continues with the constructs representing critical aspects of the preliminary conceptual framework that I developed. In the third chapter, the research design is presented, along with the rationale for situating this study within the social constructivist paradigm and case study methodology. The research questions

that guided the study are then presented, followed by details of the population and sampling, the data collection and analysis processes, study integrity, limitations and delimitations, and ethical considerations. The fourth chapter presents the analysis and findings according to the themes that emerged. Chapter five provides a discussion of the findings in response to each research sub-question, culminating in the presentation of a revised conceptual framework for understanding how educators' perceptions about teaching students identified with RD are shaped in this school district. The final chapter offers reflections on the study, implications for policy and practice, and recommendations for future research, with the intent of leading to potential transformative action amongst educators.

CHAPTER TWO: LITERATURE REVIEW

My study aimed at understanding how sociocultural artifacts from within the context of one school district shaped educators' perceptions about teaching students identified with reading-based learning disabilities (RD). In this chapter, relevant literature is reviewed to position my descriptive case study within the field. It is organized into the following sections: (a) an overview of the theoretical underpinnings of the sociocultural framework (b) an examination of sociocultural shaping of inclusive teaching practices (c) an exploration of educators' perspectives on RD (d) a review of educators' self-efficacy beliefs and (e) an overview of a preliminary conceptual framework for how educators' perceptions about teaching students identified with RD develop through shaping by sociocultural artifacts.

Theoretical Underpinnings of the Sociocultural Framework

The theoretical framework for my study is rooted in the sociocultural construction of educators' perceptions about teaching students identified with RD. Educators' perceptions are shaped by their participation in the activities of their professional "worlds" that are configured by historical, social, and cultural influences (Baustien Siuty, 2017; Thorius, 2016). Applying a sociocultural theoretical lens supported an examination of educators' perceptions, with specific attention to how these perceptions were shaped within a particular context. Further, it enabled critical analysis of whether educators' perspectives on RD were aligned with an inherent deficit model, or a socially constructed, multi-influenced model. Such a detailed picture of how educators perceive their roles and actions in relation to how they perceive RD can serve as the basis for informing future professional learning intended to disrupt deficit-based discourse and practices.

Artiles and Kozleski (2007) asserted that expanding educators' preparedness to advance inclusive education needs to include three critical elements. These are: (a) consideration of the link between cultural and historical dimensions and ideologies that underlie practices, (b) understanding of one's community and participation in it, and (c) engagement in a transformative agenda. In line with these assertions, engaging educators in an agenda of transformation that addresses the needs of all students is the apparent goal of guiding policies of inclusive education (e.g., BC Ministry of Education, 2016). To do this, underlying cultural and historical dimensions of practices, as well as the unique characteristics of the context in which these practices take place must be considered. It follows then, that analysis of inclusive education practices must consider both macro and micro-influences on educators' actions (Artiles & Dyson, 2005). These include macro-influences such as historical precursors that shaped the policies on inclusive education in a given province and school district, as well as micro-influences such as individual educators' beliefs and professional preparation. In the section that follows, I start at the macro-level in building a case for applying sociocultural theory to the study of inclusive education, broadly.

Overview of Sociocultural Theory

Sociocultural theory developed from the work of Russian psychologists, attributed largely to Vygotsky (1978), supported by collaborations with Luria and Leontiev, and carried on through the work of former colleagues and students (de Valenzuela, 2014). Sociocultural scholars are interested in detailed descriptions of the dynamic, social contexts where human development takes place, as well as the processes through which development occurs (Cole, 1996; de Valenzuela, 2014). These scholars emphasize "genetic" analysis of human thought and behaviour, meaning that multiple timeframes must be considered as influential. In sociocultural

analysis, the study of not only features of the current setting, but also the accumulated “residue of the activity of prior generations” (Cole, 1996, p. 110) is paramount.

Sociocultural analysis contrasts approaches from cognitive psychology that conceptualize of the human mind as universal, resulting in a research base that is largely devoid of cultural and historical dimensions (Hatano & Wertsch, 2001). Although different theorists have emphasized particular elements of sociocultural influences in their work, sociocultural approaches share common tenets. As summarized by Säljö (1991), all sociocultural analysis of human development emphasizes interactions with others and the use of cultural tools as means of mediating these interactions, and the influence of broad contextual influences, at both local and global levels.

Wertsch (1993, 1998) considered the situatedness of human activity within historical and cultural settings, emphasizing action as the most important unit of analysis. Action is central in Wertsch’s depiction, given its reciprocal influence upon the environment in which it occurs and its simultaneous influence upon the individual. Wertsch (1993, 1998) developed his theory from Burke’s (1969) work on dramatism that explained human motives by focusing on their actions, when and where they occurred, and how and why they occurred. This led Wertsch to assert that cultural tools or mediational means provide a useful lens through which to understand human action. He called this primary unit of analysis *mediated action* (Wertsch, 1998).

Sociocultural Artifacts

Material or conceptual examples of people’s practices that continue to exist after their use are known as “artifacts” (Wartofsky, 1979). As discussed by Cole (1996), Wartofsky’s depiction of artifacts in a three-tiered hierarchy is fundamental to understanding phenomena through sociocultural theory. A primary artifact is a material object that has been transformed over the

course of time through its use as a tool in human activity (Wartofsky, 1979). Although primary artifacts may be material things, they are not necessarily physical objects (Cole, 1996).

Language is a particularly important example of a primary artifact (Thorius, 2016; Wartofsky, 1979). The early Russian sociocultural scholars perceived that language was the “tool of tools” (Cole, 1996, p. 108). Conceiving of language as a primary artifact underpins the focus of this study on teaching students identified with RD in that formal education places central importance on the acquisition of reading skills to allow for the transmission of language through print. Indeed, the very impetus for this study comes from the importance that formal education places on reading printed forms of the primary artifact of language.

Secondary artifacts are representations or modes of action that use primary artifacts to preserve and convey modes of action or beliefs (Wartofsky, 1979). With respect to the actions and beliefs of special education, the most central secondary artifact appears to be the Individual Education Plan (IEP). An IEP is a prescriptive plan of teaching and learning strategies tailored to an individual student’s needs, required by legislation, for any student formally identified as having a learning disability under government-dictated, school district policies (e.g., IDEIA, 2004; BC Ministry of Education, 2016). Within the school system, IEPs are student-specific plans of adaptations or modifications to curriculum for students who qualify for special education services. In the province of British Columbia, services are typically provided, planned, and supported by educators other than the classroom teacher. These educators have training beyond a bachelor’s degree in education. The separateness of IEPs from plans that apply to all students in any given classroom serves to distinguish the needs of students who follow them as different from their peers. Consequently, the teaching practices associated with these students are

also seen to be unique from other students. Taken in sum, the IEP is a secondary artifact that powerfully mediates educators' actions.

The third level of artifact articulated by Wartofsky (1979) and further clarified by Cole (1996) is represented by an imagined world in which typical conventions no longer seem useful. This tertiary artifact creates an opportunity for people to engage in reflection on the world, which provides a potential tool to change current praxis by creating “a representation of possibilities which go beyond present actualities” (Wartofsky, 1979, p. 209). In the discipline of education, opportunities for such reflection in professional learning have the potential to serve as a type of tertiary artifact, if they allow educators to engage in reflective consideration of their own practices.

Unfortunately, as Akkerman and Bakker (2011) contended, artificial boundaries have been reinforced by educational research that has taken place in isolation, focusing on particular groups of people, or conducted only by scholars from particular sub-disciplines. This applies in the case of special versus general education, in which a perceived boundary exists between teaching and learning practices for students with learning disabilities and other students. It is important then, to consider tertiary artifacts in education (Hoffman-Kipp et al., 2003) such as teachers' pre-service or in-service professional learning as opportunities to counter dominant practices. These learning opportunities have the potential to engage educators in reflection on their own practices in ways that are not bound by the all-powerful procedural conventions of secondary artifacts such as special education and its tools (e.g., IEPs). In this manner, growth in pedagogical practices for students identified with RD can be fostered.

Sociocultural research can serve to bridge the divide between educators' boundary-limited practices using secondary artifacts and entering into engagement with a tertiary artifact

that can allow for critical consideration of one's own practices. Some guidance comes from Cole's (1996) assertion that research should focus on ways in which the three types of artifacts are "woven together in the process of joint human activity" (p. 122). Building from his early work alongside the aforementioned Russian scholars, Cole (1996) applied sociocultural theory to analyze examples of long-standing educational practices. Of particular note, he offered a sociocultural analysis of the origins of intelligence quotient (IQ) testing, in which he raised critical questions about the appropriateness of using generic tasks, developed in one urban context, to assess general aptitude in children from a wide variety of geographic and cultural contexts. Cole's work complemented earlier commentary by McDermott (1993), in which he posited that "LD exists as a category in our culture, and it will acquire a certain proportion of our children as long as it is given life in the organization of tasks, skills, and evaluations in our schools" (p. 271). Both McDermott's (1993) and Cole's (1996) socioculturally framed work offer a starting point to consider the broader complexities of artifacts such as the identification of disability and its problematic role within the education system.

Within special education practices, the IEP serves as an important secondary artifact. IEPs are developed for individual students by a team of educators, along with parent (and hopefully, student) input. Although this tool is apparently intended to guide educators to use effective pedagogical practices with students identified with RD, it may serve as an artificial boundary between the work of special and general educators. Such a boundary is defined as "a sociocultural difference leading to discontinuity in action or interaction (Akkerman & Bakker, 2011, p. 133). At worst, an IEP may even burden a student with a stigma, associated with lowered academic expectations, in a position of inferiority as compared to classmates. In this sense, IEPs may be seen to represent the margin at which general education practices end and

special education practices begin. By applying the sociocultural concept of artifacts as evidence of human action that is situated within complex contexts, to practices within education, it becomes possible to critically analyze teaching practices. This potential for broadened understanding of teachers' actions is necessary to lead to the transformative action in inclusive education called for by Artiles and Kozleski (2007).

Sociocultural Theory and Inclusive Education

Increasingly, scholars (e.g., Artiles, 2015; Baglieri et al., 2011; Connor, 2013; Thorius, 2016, 2019a, 2019b) are calling for a sociocultural analysis of practices of special education. This is seen as a potentially disruptive approach that can break down the boundaries around special education in order to consider legitimately inclusive means to improve students' learning (Thorius, 2019a). As Connor (2013) stated, "more can be accomplished by holding up a mirror to the institution of schooling" (p. 499), as opposed to perpetuating the existing sociocultural structures of special education. This is imperative to influence the way that individuals come to think about practices of inclusive education. When teachers are given the opportunity to become aware of and consider the cultural/historical roots of the practices of the professional community within which they position themselves, there is a possibility of re-imagining thinking about inclusive education (Thorius, 2016).

As a means to consider how people come to think about things, Bakhtin (1981) emphasized the importance of considering "voice" as evidence of "the speaking consciousness" (p. 434). Although voices may be internal, they also exist externally, to engage with other people, through spoken and written forms. Discourse can therefore be illustrative of underlying ideology. While "authoritative discourse" is that which is characterized as singular, static and inflexible, "internally persuasive discourse" is not linked to any external authority, considers

multiple, often differing perspectives, and makes meaning internally in individuals (p. 342).

Bakhtin (1981) asserted that individuals form their own thinking about topics (i.e., ideological becoming) through engagement with the voices of others.

All educators participate in discipline-specific activities and relate to others in particular ways that are determined by the roles that they play in the “worlds” of their professional lives. Traditionally, these roles are linked to secondary artifacts such as professional title and their associated roles and responsibilities, artificially separated into general and special education (Thorius, 2016). For example, educators become known as “the grade one teacher”, “the principal” or “the special education teacher”, each of which conjures up associated social identities in both the individuals, themselves, and those who interact with them. Drawing on the work of Vygotsky (1978) and Bakhtin (1981), Holland et al. (1998) asserted that people’s figuring of who they are is a dynamic process, developing in response to the activities and social relations in which they engage. It is a “socially and culturally constructed realm of interpretation in which particular characters and actors are recognized, significance is assigned to certain acts and particular outcomes are valued over others” (Holland et al., 1998, p. 52). In this sense, considering educators’ perceptions about how they see themselves relative to their professional activities and possible distinctions they make between general and special education are critical to examine.

Thorius (2016) studied the tensions and shifts in the figured worlds of six teachers, two general educators and four special educators, who participated in a series of professional learning sessions in which participants were presented with secondary artifacts (in the form of published, sociocultural research-informed documents) that challenged the parameters of their existing roles. This required all of the educators to consider their responsibilities for teaching all students.

Thorius drew her data from thematic analysis of the discourse between participants when they were presented with the disruptive artifacts. She found that distinctions between the professional roles of general and special educators made by participants at the outset, led to responsibilities and activities being viewed as distinct for each role. These structures created a hierarchy of power that positioned the special educators above the general educators (Thorius, 2016).

Specialist educators then assumed distinct expert roles as “remediators and diagnosticians of student pathology” (p. 1332). This positioning of special educators as authorities seems likely to create a reliance on them to guide general educators in meeting the needs of students who have been identified under special education policies. Such a model undermines classroom teachers’ efficacy and therefore, their opportunity to build inclusive, pedagogical skills. Thorius’ findings offer important insight into how educators perceive of their own actions within the challenges of inclusive education.

Summary of Sociocultural Theory Overview

The review of sociocultural theory presented here demonstrates its relevance to critical analysis of teaching practices. Given that sociocultural theory emphasizes the complex, dynamic nature of social contexts in which human activity occurs, it offers a lens through which to examine influences on teaching in a given context. Distinguishing between three levels of sociocultural artifacts aids in recognizing the artificial boundaries that exist between general and special education. The potential to engage teachers in transformative action to improve their inclusive practices lies in understanding how their perceptions about their teaching practices have been shaped by sociocultural artifacts. In the subsequent sections of this review, the elements of sociocultural theory just reviewed are applied to a critical analysis of relevant research, leading to a preliminary conceptual framework that guided the current study.

Sociocultural Shaping of Inclusive Teaching Practices

In accordance with a sociocultural theoretical approach, any evaluation of inclusive education cannot “be separated from the location of that phenomenon at a particular historical moment” (Artiles & Dyson, 2005, p.37). Although scholars are increasingly advocating for such review of inclusive education practices (e.g., Artiles & Kozleski, 2007; Baglieri et al., 2011; Dudley-Marling & Burns, 2014; Tan & Thorius, 2019; Thorius, 2019a, 2019b; Waitoller & Thorius, 2015, 2016), contextual sensitivity is not typically reflected in the sources of guidance (i.e., secondary artifacts) that are relied upon for practices in schools and classrooms (e.g., IDEIA, 2004; BC Ministry of Education, 2016). With respect to the educational practices associated with learning disabilities, secondary artifacts guiding such practices still largely reflect the dominant narrative that emerged from positivist-framed, medical research originally dating back hundreds of years, as summarized by the now over 35-year-old review done by Sleeter (1986). As stated in a consensus statement by the U.S. National Institute of Child Health and Human Development (NICHD)-supported Consortium of Learning Disabilities Research Centers and Innovation Hubs (Grigorenko et al., 2019), a review of the last 50 years of practices with specific learning disabilities (SLDs) confirms that “SLDs are recognized world-wide as a heterogeneous set of academic skill disorders represented in all major diagnostic nomenclatures” (p. 2). That is, learning disabilities are identified as disorders, represented by individuals’ “deficits”, as determined by comparison to “typical” others.

Given the predominance of the medicalized disability model in education, this section examines four types of sociocultural influences that shape teaching practices generally, and teaching students identified with RD, specifically. Each of these sources of influence may be examined through secondary artifacts that transmit influence through their “externally embodied

representations” (Wartofsky, 1979, p. 202). These include policies and procedures, pre-service teacher education, in-service teacher professional learning, and boundaries between teaching roles.

Policies and Procedures

The learning disability diagnostic process typically takes place through standardized, psychometrically rigorous, norm-referenced assessment. Such assessment practices are rooted in a post-positivist epistemological stance that asserts that there is the existence of a universal truth, analogous to the concept of normality (Bloomberg & Volpe, 2019). Despite the academic consensus amongst educational psychologists that specific academic deficits exist in students with learning disabilities and that these deficits relate to other cognitive skills somehow, “the diagnostic and treatment relevance of this connection has remained unclear,” (Grigorenko et al., 2019, p. 3). In other words, although a deficit model is used to identify students as having learning disabilities, the precise relevance of this identification process to determining effective “treatment” is actually undetermined within the extant research. Although this lack of clear link between diagnostic processes and effective intervention exists, special education policies that guide practices in schools are still based on the presumption that this link is clear (e.g., BC Ministry of Education, 2016).

In her critique of policies within the U.S. context that are comparable to those in Canadian contexts (e.g., BC Ministry of Education, 2016), Nepo (2017) stated that they are “(1) reactive in nature, (2) discriminative, and (3) focuse(d) on disability instead of ability” (p. 212). Historically, access to important teaching and learning supports have been dependent on diagnosis. This has resulted in lengthy delays while students await formal assessment and identification, causing them to continue to struggle while they wait. Perhaps worse, once students

are identified, they receive a label of disability, which is then addressed through a prescriptive, deficit-oriented Individual Education Plan (IEP) (Nepo, 2017).

In contrast to the nearly exclusive focus on within-individual characteristics that has shaped much of the school system's approach to supporting students with learning disabilities (Connor, 2013), characterizing students' learning to read as an act of mediated action, loaded with sociocultural influences, offers diverse possibilities for affecting change in students' learning. As stated by Lopes (2012) in his plea for the discipline of education to take on sociocultural-based research into RD:

almost everything about it is cultural: the code that must be learned is a cultural product, the context where it is learned (the school) is a product of the social organization; the social relationships (teaching/learning) that produce it are also cultural; and it does not depend on development but on an intentional social act (teaching). (p. 226)

Lopes' call for research that examines the social act of teaching students identified with RD leads to consideration of the sociocultural artifacts that shape how teachers acquire their pedagogical skills.

Pre-Service Teacher Education

To examine the nature of teachers' practices with students identified with RD, some research has considered the role that pre-service teacher education can play in shaping teachers' perceptions about teaching students identified with RD. Within the Canadian context, Gilham and Tompkins (2016) used a critical self-study approach to explore their development of a pre-service teacher education model that explored "counter-narratives to common disability categories" (p. 17). This model was aligned with a Disability Studies in Education (DSE) social equity approach that challenged models of inclusion tied to categorization of students by

disability label. Through their reflections on the development and implementation of the model with pre-service teachers, the authors asserted that professional learning for inclusion is not about providing “solutions per se; rather, we acknowledge that inclusion is a topic that must constantly be won and re-won” (p. 16). The work of Gilham and Tompkins pointed to the importance of emphasizing awareness of the sociocultural influences upon educational practices in order to transform pedagogical actions.

In her critical ethnographic study of four novice special educators, Baustien Siuty (2017) examined how these educators developed and shifted their identities over time in their communities of practice within schools. Tensions between the traditional special education practices in the schools where they taught and the critical disability-informed perspectives of the university preparation program from which they had recently graduated were explored. The themes in how these teachers navigated the tensions that emerged were summarized by the author as both reifying and resisting. While they operated as reifiers in their daily work within the bounds of the dominant ideologies of special education, they also seized opportunities to be resisters when they observed instances of social injustice and used their roles to try to address them. Baustien Siuty’s (2017) findings offer evidence that building a sociocultural understanding of disability in teachers can serve to transform educators’ practices of inclusive education.

In-Service Teacher Professional Learning

Given that professional learning represents an opportunity for transforming educators’ perceptions and ultimately, their actions (Waitoller et al., 2016), it offers an important means for re-shaping inclusive education. In a national study of Canadian educators’ perceived needs for professional development (Campbell et al., 2017), teaching to students’ diverse needs was identified as one of the top priorities reported by educators. With respect to teaching reading in

particular (perhaps the most relevant for students identified with RD), the Canadian context is especially important to consider, given that students from this country have ranked highly overall in reading results within the Organisation for Economic Co-operation and Development's (2019) Programme for International Student Assessment (PISA) rankings. The discrepancy that exists then, for students identified with RD, demands analysis of possibilities for transformative action.

In the policy brief jointly published by the American Association of Colleges for Teacher Education and the National Center for Learning Disabilities (Blanton et al., 2011), training of general education teachers was identified as the best means to improve learning outcomes for students with learning disabilities. Despite this, professional learning efforts have typically maintained separation of special and general education. Waitoller and Artiles (2013) reviewed the research on professional development for inclusive education published between 2000 and 2009. Of the 46 studies they reviewed, 70% of them defined inclusive education by reference to differences in abilities (i.e., disabilities). The vast majority of these (84%) addressed implementation of specific instructional methods. Only 16% of these studies focused on changing school cultures (i.e., a sociocultural approach) to inform equitable practices for all students. From their review, the authors determined that research on fostering inclusive education practices needed to focus on teacher learning in "situative boundary practices" (p. 344). This conclusion makes it clear that critical consideration of the "discontinuities in action" (Akkerman & Bakker, 2011, p. 132) between general and special educators' assigned roles can offer an opportunity to improve inclusive teaching practices.

Teaching Roles

Research has begun to examine the distinctions created between special and general educators' roles. In an effort to consider the source of perceived distinctions between these

educators' identities, Killoran et al. (2013) examined Ontario provincial policy. This policy requires teachers to obtain additional coursework in special education to qualify them to work with students identified with disabilities. A group of teachers and university educators from the special/inclusive education field came together to consider the guidelines. They determined that the guidelines acted as a potential reinforcer of deficit model thinking amongst educators. One of the major points of consensus that emerged from the forum was that fostering inclusive practices in classrooms requires increasing collaboration between both general and special educators, as this actually rarely occurs in practice. This consensus pointed to the need for research to better understand how educators in various capacities might come together to develop new and transformative approaches to inclusive education.

An example of educators crossing the boundaries of their roles to improve inclusive practices comes from Lowrey et al. (2017). These scholars studied the narratives of seven general education teachers from both Alberta and the U.S., who were working on implementation of Universal Design for Learning (UDL) (Meyer et al., 2014). This is an approach to teaching that aims to foster teachers' consideration of "multiple means of representation (the *what* of learning), expression (the *how* of learning), and engagement (the *why* of learning)" (Smith-Canter et al., 2017, p. 3) to engage all learners, regardless of ability. Particular emphasis in the study by Lowrey et al. was on their teaching of students identified with intellectual disabilities. Narrative analysis of semi-structured interviews revealed key themes in the stories of participants. One of the key aspects of their capacity to implement inclusive education practices through UDL was working in teams within a network of multi-disciplinary support (i.e., district-wide, composed of educators in various roles). These findings support the call from the National Center for Learning Disabilities (NCLD) (Blanton, et al.,

2011) to create professional learning opportunities to move beyond historical distinctions between general and special education to regard teaching as universal practice for all students.

Similar to the study done by Lowrey et al. (2017), Smith-Canter et al. (2017) studied the efficacy of a professional development program aimed at fostering both general and special educators' inclusive perceptions and practices using UDL. Using a pre/post design, they examined six co-teaching teams comprised of educators from elementary, middle and high schools. Their understanding and use of UDL in their teaching was measured following a series of professional learning workshops delivered on a university campus, by university researchers. Results showed that increased understanding of UDL and efforts to apply UDL in teaching practices, including increased effective use of technology, were evident across all participants, regardless of their status as general or special educators, following their professional learning experience.

General and special educators collaborated in the context of a professional learning community (PLC), which Tan and Thorius (2019) examined through a case study. In the PLC, two general and four special educators worked together to create equitable learning conditions in math for students identified with disabilities. Meeting and interview transcripts served as primary data sources that were analyzed for the existence of themes. Three major themes emerged: (a) tensions between identities as associated with general and special education, (b) inequities between general and special educators with regards to resource access and professional marginalization, and (c) recognizing and addressing the aforementioned tensions. Despite educators' perceptions of differences as barriers, collaboration across roles was cited as an essential element to making progress in providing equitable, inclusive learning opportunities. The authors asserted that future research should consider the sociocultural shaping of educators'

perceptions in their particular roles, in order to illuminate barriers, as well as the tensions between influences, as opportunities for learning and innovation to transform practices.

Summary of Sociocultural Shaping of Inclusive Teaching Practices

As demonstrated, inclusive education practices have been found to be shaped by four different categories of sociocultural influences. These influences are transmitted through secondary artifacts that represent them. Special education policies and procedures aligned with the prevalent deficit model are one notable influence on teachers' practices. Models of pre-service teacher education are also notable in that they have been shown to offer the opportunity to disrupt the deficit-oriented practices historically evident in schools. In-service teacher professional learning on inclusive practices has also been highlighted as a much needed and potentially powerful influence that can shape inclusive teaching practices. Longstanding, figurative boundaries between the roles of general and special educators is yet another type of sociocultural influence that has been found to shape teaching practices. In the sections that follow, the focus of this review narrows from categories of sociocultural influence that shape inclusive education, to closer consideration of RD, specifically.

Educators' Perspectives on Reading Disabilities

Having established the importance of considering macro-level sociocultural influences on how practices of inclusive education take place, consideration of micro-level influences such as individual educators' perspectives on RD is relevant (Gibbs & Elliott, 2015; Jordan & Stanovich, 2004). In contrast to the deficit view of disability, a social construction view places ability and disability as constructs created in the relations between individuals and the opportunities afforded by the activity setting (Dudley-Marling & Burns, 2014). Over 30 years ago, in her revolutionary critique of learning disabilities as a socially constructed category of education,

Sleeter (1986) linked the development of the construct of learning disabilities to the movement to reform American education following the Soviet Union's launching of Sputnik in 1957. This historical event initiated a widescale criticism of the American education system as having failed to produce the scholars necessary to maintain technological superiority internationally. This resulted in recommendations for educational reform that included tougher academic standards, rigorous, standardized assessment and grouping of students by "ability" (Sleeter, 1986).

The relevance of Sleeter's (1986) assertions to my study, is that it was the procedure for sorting and identifying students that caused educators to perceive "dis" ability in some students, rather than factors innate within the students. In other words, this sociocultural influence, transmitted to educators through secondary artifacts, powerfully shaped educators' perspectives on learning disabilities. Given the potential of sociocultural artifacts to shape educators' perspectives on disability, this section will examine literature that illustrates why it is important to consider educators' perspectives on RD. Key aspects of the research to be reviewed include: deficit versus social construction perspectives, knowledge about what RD is, and variations in perspectives across general and special education teaching roles.

Deficit versus Social Construction Perspectives

In her poignant, narrative account of a boy identified with a learning disability and his teacher, Collins (2013) illustrated how both students and teachers are positioned within the milieu of schools. She positioned them as agents of the educational system—the student as the deficient learner and the classroom teacher as the police of the borders of "normal". Collins connected this positioning to the deficit model, which she attributed to "typological thinking" (p. 181). Typological thinking is based upon the assumption that all individuals represent variations from an ideal type (Gelb, 1998). This concept underlies the normative assumptions of

intelligence testing, which form the basis of the special education model. Students are represented by scores which are compared to an ideal norm. Pivotal decisions regarding students' educational experiences are made on the basis of these scores. This results in the identification and positioning of some students as "normal" and others as "deficient" (p. 181).

Such positioning is reflected in the discourse of both general and special educators in multiple contexts (Cochran-Smith & Dudley-Marling, 2012; Thorius, 2019b). McPhail and Freeman (2005) attributed such discourse to an attempt by schools and their staffs to avoid being seen as failures as educators. By adopting standardized systems of accountability, students who do not fit well may be characterized as inherently flawed, thereby removing fault and responsibility from general educators.

In their early efforts to distinguish between teachers' perspectives regarding the deficit (what the authors termed "pathognomic") model and the social construction model, Jordan and Stanovich (2004) synthesized a number of smaller studies they had conducted to examine the factor structure of teachers' epistemological views about students with disabilities. The authors conducted interviews with in-service teachers and found that teachers' perspectives about students with disabilities and the etiology of those disabilities existed along a bipolar continuum, with deficit-based epistemological views at one end and social construction-based views at the other. Deficit-based perspectives placed disability as a pathology inherent to the student that was best identified through standardized assessments and addressed by special education experts. Conversely, social construction-based perspectives placed disability as an attribute of the student that was influenced by instruction and learning activities and was the responsibility of the classroom teacher to address. In their findings, the authors found that 50% of general education teachers held deficit-oriented perspectives, another 43% held views that vacillated between deficit

and socially constructed and only 7% held perspectives that disabilities are social constructions shaped by history and culture. Given these findings, it is important to consider classroom teachers' unique perspectives on RD for their potential to influence their perceived sense of responsibility for teaching students identified with RD.

Students' own perceived competence within school settings is still greatly influenced by assessments of ability with printed, academic English (Rappolt-Schlichtmann et al., 2018). This is particularly important when considering teaching practices for students identified with RD. Given that proficiency in traditional, print-based literacies has been granted a privileged status of sorts in the school environment (Papert, 1993), these students appear to be especially at risk for negative, deficit-oriented typological thinking in teachers who rely on print-based literacy tasks as their assessments of student learning.

In their survey study of 267 British primary school teachers' essentialist (i.e., fixed, deficit-based) perspectives, Gibbs and Elliott (2015) examined the impact of using the differential labels of "dyslexia" and "reading difficulties" on teachers' perspectives. The authors found that although the results were complicated by overlap between teachers' understanding of the two terms employed, teachers did associate the term "dyslexia" (i.e., a reading disability) with greater essentialist perspectives (i.e., perceptions that reading deficits were unchangeable and inherent to the student). If educators perceive of RD as an innate characteristic of the student that cannot be changed, their judgements of their own ability to effectively teach those students to learn to read may be negatively influenced, particularly if teachers rely heavily on print-based teaching tasks (Gibbs & Elliott, 2015).

In their study of 122 British secondary school teachers, Woodcock and Hitches (2017) examined teachers' perspectives about students following exposure to short, hypothetical

vignettes. Their findings revealed that the teachers actually showed more negative attributions towards students identified with RD labels than students without RD labels when shown vignettes of struggling learners. This supports previous findings with preservice teachers (Woodcock and Vialle, 2015), whose awareness of a student's diagnostic label similarly lowered academic expectations for those particular students. These findings reveal the potential of a deficit-oriented, disability perspective to negatively influence teachers' perceptions about teaching students with significant reading difficulties.

With the intent of offering evidence to contradict deficit-oriented perspectives in the teachers of students identified with RD, Rappolt-Schlichtmann et al. (2018) conducted a randomized, control trial to determine the value of a digital tool they designed to build the capacity of elementary students identified with RD in their learning of science concepts. Their finding most relevant to a review of teachers' perspectives was that teachers reported that seeing their students' success with the unique tool helped them to view the students as academically competent, in some cases, for the first time. The authors pointed out that by defining RD as an inherent deficit, much of the existing research on RD has failed to consider the unique lived experiences of the people involved in teaching and learning.

In research aimed at changing teachers' perspectives on disability, Lanterman and Applequist (2018) studied 77 pre-service teachers' views on learning, teaching, and disability both before and after participation in online modules about inclusive teaching using universal approaches to instructional design. They found that teachers' responses on a questionnaire about the dynamic potential for their students' learning (as opposed to a view that disability is a fixed deficit) increased after exposure to the professional learning information. Although this study did

not address RD specifically, these findings show promise for the efficacy of professional learning as an artifact that can shape teachers' perspectives about RD.

An example of research into teachers' perspectives on disability from the Canadian context comes from McGhie-Richmond et al. (2013). These researchers used surveys from 123 teachers across elementary and secondary settings, as well as 14 in-depth interviews to conduct their study in a rural Alberta school district. Findings revealed that elementary teachers reported significantly more positive attitudes towards inclusion of students with disabilities overall, with secondary teachers reporting negative responses as a whole. Interestingly, the researchers noted that secondary teachers who taught core subjects expressed less positive attitudes about inclusion of students with disabilities than secondary elective teachers. This was postulated to represent a general perception that teaching content is the essential role of a secondary core subject teacher, as opposed to elective teachers or even elementary teachers, who may hold a more universal view about the inclusion of all students, regardless of ability, as part of their role. Although these findings were for teachers' perspectives about disability and inclusion broadly, rather than RD specifically, they are relevant to this review in that they reveal differing perspectives on disability amongst educators in different roles. The potential for sociocultural artifacts within educational contexts to shape these perspectives has important implications for efforts to improve teachers' inclusive teaching practices.

Knowledge About Reading Disabilities

Building upon the literature regarding teachers' perspectives on RD as aligned with a fixed deficit or a flexible, socially constructed phenomenon, it is essential to consider what else teachers know, or do not know, about RD. Given that research has found gaps in teacher knowledge about the structure of language and related reading instructional practices (e.g.,

Hammond & Moore, 2018), one might expect their understanding of RD to be low overall, as well. This is not a certainty, however, as there is a dearth of research evidence of teachers' knowledge about characteristics of RD, in particular (Nijakowska, 2019; Soriano-Ferrer et al., 2015; Washburn et al., 2017; Worthy et al., 2016).

In their exploratory survey analysis of 271 novice teachers (defined as those with 0-5 years of experience), Washburn et al. (2017) found that 54% of all teachers from various locations in the U.S. had at least one misconception about dyslexia (i.e., RD). Although notable, this percentage was found to be lower than those in previous studies from the U.S. and England by the same principal author. Washburn et al. (2011) found much higher percentages of misconceptions amongst both pre-service (92%) and in-service (91%) teachers.

The quality of teacher knowledge about RD is further called into question by Washburn et al.'s (2017) study, in which they found that having a teaching certificate or having taken literacy-specific courses were not significant predictors of teacher knowledge about RD. The authors also found that secondary teachers reported more misconceptions about dyslexia than elementary teachers. These findings cast doubt on the quality and amount of information about RD that is included in teacher education programs, perhaps varying by elementary or secondary focus.

In a related study from differing contexts, survey analysis of 246 pre-service and 267 in-service Spanish-speaking teachers from Spain and Peru was done by Soriano-Ferrer et al. (2015). They found that in-service teachers reported more accurate knowledge about dyslexia than pre-service teachers. In contrast to the findings of Washburn et al. (2017), in-service teachers' self-efficacy, years of teaching experience, post-graduate training in dyslexia, and prior experiences with a child with dyslexia were positively correlated with knowledge about dyslexia. These

findings offer support for the consideration of sociocultural influences such as pre-service and in-service professional learning in different contexts as influential upon teachers' knowledge about RD.

Perspectives of General versus Special Educators

Given that previous research has found variations in teacher knowledge about RD by context (Soriano-Ferrer et al., 2015; Washburn et al., 2017), it is of interest to further explore how such knowledge varies by role as general or special educators. Using a qualitative approach to examining teachers' perspectives on RD and associated teaching practices, Worthy et al. (2016) conducted semi-structured interviews with 32 elementary educators across general classroom and special educator roles. Educators' personal and professional experiences with dyslexia, perceptions of their own knowledge, beliefs and confidence concerning dyslexia, and the identification and intervention procedures of dyslexia in their schools were examined.

Two major themes emerged from Worthy et al.'s (2016) study, as follows: teachers taking responsibility, and barriers to teaching students identified with RD. In terms of responsibility, educators spoke about their commitment to complying with district procedures for assessment and instruction. They also spoke of barriers associated with the identification process as long, arduous and ambiguous. Prescribed intervention procedures were described similarly. The need to identify students with dyslexia in order for them to receive accommodations on high-stakes testing was also perceived as a barrier. Notably, when sharing their understanding of what dyslexia is, educators provided inaccurate information in many instances. In any case, educators identified as dyslexia specialists expressed more confidence in their knowledge than other educators, described by the authors as reflective of "authoritative discourse" (Bakhtin, 1981) taken as indisputable, given their expert roles. The influence of the sociocultural artifact of

distinct special and general educator roles in shaping educators' perspectives on RD is evident in these findings.

In a follow-up to their 2016 study, Worthy and colleagues (2018) conducted interviews with 13 dyslexia interventionists. Given that specialist teachers in these roles had previously expressed confidence in their knowledge about dyslexia, the researchers sought to uncover the elements behind their confidence. Their findings revealed a series of themes that corresponded to the traditional, deficit-based special education model that emphasized the separateness of special educators and the expert knowledge they require to be effective. The themes identified by these educators were: dyslexia as a neurological difference, instruction for dyslexia as a prescribed intervention, general educators as lacking knowledge and training, dyslexia as being under-identified in general, and interventionists' professional identities as specialists with unique training. Taken in sum, the dyslexia specialists' perspectives on RD reflected perceived boundaries between general educators and special educators. This is further evidence that the sociocultural influence of educator role shaped perceptions about teaching students identified with RD in Worthy et al.'s (2018) study.

Summary of Educators' Perspectives on Reading Disabilities

The research reviewed here demonstrates that educators' perspectives on RD are shaped by multiple sociocultural influences. For example, perspective along the continuum from a deficit-based to a socially constructed view of RD varies based on: labels used to describe students, instructional activities, professional learning opportunities, and status as elementary versus secondary teacher. Considerable context-based variations in teachers' knowledge about RD have been found to be connected to pre-service and in-service teacher learning in some cases. Although special educators report relatively more knowledge of RD, their perceptions are

linked to authoritative commentary from secondary artifacts that transmit the processes for implementation of the prescriptive special education system, rather than socially constructed knowledge of RD per se. In the subsequent section, this review narrows further from the sociocultural influences on teachers' perspectives about RD, to their personal beliefs about the efficacy of their teaching.

Educators' Self-Efficacy Beliefs

In his seminal work on social cognition, Bandura (1986, 1997) asserted that the nature of individuals' statements of beliefs about their perceived capabilities are powerful predictors of their behaviour and decision-making. Through a mechanism he termed "reciprocal determinism", Bandura asserted that individual factors such as cognition, affect and biology influence behaviour, which in turns influences the environment, in a triad of reciprocal influence (Bandura, 1986). In this sense, Bandura's conceptualization is consistent with sociocultural theory, in that "individuals are viewed as both products and producers of their own environments and social systems" (Pajares, 1996). Self-efficacy beliefs concern the manner in which individuals interpret their "capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997, p. 3).

While the previous sections of this review demonstrated that there is evidence that both teachers' perspectives on RD and their actual teaching practices are shaped by sociocultural influences such as professional learning (e.g., Tan & Thorius, 2019) and guiding policies and procedures (e.g., Worthy et al., 2016), it is teachers' belief in their personal agency (Bandura, 1997) to teach students identified with RD effectively, that forms the basis for action (Sharma et al., 2012). According to Pajares (1996), "the potent nature of beliefs makes them a filter through which new phenomena are interpreted and subsequent behaviour mediated" (pp. 543-544). Self-

efficacy beliefs have been shown to be domain-specific, rather than universal (e.g., Tschannen-Moran & Johnson, 2011), which makes them particularly interesting to educational researchers pursuing insight into a specific facet of teaching (e.g., teaching students identified with RD). With respect to the matter of teaching students identified with RD, there is evidence to suggest that teachers' perspectives on RD and teachers' beliefs in their efficacy to teach them effectively may interact (Gibbs & Elliott, 2015; Worthy et al., 2016). In order to promote potentially transformative actions amongst educators, the influential nature of teachers' perceived self-efficacy to teach kids with RD merits further exploration.

Self-Efficacy Beliefs and Teaching Practices

Although the sources of teachers' self-efficacy are not always clear (Tschannen-Moran & Hoy, 2007), Bandura (1997) does offer four proposed sources of self-efficacy: mastery experiences (thought to be the most powerful), vicarious experiences, verbal persuasion, and physiological arousal. Whether a teacher accumulates positive or negative experiences of each type affects their self-efficacy beliefs. Mastery experiences in which teachers directly experience success, offer "authentic evidence of whether one can muster whatever it takes to succeed" (Bandura, 1997, p. 80). Vicarious experiences, when teachers witness others who they perceive as similar to them experience success, allow them to appraise their own skills in comparison to those of others. In experiences of verbal persuasion, teachers receive verbal affirmations of their capabilities from others whose opinions they value. Physiological and affective states influence self-efficacy beliefs by sending somatic signals that are experienced as positive emotions (e.g., joy, optimism) or negative (e.g., anxiety, fear) (Bandura, 1997).

In their survey study of the antecedents of 255 novice and experienced teachers' general self-efficacy beliefs, Tschannen-Moran and Woolfolk Hoy (2007) found that mastery

experiences of successful teaching contributed most to the self-efficacy beliefs of both experienced and novice teachers. This finding was consistent with Bandura's (1997) assertion about the salience of mastery experiences. Within Tschannen-Moran and Woolfolk Hoy's study, novice teachers also reported that verbal persuasion from others such as administrators and colleagues, vicarious experiences of witnessing teaching practices modelled for them, and the availability of resources were salient. Such experiences were noted by the authors to be especially important to novice teachers who have not yet had the opportunity to accumulate many mastery experiences.

In a later study by the same principal author (Tschannen-Moran & Johnson, 2011), the antecedents of 648 teachers' self-efficacy beliefs were examined via survey. This time, the authors focused on teachers' self-efficacy for literacy instruction, specifically. Findings revealed that demographic factors such as gender and race were not predictive of self-efficacy beliefs, nor was the number of years of teaching experience. In contrast, verbal persuasion and vicarious experiences through participation in professional learning activities related to literacy instruction, perceived quality of preservice education and access to literacy resources were related to increased self-efficacy. Overall, findings supported the distinctness of teachers' self-efficacy for teaching generally, from teaching literacy, specifically. In considering their results, the researchers pointed to a need for research that considers teachers' self-efficacy within specific contexts, and that explores the elements that influence self-efficacy in more detail.

Self-Efficacy Beliefs and Inclusive Education

For the most part, research on self-efficacy for teaching practices has focused on the nature of specific academic tasks (e.g., reading) or working with students within particular demographics (e.g., students from racial minority groups) (Gibbs & Elliott, 2015). Within the

last decade, research has begun to examine teachers' self-efficacy for inclusive teaching practices, more generally. Results from studies across international contexts (e.g., Siwatu, 2011; Vaz et al., 2015) have shown a wide variety of results, which support the need to consider context-specific sociocultural influences on teachers' self-efficacy.

In their work to develop a survey measure of teachers' self-reported efficacy for teaching diverse students, including those with disabilities, Benton-Borghi and Chang (2012) studied the responses of over 200 general education teachers from one U.S. state. Their results indicated that in-service teachers' self-efficacy to teach to diversity (including students with disabilities) was low overall. This result emerged, even though participants reported high overall efficacy as teachers. The finding reveals that teachers' self-efficacy for inclusive teaching is distinct from other aspects of teaching.

In a study of self-efficacy for culturally responsive teaching in urban contexts (a component of inclusive teaching), Siwatu (2011) assessed 34 pre-service teachers' self-efficacy via survey. Overall, preservice teachers reported that they felt less prepared to teach African American and Hispanic students in diverse urban contexts than White American students in suburban contexts. The author asserted that this was a result of teacher preparation programs tailoring their programs to suburban, predominantly White, contexts. Later research by the same principal author (Siwatu et al., 2017) further supported such influence of sociocultural factors on teachers' self-efficacy.

Additional research indicating the influence of sociocultural factors on teachers' self-efficacy beliefs emerged in a study by Vaz and colleagues (2015). This cross-sectional survey of 74 in-service teachers in urban Western Australia found that those with low levels of self-efficacy beliefs in their teaching skills overall were more likely to uphold negative attitudes

towards including students with disabilities. Gender and previous training in teaching students with disabilities were also found to influence attitudes towards inclusion. These findings support the importance of examining how teachers' self-efficacy beliefs and their perspectives on inclusion are shaped.

Further evidence of the importance of sociocultural influences on teachers' self-efficacy beliefs for inclusion emerged in Malinen et al.'s (2013) survey study of 1911 participants across Finland, China, and South Africa. A common finding across the samples from each country was that teachers' previous experience teaching students with disabilities was the strongest predictor of self-efficacy beliefs. This is consistent with Bandura's assertions that mastery experiences are the most powerful influence on self-efficacy (Bandura, 1997). The larger patterns of results were unique to each of the countries, which is not surprising, given considerable differences in regulatory policies and procedures in each context. In this sense, this finding supports the importance of considering sociocultural influences on educator's perceptions, including self-efficacy beliefs.

In another study that demonstrated the influence of sociocultural influences on teachers' self-efficacy beliefs, Savolainen et al. (2012) conducted a study that surveyed 319 South African and 822 Finnish primary and secondary teachers about their attitudes and self-efficacy beliefs for inclusive education practices. Self-efficacy beliefs for collaboration with colleagues emerged as the best predictor of attitudes towards inclusion in both countries. Findings revealed relatively higher attitudes supporting inclusion in Finland than South Africa. The lower self-efficacy beliefs reported by South African teachers were noted to be potentially linked to policies that did not include students with disabilities in mainstream classrooms until shortly before the data was

collected. This finding points to the importance of considering the sociocultural influence of educational policy on teachers' perceptions of self-efficacy beliefs.

Self-Efficacy Beliefs and Teaching Students with Reading Disabilities

In their national survey of 1,350 American general education (i.e., classroom) teachers, the National Center for Learning Disabilities (NCLD & Understood, 2019) found that only half of those surveyed actually thought that students with learning and attention issues such as those experienced by students identified with RD are capable of meeting grade level standards. With respect to specific teaching strategies, only 17% reported feeling very well prepared to teach students with mild to moderate learning disabilities. The NCLD report identified the following three types of teacher beliefs that positively influenced learning for students with learning disabilities: (a) strong sense of self-efficacy, (b) positive orientation toward inclusion and personal responsibility for all students, and (c) growth mindset (i.e., understanding of how persistence, hard work, self-regulation and effort relate to learning and other outcomes) (p. 15). This highlights the importance of teachers' beliefs to students' achievement, yet unless educators also critically consider larger structures and systems (i.e., sociocultural practices as reflected in artifacts), genuine improvement in teaching and learning for students identified with disabilities is unlikely (Dudley-Marling & Burns, 2014).

Given that RD may ultimately be seen as a challenge of literacy instruction, it is important to consider how teachers perceive their preparedness for teaching students to read, even when they struggle. In an example of research into special educators' beliefs about their self-efficacy for teaching reading, Urbach and colleagues (2015) compared the perceptions of more and less experienced special educators. Findings revealed that more experienced teachers reported higher levels of efficacy beliefs overall and were more focused on learning outcomes

than less experienced teachers, who were more focused on building student relationships. As novice teachers have recently completed their pre-service learning, these findings suggest that there is scope for increased building of teachers' self-efficacy beliefs for reading pedagogy within pre-service teacher preparation programs.

Within their larger study of classroom teachers' perceptions about RD, Gibbs and Elliott (2015) used self-report questionnaires to examine the self-efficacy beliefs for teaching students struggling with reading amongst 267 primary teachers in England. Contrary to previous findings by Jordan and Stanovich (2004) that found decreased teacher self-efficacy beliefs when disability labels were used, Gibbs and Elliott found that teachers' self-efficacy beliefs were actually increased in the presence of a disability label (i.e., dyslexia). Importantly, this surprising finding was not replicated in a comparable study by Gibbs et al. (2020) done with 124 Finnish and British elementary school teachers. Instead, like Jordan and Stanovich's (2004) findings, the use of an RD label was again associated with increased fixed, essentialist teacher perspectives on disability. This time though, category labels did not influence teachers' self-efficacy beliefs. In addition, differences were found between the overall perceptions of educators from Finland and the UK. The variability in these findings leaves the potential link between educators' perspectives on RD and their self-efficacy beliefs for teaching students identified with RD uncertain. What is clear, is that the differences between educators' perceptions from the two countries point to the likelihood that contextually specific sociocultural artifacts have shaped educators' perceptions (both self-efficacy beliefs and perspectives on RD) about teaching students identified with RD. Precisely how particular artifacts have shaped those perceptions remains unknown.

Summary of Educators' Self-Efficacy Beliefs

The construct of self-efficacy is especially relevant to the examination of teaching practices, given that belief in one's personal agency influences how action occurs (or not) (Bandura, 1997). Teachers' self-efficacy beliefs are specific to particular aspects of teaching practices (Tschannen-Moran & Johnson, 2011). Sociocultural influences such as educational policies and pre-service education have been found to be related to self-efficacy beliefs for inclusive education across contexts (e.g., Savolainen et al., 2012; Siwatu, 2011). Although there is only limited research on teachers' self-efficacy beliefs for teaching students identified with RD currently, findings from related studies linking teachers' self-efficacy with inclusive teaching practices (e.g., Urbach et al., 2015), point to the importance of pursuing this topic of research further. Evidence of differences in teachers' self-efficacy beliefs across cultural contexts (e.g., Malinen et al., 2013) also points to the importance of considering how sociocultural artifacts within a particular context shape educators' perceptions about teaching students identified with RD.

Preliminary Conceptual Framework

I synthesized the overarching topics from the literature review to develop a conceptual framework illustrating the anticipated links between critical constructs in the shaping of educators' perceptions about teaching students identified with RD. As Miles et al. (2020) noted, a conceptual framework explains the primary constructs studied and the presumed relationships between the variables. In this sense, the conceptual framework that I created acted as an evolving roadmap throughout my study. It depicts the contextually situated nature of the critical variables of interest to this study, namely: influential secondary sociocultural artifacts, teachers' perspectives on RD, and teachers' self-efficacy beliefs for teaching students identified with RD.

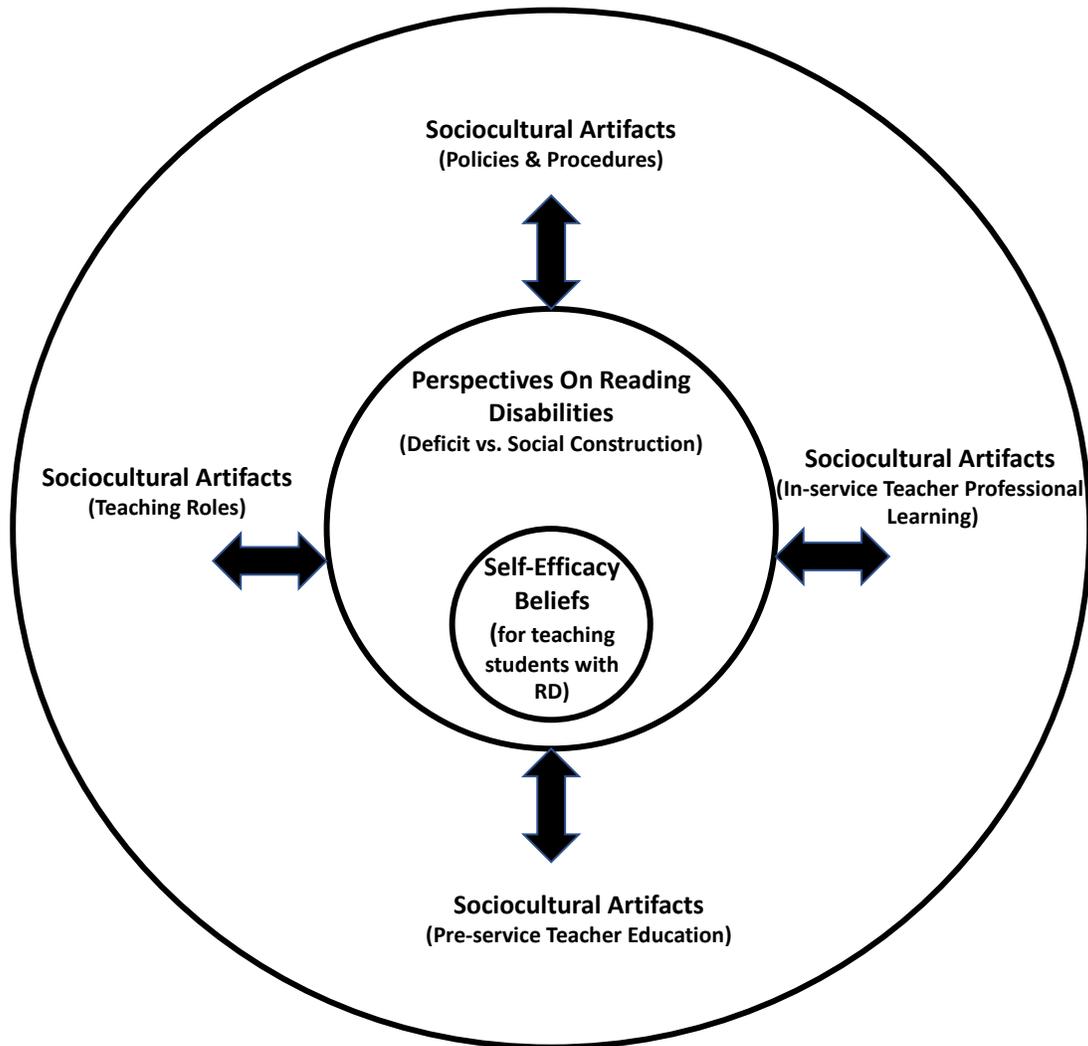
A Model for Understanding the Shaping of Educators' Perceptions

My research, aimed at understanding how secondary sociocultural artifacts shape teachers' perceptions about teaching students identified with RD in one school district, was aligned with the socioculturally-framed assertions of Artiles and Kozleski (2007). These scholars argued that expanding educators' capacity for inclusive education requires three essential elements. These are: (a) analysis of the link between cultural and historical dimensions and ideologies that underlie teaching practices, (b) understanding one's community and participation in it, and (c) engagement in a transformative agenda. In keeping with these three elements, my study addressed the first two through its data collection and analysis. My intention is to share my findings so that they can be leveraged by local educators to take transformative action to strengthen their inclusive teaching practices.

Given the critical link between educators' perceptions and their actual practices (Gibbs & Elliott, 2015; Jordan & Stanovich, 2004; Tschannen-Moran & Johnson, 2011), as well as the prevalence of a deficit-based model in the artifacts that transmit guidance for teaching students identified with RD (Thorius, 2016, 2019a, 2019b), a conceptual framework that describes how particular secondary artifacts in a given context shape teachers' perceptions, was of interest. I applied a sociocultural theoretical framework (Cole, 1996) to develop a conceptual model of how teachers' perceptions are shaped by secondary sociocultural artifacts within this school district.

Figure 1 represents the preliminary conceptual framework for understanding how sociocultural artifacts shape teachers' perceptions about teaching students identified with RD in one school district. Consistent with Cole's (1996) depiction of context as "that which surrounds" (p. 132) the three concentric circles represent the critical variables of interest to this study: secondary sociocultural artifacts, teachers' perspectives on RD and teachers' self-efficacy beliefs

for teaching students identified with RD. The outer circle and the bi-directional arrows reach towards the two inner circles in the middle that represent teachers' perceptions. This illustrates the bi-directional influence of sociocultural artifacts on the perceptions, as well as the potential for influence of the perceptions on the artifacts. This is taken from Wertsch's (1993, 1998) depiction of mediated action as having a bi-directional influence on the environment and the individual. Teachers' self-efficacy beliefs, depicted in the innermost circle, are further nested within teachers' perspectives on RD, given evidence of an influential relationship between them (Gibbs & Elliott, 2015; Worthy et al., 2016). The categories of sociocultural artifacts included in this figure are those that emerged repeatedly throughout the literature review. The depiction of this conceptual framework was expected to evolve as data was collected and understanding of these critical variables increased.

Figure 1*Preliminary Conceptual Framework***Positioning the Study**

Despite many years of educational policies and practices purportedly designed to help students with significant struggles in learning to read, some children continue to struggle and end up identified as having disabilities. Rather than being an unchangeable fate, this state of affairs is socially constructed. Within the education system, educators' roles, and their associated

identities, as well as their knowledge and beliefs about their own practices are tied in important ways to influences of culture and history. These perceptions are particularly influential to their teaching practices. Yet, the predominant alignment of RD research within the field of special education has led to little being known about how educators' perceptions, including perspectives on RD and beliefs about their own self-efficacy for teaching students identified with RD, are shaped by sociocultural artifacts within the context of their teaching.

The purpose of my study was to answer the over-arching research question: How do secondary sociocultural artifacts shape educators' perceptions about teaching students identified with RD in the context of one school district? It addressed gaps in the existing research on both RD and inclusive education practices in three ways. First, my study contributed a qualitative examination of educators' perceptions about RD, as opposed to the predominantly quantitative, medically, and psychologically framed portrayals that exist in the RD research. Woodcock and Hitches (2017) called for an increase in qualitative methods to better understand the nuances of teachers' perspectives. In a comprehensive review of the research on RD published in the latter half of the 20th century until 2011, Lopes (2012) noted that the most prolific publishers of RD research were physicians, psychologists and neuropsychologists. None of the researchers came from the discipline of education. This is also evident in the location of the RD research in psychology-based journals, with very little in literacy education journals (Lopes, 2012).

Second, in my study, I examined the particular sociocultural context of one district, in order to obtain a unique and fulsome description. This included considering input from educators from various professional roles, with varying years of experience. Washburn and colleagues (2017) advocated for investigation of the perceptions of veteran teachers, as opposed to novice or preservice teachers, for whom the evidence is greater in already existing research (e.g., Thorius,

2016; Washburn et al., 2017). These authors also advocated for the consideration of educators' perspectives across professional roles (e.g., special education teachers, administrators, and others), rather than those from a singular role. Consideration of perspectives across roles, particularly those from both general and special education, allowed for detailed examination of perceptions that may be influenced by role.

Third, given the important link between teachers' perceptions and their practices (Gibbs & Elliott, 2015), my study contributed insight into how educators' perceptions of their teaching of students identified with RD are formed. Such new insight can help to guide the design of future professional learning experiences and have implications for pre-service learning. This research provided new knowledge about how teachers' perceptions of their preparedness to meet the needs of students identified with RD are shaped as a result of sociocultural artifacts in the context of their school district.

Chapter Summary

In this review of extant literature, I positioned my descriptive case study within the field. In the first section, I provided an overview of the sociocultural theoretical framework within which this case study is situated. Second, I reviewed existing evidence of sociocultural shaping of inclusive teaching practices. Third, I reviewed the literature on educators' perspectives on RD, followed by the literature on educators' self-efficacy beliefs. Finally, I presented the preliminary conceptual framework that I developed, based on existing research. In the next chapter, I offer the details of the case study design that I conducted.

CHAPTER THREE: RESEARCH DESIGN

The purpose of my study was to describe how secondary sociocultural artifacts shape educators' perceptions about teaching students identified with reading disabilities (RD) in a case study of one school district. The first section of this chapter provides the background as a researcher that I bring to this study, followed by a general introduction to the research design, and the rationale for its application in the study. The next section includes the research questions, sampling details, procedures for data collection and analysis, integrity, limitations and delimitations, and ethical considerations made for this study.

Background and Role of the Researcher

I have spent my 25-year career in public education in various capacities—as teacher, school psychologist, vice principal, and district principal. Since the beginning of my career, my primary interest has been with improving the school experiences for the students who seem to be left at the figurative margins of classrooms and schools. My work as a school psychologist gave me ample experience with students who struggled in acquiring reading skills and subsequently, ended up identified within the system of traditional special education. Years of witnessing multiple generations of students experience this, but not necessarily gain appreciable benefits from it, left me curious to explore this phenomenon more closely, with the hope that insights might lead to better experiences for students. Given that the responsibility for teaching students identified with RD has historically fallen to special educators through the process of Individual Education Plans (IEPs) but is now shifting to classroom teachers through the trend towards Universal Design for Learning (Meyer et al., 2014), I wondered how classroom teachers perceive themselves to be equipped to take on this responsibility. Now, in my additional, part-time role as

an instructor within an inclusive education graduate diploma program for teachers, my focus has turned to what role classroom teachers might play in leading positive change.

Although my work has historically been aligned with a post-positivist special education model, focused on identification of deficits and remediation of those deficits, I have experienced an epistemological shift towards consideration of multiple perspectives on disability. In this sense, my stance regarding meaning-making is social constructivist. My research is framed within this perspective, in order to fully consider the perspectives of educators on the teaching of students identified with RD.

Ultimately, my unique, local knowledge of the context of my research added richness (Berger, 2015) to this descriptive case study. I have considered the ethical implications of collecting research data within the context where I am employed. Although it presented both benefits and challenges, I believe that the benefits of my situatedness within the research context outweighed the risks.

Research Methodology

Given that my primary research aim was to provide a rich description of the ways in which a group of teachers in one school district come to make sense of and conduct their activities within their daily situations (Miles et al., 2020), a descriptive case study was the most fitting research approach. The integrity of the study is strengthened by situating it within a range of established research paradigms. In their recent work, Lincoln and colleagues (2018) identified the ontology (i.e., nature of reality), epistemology (i.e., nature of knowledge), and methodology (i.e., process of research) of major research frameworks. These are the positivist, post-positivist, critical, participatory, and constructivist. Considering Lincoln et al.'s (2018) overview of the philosophical underpinnings of major research paradigms, I have positioned my study within the

social constructivist paradigm. As such: (a) my axiology dictated that my personal values and biases had to be acknowledged within the context of the study, (b) my ontology assumed that there are multiple realities that are socially created through lived experiences, (c) my epistemology required that close contact with the study participants allowed their subjective experiences to shape the study as it unfolded, and (d) my methodology was emergent, shaped by the inductive reasoning that occurred as the study proceeded. As my study aimed to create a rich, descriptive account of a phenomenon (i.e., how secondary sociocultural artifacts shape teachers' perceptions about teaching students identified with reading disabilities within the context of one school district), situating it within the social constructivist paradigm allowed for context-specific, detailed, inside knowledge to emerge and influence the study as it took place.

Case Study Methodology

Although seminal examples of case studies are plentiful throughout empirical work broadly, an agreed-upon definition of case study that cuts across disciplines is lacking (Flyvbjerg, 2011; Gerring, 2004; Pearson et al., 2015; Schwandt & Gates, 2018; Yin, 2018). Within the case study literature, attempts to clarify a singular definition of case study have resulted in widespread confusion, which Gerring (2004) referred to as a “definitional morass” (p. 342). Further, the manner in which cases are identified varies widely, from an actual entity (e.g., an individual or organization) to a more abstract conceptualization, (e.g., a community or a decision process) (Creswell & Poth, 2018). According to Flyvbjerg (2011), “the decisive factor in defining a study as a case study is the choice of the individual unit of study and the setting of its boundaries,” (p. 301). In this sense, intensive focus on a particular “case” is a defining component of case study research. For the purpose of my research, I adopted the definition of a case proposed by Miles et al. (2020), as “a phenomenon of some sort occurring in a bounded

context” (p. 24). With this focus, using case study research becomes a means “to unravel the complexity of one demarcated entity” (Abma & Stake, 2014, p. 1150).

According to Brown (2008) and Yazan (2015), there are three scholars who are best-known for their comprehensive work on case study as a research strategy. They are Robert Yin, Robert Stake, and Sharan Merriam. Yazan (2015) offered a useful heuristic by which to arrange the convergences and divergences of these scholars, namely: by their epistemological commitments, definitions of cases and case study, study designs, data gathering, data analyzing, and validation of findings. In the paragraphs that follow, I will provide an overview of the work of each of these scholars as it pertains to my research, broadly using Yazan’s (2015) organizing features, to justify my own methodological choices.

Yin’s Conceptualization of Case Study

At one end of the continuum of case study methodology, Yin’s approach may be characterized as the most positivistic in nature, among the three methodologists (Yazan, 2015). Yin espoused an empirical model for case study that uses a pre-determined theoretical framework and seeks to identify both “general and universal patterns (Abma & Stake, 2014, p. 1150). For Yin (2018), case study research follows a “linear but iterative process” (p. 31) and adheres to a data-gathering protocol. He emphasizes the skills of the investigator to conduct analyses that may include both quantitative and qualitative data (Yazan, 2015). In order to authenticate data, Yin adheres to psychometric concepts such as construct validity, internal and external validity and reliability (Yin, 2018). Taken as a whole, Yin’s characterization of case study relies on psychometric concepts that are viewed as overly simplistic for complex educational settings (e.g., Hamilton & Corbett-Whittier, 2013). In this regard, Yin’s positivistic,

linear approach is not most suited to my proposed study, which is rooted in social constructivism, and will unfold in a complex, ever-evolving educational context.

Stake's Conceptualization of Case Study

In contrast to Yin, Stake's epistemological commitments represent the opposite end of the continuum, rooted in constructivism and existentialism (Yazan, 2015). For Stake, it is the unique complexities and the intrinsic value of their study that distinguishes case study from other research methods (Stake, 1995, 2010). In his conceptualization, case studies are not reliant on intervention from a researcher, but rather, they serve to document natural phenomena as they occur, from multiple perspectives (Yazan, 2015).

Stake asserts that qualitative methods are most-suited to case study (Abma & Stake, 2014; Stake, 1995), typically including observations and natural discourse analysis, versus researcher-created instruments such as tests or clinical interviews (Abma & Stake, 2014). For Stake, understanding is valued over explanation, and is achieved through both close-up and faraway analyses of a case, along with collection of multiple perspectives within naturalistic dialogues (Abma & Stake, 2014; Stake, 1995, 2010). Holistic understanding involves the researcher serving as instrument, observing, questioning, and interpreting the multiple influences that interact in multiple ways, rather than a fixed cause and effect sequence (Stake, 2010). Consistent with this understanding, triangulation is endorsed by Stake as a means to collect data from various sources to compare and authenticate it (Yazan, 2015). For Stake, insights from cases are bound by the particular time and context of a case, elicited through "thick description", a concept derived from anthropology (Geertz, 1973). According to Stake, this supports "vicarious experience" when readers of the case study can "translate the experience from the case studied to their own context" in order to build their own understanding (Abma & Stake,

2014, p. 1152). In this sense, Stake's version of case study is grounded in the interpretivist/constructivist paradigm. Although Stake's conceptualization is relevant to my research, the work of another scholar offers an approach that is even better suited to my case study of a bounded phenomenon within an educational setting, as I describe next.

Merriam's Conceptualization of Case Study

Merriam's case study approach lies at the same end of the methodology continuum as Stake's (Yazan, 2015). As opposed to Stake's open-ended model, Merriam's primary contribution is that she offers a detailed, practical approach to conducting a constructivist-oriented case study (Yazan, 2015). She emphasizes that making meaning out of data is the key responsibility of the researcher, occurring simultaneously, as data is collected (Merriam & Tisdell, 2016). Although Merriam's work is focused on qualitative data sources, including interviews, observations, and document analysis (Merriam, 1988, 1998), her more recent work refers to the potential for using mixed quantitative and qualitative data sources within methodological frameworks (Merriam & Tisdell, 2016).

Rather than aiming to generalize findings in an empirical sense, Merriam's version of case study aims to deeply understand particularities. The specification of the case, itself, as the unit studied, is its defining feature. The case represents "a single entity, a unit around which there are boundaries" (Merriam & Tisdell, 2016, p. 38). In this sense, Merriam's approach is more flexible than those of both Yin and Stake, whose approaches are limited to the study of programs and people, rather than inclusive of events and processes, like Merriam's (Yazan, 2015). Merriam draws on the body of established work on case studies to identify their defining methodological features (Merriam & Tisdell, 2016). She asserts that *particularistic* study of a specific phenomenon is best for research into practical problems, or those that arise from

everyday practices. Merriam endorses *descriptive* study to create “a highly descriptive, detailed presentation of the setting and in particular, the findings of a study” (Merriam & Tisdell, 2016, p. 257). According to Merriam, a case study is *heuristic*, in that it can “shed light on the phenomenon, allowing the reader to extend their experience, discover new meaning, or confirm what is known” (Brown, 2008, p. 3). Merriam’s depiction of case study, with its rich description of a context-specific phenomenon through multiple perspectives and data sources, is noted to be well-suited to the study of problems of practice in education (Merriam, 2009). Further, Merriam’s approach is consistent with the intent of my research to describe the sociocultural milieu of teachers’ perceptions about teaching students identified with RD in one school district. From the preceding review of various models of case study research, Merriam’s (1988; Merriam & Tisdell, 2016) depiction of case study is most applicable to the aim of my study.

Design of this Case Study

As the design of a case study can be daunting for a novice researcher (Yazan, 2015), I relied on Merriam’s pragmatic approach (1998), as well as practical guidance offered by Baxter and Jack (2008). Case studies are appropriate for answering “how” and “why” questions when behavior of participants cannot be manipulated, contextual conditions are of interest/relevance and the boundaries between the phenomenon and the context are not clear (Merriam, 1998; Yin, 2018). Since my study’s primary purpose was to gain insight into how teachers’ perceptions are shaped by sociocultural artifacts that are specific to the context of one particular school district, it aligned well with the intent of a case study.

Baxter and Jack (2008) assert that a case or unit of analysis must be identifiable as a phenomenon that is bound by its context. This is consistent with Merriam’s approach (1988, 1998; Merriam & Tisdell, 2016) that emphasizes the importance of demarcating the boundaries

of the case to be studied. For my study, the perceptions of grades 4-7 teachers from one school district about their teaching of students identified with RD, were the unit of analysis. As recommended by Baxter and Jack (2008), it is necessary to bound the case by factors such as time, place, and activity. The case that I studied is limited to classroom teachers with current responsibility for teaching grades 4-7, in an urban, western Canadian school district. In my research, the case may be thought of as a “site”, in that the social and cultural characteristics of the unique setting of the case are considered important components of the research (Miles et al., 2020).

In planning the design of a case study, Merriam (1998) stipulates the importance of determining the type of case study, as guided by its overall purpose. Since my study was intended to provide insight into how teachers’ perceptions are formed by sociocultural artifacts that are specific to their real-life context, with such insight informing the development of my conceptual framework, it is characterized as descriptive, according to Merriam’s (1998) classification of case study types. It constitutes a single case in that it focused on one case (that is, the perceptions of all grades 4-7 teachers across one school district), but also included embedded sub-units (that is, individual educators’ perceptions) (Merriam, 1998).

Research Questions

Uncovering the secondary sociocultural artifacts that shape educators’ perceptions, including their own efficacy for teaching students identified with RD, has the potential to support teachers in their efforts to use inclusive pedagogical practices. While existing research has begun to uncover some of the influences on teachers’ perceptions, the contextual specificity of these influences needs to be considered. Without a detailed understanding of the conceptual model of how these influences operate in a given context, local educational policymakers and other change

agents may be missing the mark in their efforts to support inclusive teaching practices generally, and for students identified with RD, specifically. The following over-arching question guided my inquiry: How do secondary sociocultural artifacts shape grades 4-7 educators' perceptions about teaching students identified with reading disabilities (RD) in the context of one school district?

The following four research sub-questions allowed me to further explore this primary inquiry:

1. What secondary sociocultural artifacts have influenced educators' perceptions about teaching students identified with reading disabilities within this context?
2. How do educators characterize their perspectives on reading disabilities?
3. How do educators characterize their self-efficacy beliefs to teach students identified with reading disabilities?
4. To what extent do educators perceive specific secondary sociocultural artifacts as supportive or inhibitive to their teaching of students identified with reading disabilities?

Population and Sampling

Purposeful sampling was relevant to my study in that my goal was to produce rich information and in-depth understanding, as opposed to empirical generalizations (Patton, 2015). In this sense, "what would be 'bias' in statistical sampling, and therefore a weakness, becomes intended focus" (Patton, 2015, p. 401). A fundamental axiological component is that a researcher's findings are necessarily "value-laden and that biases are present in relation to their role in the study context" (Creswell & Poth, 2018, p. 20). For this reason, following the guidance of Berger (2015), I have positioned myself as researcher with respect to my social position, personal experiences, and political and professional beliefs.

According to Miles et al. (2020), qualitative research samples typically involve *small* groups of people within their naturalistic contexts. In addition, they are *purposive* in that they are intentionally selected due to their relevance to the phenomenon of interest. This contrasts random sampling, which is typically used in quantitative research, with the goal of generalizing from a sample to the larger population (Bloomberg & Volpe 2019). Further, qualitative samples are determined by *boundaries* of practical constraints such as time and means, balanced with critical characteristics as determined by a guiding conceptual *frame* (Bloomberg & Volpe, 2019). Finally, sampling occurs *within* the case to robustly describe constructs and how they relate to each other (Miles et al., 2020).

The location for my research was a public school district within a mid-sized, western Canadian city. Given that the intent of my research was to “get as close as possible to the participants being studied” (Creswell & Poth, 2018, p. 21), the geographic location of this site offered that opportunity. The school district was selected, in part, due to its establishment of weekly professional learning communities (PLC). These teacher-driven PLC provide potential future opportunities for teachers to critically reflect on their practices, which has the potential to lead to transformation of inclusive education (Artiles & Kozleski, 2007).

The study used a three-phase sampling process. In Phase 1, purposive random sampling (Bloomberg & Volpe, 2019), was employed to gather insight about relevant secondary sociocultural artifacts that shaped educators’ perceptions in this context. An individual who holds responsibility for inclusive education throughout the district has important historical knowledge of provincial and district policies and procedures designed to guide teaching practices of students identified with RD. Given that the purpose of this study was to describe how teachers’ perceptions are shaped in the specific context of this district, purposeful sampling of a

district administrator was justified. From a potential pool of seven district-level administrators, two who had direct responsibility for supports for students identified with RD provided consent to participate. The interview participant was then randomly selected from the two.

As the literature review conducted prior to commencing this study revealed four previously identified influences on educators' perceptions about teaching students identified with RD in other contexts, potentially influential secondary sociocultural artifacts from this context were selected for further analysis, as aligned with these four influences. These included: (a) guiding policies and procedures, (b) pre-service teacher education, (c) in-service teacher professional learning, and (d) teaching roles. The documents were selected initially, based on my own knowledge of the school district in this context. This selection resulted in three documents. A further seven documents were identified as relevant through the interviews of Phases 1 and 3, as well as the open-ended questions on the questionnaire portion of the data collection process.

In Phase 2, criterion-based, purposive sampling (Bloomberg & Volpe, 2019) of all grades 4-7 classroom teachers in the district was used to gather teachers' general perceptions about their teaching experiences, in exploratory questionnaires. The target participants for this phase of my research were the group of grades 4-7 teachers across the whole district, with current responsibility for teaching one or more of those grades. Of all the elementary schools in the district, with an estimated average of approximately five grades 4-7 teachers in each, potentially 135 teachers could have been sampled in the case as a whole. There were 12 classroom teachers who responded to the questionnaires, for a response rate of approximately 9%. The response rate was likely negatively affected by ongoing disruption to educators' work due to an active pandemic, as well as how close the date required to return the questionnaires was to a school holiday. The criterion for this sampling was status as a grades 4-7 teacher, as these grade levels

are most pertinent to gathering information relevant to the phenomenon of interest (i.e., teachers' perceptions of teaching students identified with RD). This is because students are not typically diagnosed as having a reading-based learning disability until at least grade 3, such that teachers of kindergarten to grade 3 would not fit within the boundaries of the case. In addition, teachers of grades 8-12 are typically subject-specific teachers whose responsibilities are less focused on teaching students to read than those in elementary positions, where learning to read is especially salient. For these reasons, grades 4-7 teachers were purposefully selected as the sample for Phase 2 of this study.

Phase 3 involved within-case (i.e., selected from the larger sample of classroom teachers who completed the questionnaires) purposive sampling for follow-up interviews with classroom teachers. Of the 12 teachers who completed the questionnaires, six teachers offered consent to complete a follow-up interview. All of these teachers had at least 5-10 years of experience, and most had 16-20 or more years of experience. To the extent that it was possible within the sample of teachers who offered consent, three teachers who held varying perceptions about teaching students identified with RD were selected. This selection was done by choosing participants whose responses fell at the extremes as compared to other respondents on the three separate questionnaires (i.e., Self-Efficacy for Teaching Students identified with RD, Perspectives on RD, and Influence of Sociocultural Artifacts) that were administered together as one form in the second phase of data collection.

Variation across responses was determined by converting item responses to numerical values, totaling them for each scale for individual participants, and then comparing individual totals to both medians and means for the aggregated responses for each scale. This highlighted variations across participants' responses. I followed this up with inspection of individual

responses to items on each of the scales, as well as responses to open-ended questions. The intention of this process was not to determine variation in a statistically precise way, but rather, to capture variation across participants. This put focus on data within this case that represented variation on dimensions of interest (i.e., perceptions about teaching students identified with RD). Such data emerging from the questionnaires were examined to document the diversity of responses and identify common patterns that cut through variation (Patton, 2015).

In the latter part of Phase 3, purposive, random sampling was used to select a school principal and a support teacher for interviews, to further explore the secondary artifacts that teachers identified as supportive or inhibitive to their teaching of students identified with RD. These staff members were deemed relevant to gather information from, as they are tasked with guiding inclusive education practices in the schools in the district. From all the elementary schools in the district, with one principal and approximately one support teacher at each, the final determination of individuals for these interviews was based on random sampling from within those who responded to the offer to participate and provide consent. One principal, and five support teachers offered consent to participate. The sampling employed in Phase 3 may be characterized as within-case sampling, in that it was nested within the case of grades 4-7 educators across the school district, it was driven by the theoretical basis for the study, and it was iterative, proceeding and evolving as the study progressed (Miles et al., 2020). As the study progressed, data analysis from each phase took place to determine whether more interviews would be needed to obtain sufficient detail to reach the point of saturation (Merriam & Tisdell, 2016). That is, until adequate information had been obtained to answer the study's guiding research questions. With the rationale for the study's sampling procedures in place, I turn now to an overview of the methods used in my research.

Methods of Data Collection

Case study design is intended to unfold inductively, as data is collected using multiple methods, from multiple sources, and themes are drawn from rich, descriptive detail (Creswell & Poth, 2018). Typically, case studies as characterized by Merriam (1988; Merriam & Tisdell, 2016) rely on asking questions, observing events, and reading documents as primary methods of data collection. Within this study, data collection proceeded through three phases. It commenced with the qualitative methods of asking questions (interview) and reading artifacts (document analysis) to broadly explore the topic in the context of interest, as per the first research sub-question. This initial qualitative information was then used to inform subsequent data collection, including the questionnaires (sent out together as one form) that gathered data as broadly as possible from grades 4-7 classroom teachers across the district. These three questionnaires were designed to address research sub-questions 2-4 with both open-ended, qualitative data (i.e., participants' written words) as per Merriam's definition (Merriam & Tisdell, 2016), as well as closed-ended, quantified data (i.e., participants' ratings of written statements). In turn, this broad data was followed up with asking more questions (qualitative interviews) to gather specific, detailed data from a smaller, purposeful sub-sample of grades 4-7 classroom teachers, as well as a school principal and a support teacher, aimed at explaining earlier findings from the data collection process, as per all of the research sub-questions.

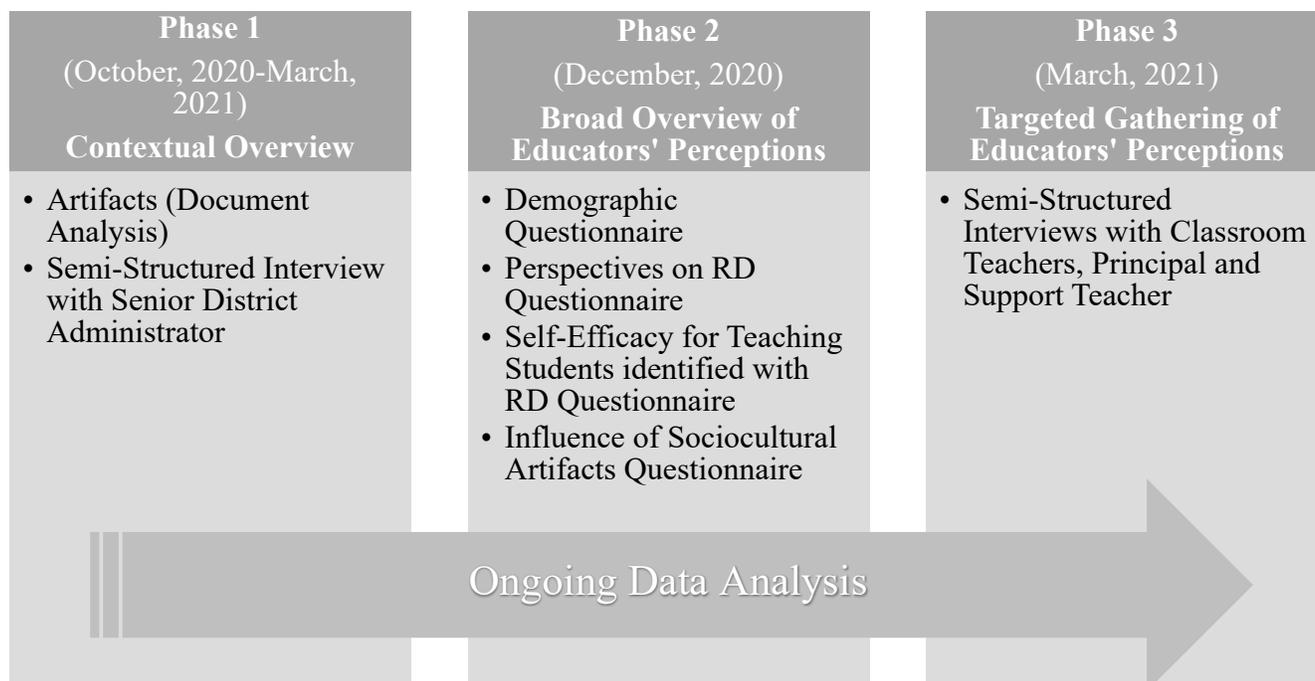
To fully describe the details of a case, four types of information were collected, including: "contextual, demographic, perceptual, and theoretical" (Bloomberg & Volpe, 2019, p.311). Contextual information describes the culture and environment of the research setting. In my study, given that determining salient, secondary, sociocultural artifacts and the modes of human action that they represent was central to the case of interest, this information was

collected across all three phases of the study, using all methods outlined. Demographic information refers to the personal characteristics of the participants. This was collected using the Phase 2 questionnaires and follow-up Phase 3 interviews. Perceptual information refers to the perceptions of participants. Such information was collected via the questionnaires in Phase 2, as well as the interviews in Phases 1 and 3. Theoretical information refers to what is already known about the topic from within existing literature. This information was collected prior to data collection, to inform the development of the conceptual framework that guided the development of the research questions, as well as during data collection and iterative analysis, when prior research was re-visited in light of my findings. Theoretical information is provided in the literature review presented earlier, and is re-visited in subsequent chapters, as it relates to the current findings.

As per the recommendation of Bloomberg and Volpe (2019), prior to beginning data collection, I aligned all of my data collection methods with my research questions. My data collection was designed to answer the sub-questions that informed the nuances of the broader inquiry. This pre-planning provided an important guiding reference as my data collection proceeded.

Data Collection Process

The three distinct phases of data collection and the methods used within this case study are shown in Table 1. The sections that follow provide specific details of each collection phase.

Table 1*The Data Collection Process*

Phase 1 – Artifacts and Senior Administrator Interview. To create a contextual overview, I selected and reviewed artifacts that represented the four broad categories of secondary sociocultural artifacts that were expected to be relevant, based on my review of the literature and the preliminary conceptual framework that I derived from it. These four categories were as follows: (a) policies and procedures, (b) pre-service teacher education, (c) in-service teacher professional learning, and (d) teaching roles. The primary purpose of the artifact document analysis was to identify key themes contained within salient secondary sociocultural artifacts from this context. These themes were more closely examined for their connections to educators' perceptions, in the latter phases of the study. Saldaña and Omasta (2018) asserted that documents, particularly official documents such as those that I focused upon in my study, reveal important evidence of values and ideologies in both manifest (i.e., overt) and latent (i.e., covert) elements of the discourse they present. Given my interest in how secondary sociocultural

artifacts shape educators' perceptions, closely examining the content of pertinent documents and websites that represented secondary sociocultural artifacts was critically important.

I began by reviewing three documents that I had identified, given my insider knowledge of the context of interest. These documents included the provincial ministry's special education policy document, the school district's vision, mission and values statements, and the school district's inclusion policy (specific references are not provided to protect the identity of the school district). It was expected that content of these documents would be relevant to multiple categories from the conceptual framework.

To further probe for details about the sociocultural context of teaching students identified with RD in this school district, I conducted a semi-structured online interview via *Zoom* (see interview protocol in Appendix B) with a senior administrator. This individual held responsibility for inclusive education practices across the district. The practice of interviewing is noted to be appropriate in the early, exploratory stages of a study, to gain insight from those with inside knowledge (Saldaña & Omasta, 2018). During this interview, three additional artifacts were identified and subsequently added to the document analysis. An informational document for the public about inclusive educational services published by the district, the teachers' collective agreement, and the district-developed professional learning website (references withheld to protect the identity of the school district) were reviewed. Following review of open-ended questionnaire responses from Phase 2, a seventh artifact was added for analysis: a formal letter of understanding between the local teachers' union and the school district (reference withheld to protect identity). Three final artifacts were added to the document analysis of Phase 1 following completion of the Phase 3 teacher interviews. The local university's Faculty of Education website (both the faculty vision statement and the program/course descriptions), as

well as the teachers' union professional development website were analyzed (references withheld to protect identity). By the end of all data collection, following Patton's (2015) guidance about the types of documents to consider, 10 documents/websites had been identified as salient secondary sociocultural artifacts to cover all four key categories from the conceptual framework.

Phase 2 – Teacher Questionnaires. Although typically considered a quantitative method, surveys (often carried out with questionnaires) can be used as an “adjunct” to qualitative methods, particularly when open-ended questions are used to “shed light on participants’ perceptions” (Bloomberg & Volpe, 2019, p. 320). Surveys using consistent questionnaires are also seen as the most basic type of interview, with highly structured questions that do not vary by participant (Saldaña & Omasta, 2018). This feature was useful to obtain a broad sense of a group of classroom teachers’ perceptions from across the district, as was the intention of Phase 2. To gather the perceptions of as many grades 4-7 elementary teachers in the district as possible, I distributed a series of brief, online questionnaires, compiled into one form.

The questionnaire form (see Appendix C) was developed for this study after reviewing teaching self-efficacy scales (e.g., Bandura, 1997; Nijakowska et al., 2018; Tschannen-Moran & Johnson, 2011) and reading disability perspective scales (e.g., Gibbs & Elliott, 2015; Lopes, 2012). It also included questions about secondary sociocultural artifacts thought to be of potential significance from the literature review presented earlier, as well as items designed to measure demographic information to describe the participants’ experiences teaching students identified with RD.

To facilitate the collection of both qualitative and quantitative information, the format included six open-ended and 24 closed-response, Likert-scale format items. Some items offered space for participants to elaborate on their response choices in a written format. The qualitative

information gleaned from the open-ended items on the questionnaire form was used to ensure that the interview protocol developed for the study would adequately follow-up on elements emphasized within participants' reported perceptions. Additionally, the information from the questionnaires was used to identify teachers who agreed to follow-up interviews. Teachers were selected to represent variations of perceptions (i.e., their perspectives on RD and self-efficacy beliefs about teaching students identified with RD), so that they could be interviewed in the subsequent research phase.

The link to the questionnaire form was embedded in a recruitment letter for classroom teachers which was sent via email, to every elementary school in the district. Principals distributed the district's approval statement for the study and the link-containing letter to all grades 4-7 teachers in their schools. By the deadline date, 11 classroom teachers had completed the questionnaires. A 12th form was completed and submitted shortly after the deadline. Of the 12 submissions, only 9 included responses to every question. Two of the respondents only completed the demographics questionnaire. Another respondent did not complete the self-efficacy or perspectives on RD scales. With the goal of achieving variability in my sampling of interview participants, I compared the questionnaire responses of all six classroom teachers who offered consent to do an interview. The process for selecting interview participants to achieve variation in my sample and the content of the responses of each participant are discussed in detail in subsequent sections.

Phase 3 – Teacher and Other Educator Interviews. To more deeply probe the perceptions of educators whose questionnaire responses represented variation across the forms from Phase 2, I conducted semi-structured interviews (see interview protocol in Appendix D) with a sub-sample of three classroom teachers. The size of this sub-sample was pre-determined,

based on estimated saturation of data using this sample size, although it was flexible, and would have been increased if further data had been deemed needed. The purpose of these interviews was to gather rich, descriptive information about the specific secondary sociocultural artifacts that have shaped their perceptions about teaching students identified with RD, and particularly, the supports and hindrances that they perceive. “Semi-structured interviews are used to facilitate more focused exploration of a specific topic, using an interview guide,” (Bloomberg & Volpe, 2019, p. 317). In accordance with the recommendation of Creswell and Poth (2018), guiding interview protocols for the proposed study were developed to seek answers to the sub-questions of the research, phrased in ways that were readily understandable to the participants. Interviews that are “semi-structured” have enough flexibility to adjust as the interview proceeds, depending largely on the interviewer’s ability to ask good questions and the participant’s willingness to engage deeply in an exchange or discussion (Bloomberg & Volpe, 2019). As per guidance from Merriam and Tisdell (2016), care was taken to avoid the use of multiple queries within a single question, as well as those that might lead responses or require yes-no answers.

Participants had the opportunity to offer consent to follow-up interviews when they completed the exploratory questionnaires in Phase 2. Of the six participants who offered consent, three were contacted via direct email to offer an interview. All interviews were conducted online using the *Zoom* platform. The interviews were video recorded with the permission of participants and stored on a local disk. This allowed for me to do all transcription by hand, supplemented with use of the voice recognition feature of Microsoft Word, so that no third-party access to the data was necessary. The interviews each lasted over 1 hour, but under 1.5 hours.

Following the interviews with grades 4-7 classroom teachers, a school principal, and a support teacher with responsibility for guiding inclusive education practices in their schools,

were also interviewed using the same process for classroom teachers (see interview protocol in Appendix E). The recruitment letter to participate in these interviews was distributed via email by district administrative staff responsible for inclusive education services, directly to school principals and support teachers. Five support teachers and one school principal offered consent. The support teacher participant was determined by random selection, while the principal participant was determined by default. By interviewing the educators in positions to support classroom teachers in meeting the needs of students identified with RD, clarification of the specific secondary sociocultural artifacts that teachers had identified as supports or hindrances was obtained. In this manner, comparison with previous findings and rich description to close any lingering gaps in detail from previous phases (i.e., saturation) was achieved.

Data Analysis

Qualitative data analysis requires applying five fundamental skills, as follows: 1) condensing extensive data, 2) noticing patterns in data, 3) unifying apparently different items, 4) understanding social processes of human activity, and 5) interpreting “routines, rituals, rules, roles, and relationships of social life” (Saldaña & Omasta, 2018, p. 30). In this way, analysis of words, both spoken and written, was ongoing and iterative throughout the data collection process, as each phase informed the others. Much of the analysis involved forms of coding in which I assigned words or short phrases as labels to portions of the data collected (Miles et al., 2020) to translate the raw data into a form that was meaningful to answer my research questions. I applied first and second cycle coding processes (Saldaña, 2016) to capture the essence of the data, itself. To organize, synthesize, and make meaning of the data compiled from different sources, I applied the Thematic Analysis framework developed by Braun and Clarke (2006) as a guide across all study phases.

Thematic Analysis

Given my challenge as a novice researcher in bringing together multiple data sources to respond to my research questions, guidance from a proven method of analysis was critical. Braun and Clarke (2006) asserted that thematic analysis is appropriate for early career researchers who seek to identify meaningful themes across entire data sets, as is often necessary in case study research. They further clarified that such themes do not “reside” in the data, itself, (p. 80) but rather, rely on the thinking and ideological stances of the researcher to draw out the repeated patterns of meaning across a data set. Given the exploratory, constructivist nature of my research, thematic analysis offered the potential for an inductive approach in which the data drove the development of the coding schemes, rather than using pre-existing ones derived from theory. This was especially important in the analysis of perceptual data from my study, which required me to move beyond describing to examining “the underlying ideas, assumptions, and conceptualizations – and ideologies – that are theorized as shaping or informing the semantic content of the data” (p. 84).

Braun and Clarke (2006) outline a clear, step-by-step process for conducting thematic analysis that progresses through six phases of a process that is not linear, but rather, recursive, requiring writing through all stages of analysis. Although Braun and Clarke (2006) use the term “phase” to refer to the components of their thematic analysis process, the term “stage” is used here, so as not to create confusion with the three distinct “phases” of data collection conducted in my study and referenced throughout this report. In the section that follows, I describe in detail the processes I followed in the thematic analysis of the data from this study.

Stage 1. During this stage of thematic analysis, the goal is for the researcher to familiarize themselves with the data (Braun & Clarke, 2006). I began by printing copies of the

documents from the first phase of my data collection. This excluded those that were prohibitively lengthy (the district professional learning website, the teachers' union professional development online station, and the teachers' full collective agreement), which were examined in digital format. To add structure to my general overview of the documents, I adapted and completed the template created by Bloomberg and Volpe (2019) to collect and summarize my general impressions from the review of each document (see Appendix A). This assisted me in creating a general summary of each document, including the significance of the document to my study, overall tone, presence of contradictory information, salient issues raised, and additional questions for each one. In doing this, I also noted which of the four categories of secondary sociocultural artifacts from my conceptual framework that each represented.

The questionnaire data from Phase 2 of my data collection was reviewed informally as it was submitted. Prior to proceeding with analyzing questionnaire responses both within and across participants, I extracted, collated, and organized all of the data within a spreadsheet. Once all of the responses to questionnaire items were exported from *Qualtrics* as an *Excel* spreadsheet, a codebook was developed to track and assign numeric codes to all closed-ended responses.

Given that the response choices on the Likert scale ranged from "Not at all" to "A Great Deal", values from 0 to 5 were assigned. Some items had to be reverse-coded, depending on whether the item was worded in the affirmative or the negative. Assigning numeric values allowed me to compute totals for each participant on each questionnaire within the form. Consistent with the typical purpose of questionnaires as described by Saldaña and Omasta (2018), I then computed basic descriptive statistics (frequency counts, ranges, medians, and means) to become acquainted with the demographic characteristics (e.g., years of teaching,

degrees held, etc.) of the sample of grades 4-7 teachers who participated in the questionnaire completion.

I sorted participants' total scores for each questionnaire by frequencies. This was particularly important to identify which participants' responses were HIGH (top third), MODERATE (middle third), or LOW (bottom third) within the sample. I did a visual comparison of all participants' total scores. With the goal of achieving variability in my sampling of interview participants, I compared the total responses of all six participants who offered consent to do an interview. This resulted in the selection of three participants (given pseudonyms to protect their identities). The responses of each Phase 3 interview participant are discussed in detail in the next chapter.

I was also able to compute mean scores for each participant on closed-ended items on the Self-Efficacy, Perspectives on RD, and Influence of Sociocultural Artifacts questionnaires. This further allowed me to compute measures of central tendency (i.e., mean and median) for all responses, across all participants, permitting comparison of individual mean scores to the rest of participants' responses. As a record of my thinking throughout this process, as well as all stages of data collection and analysis, I recorded jottings in a reflexivity journal so that all queries and ideas were saved for potential consideration as analysis proceeded. Not only was this careful process of reflection necessary to identify the interview candidates for the next phase, but it also allowed me to confirm the relevance of the four categories of secondary artifacts on teachers' perceptions as outlined in my conceptual framework and helped to verify the appropriateness of the Phase 3 interview protocols.

The data analyzed from interviews included participants' direct responses about their experiences, beliefs, and knowledge about the phenomenon of teaching students identified with

RD in this district. The time I spent manually transcribing interviews allowed me to familiarize myself intimately with the raw data. In accordance with Saldaña and Omasta's (2018) recommendation for initial analysis of interview data, all interview transcripts were condensed to remove extraneous and redundant information, before moving into more comprehensive coding. I did this by printing and manually highlighting key content using coloured markers, identifying parts that needed removal because they were redundant, reviewing the notes that I had jotted during the interviews, and writing jottings in the margins as I noted early impressions. All condensed transcripts were then uploaded into *NVivo*, the computer-assisted qualitative data analysis software that I used for all later stages of data analysis.

Stage 2. In Braun and Clarke's (2006) model of thematic analysis, initial codes are generated at the second stage. I began the process of comprehensive manual coding after importing all documents, open-ended questionnaire responses, and interview transcripts into qualitative data analysis software (*NVivo*). Codes are characterized as symbolic constructs (often single words or short phrases) used to condense the data into deep, compact forms of meaning (Saldaña & Omasta, 2018). It was not possible to predict in advance the exact coding procedures that were applied to my raw data, because study of qualitative data is designed to be flexible and responsive to emergent data (Saldaña, 2016). For this reason, I adopted a process similar to the one offered by Saldaña as a relevant, generic starting point.

Accordingly, Saldaña's (2016) first and second cycle coding process was applied to the analysis of all documents, open-ended questionnaire, and interview raw data. This facilitated the synthesis and reorganization of data to eventually narrow down to a select list of themes and assertions. My first cycle coding methods included the elemental method of Descriptive Coding (Saldaña, 2016) to create an inventory of the overall response contents organized by single word

labels or short phrases, similar to the use of “hashtags” in social media (Saldaña, 2016). As an example, from the document analysis alone, this resulted in an inventory of 147 key text segments that were then sorted and condensed into descriptive codes that summarized the content of the documents. A sample of the descriptive codes that summarized the documents at that point were special procedures, individual deficiency, authority, classroom teaching, inclusive environment, social justice, diversity, and staff roles.

The descriptive codes from all qualitative data were further refined by applying In Vivo Coding (Saldaña, 2016; Saldaña & Omasta, 2018) to identify the actual language used to represent the topics. This brought a “living quality” (Saldaña & Omasta, 2018, p. 182) to the qualitative data, in that it highlighted the parts that were, or that might have been stressed if someone were saying it aloud. Additionally, as indicated by Saldaña (2016), coding the same data items twice was useful to obtain a “richer perspective” (p. 73). Figure 2 presents a sample of the codes as they were assigned to participant interviews within the *NVivo* software.

Figure 2

Sample of Coding in NVivo Software

The screenshot displays the NVivo software interface. On the left, a hierarchical coding tree is visible under the 'Name' column. The tree includes the following categories and sub-categories:

- RD as Pathology
- Classroom Teachers as C...
 - add on
 - always have kids that l...
 - argument
 - better job of it then the...
 - coaching and modeling
 - coaching for teachers
 - early days
 - expectations
 - had to go seeking
 - head in the sand
 - highly dependent on th...
 - in their gut
 - it's your job
 - lifelong learners
 - pre service learning
 - professionalism of the...
 - teaching of reading an...
 - they own it
 - professional autonomy
 - classroom teaching
- RD as Diversity
 - committed to equity an...
 - diversity
- Sarah-Key Quotes
- So that's one of my thing...
- Specialized Processes
 - class composition and...
 - identifying students
 - low- and high-incidenc...

On the right, the 'Sarah Interview' window is open, showing a text excerpt with the following content:

S – It's... it's huge. It is. Because I think some of the... you know people ask me what my role is--I always describe it as advocacy. Like I do think that's my job. My job is to build ramps and build bridges and connections between families and schools and make sure kids are heard. Make sure that twelve professionals don't sit around a table having a conversation about a child that the parent doesn't get to speak in, right? Like I...I...that's a piece of my work that... that, that's what motivated me to even take on the role is, that I think parents don't always have the voice that they need. Kids don't always have the voice they need and um, I think we point fingers at educators a lot of times for not doing things that we've never taught them how to do or given them the tools to do well. So... that's yeah... I, that's the ground I stand on when I come to work everyday.

[ongoing chat]

I - Mhmm. So, could you just tell me...and of course because I'm sort of an insider within our district, I do have some sense of it, but I'd love to hear from you. Just some of the things that for you, in your role, stand out as some of the major pieces within the district that have been used to support classroom teachers.

S - Specifically, around reading?

I - Yeah, and specifically, perhaps students with reading disabilities too. With Q designations specific to reading.

S – Well, um... it's tricky for me to respond in terms of, specifically around designations. Because, well I think it's super important that we support kids with designations and that we understand the nuances of the recommendations in their individual needs and the specifics of personalized program planning. One of the big things that we've been trying to assert for, is it shouldn't matter if you have a specific designation, for us to help you. That uh, you know, that serves a purpose in the sense that we do have some things we know about you that we might not know about other learners. And we have a responsibility to learn and understand the things that you need us to be supporting you with, and provide those individuals plans and goals, but we should still help you if you're struggling with reading, whether you've got that plan or not. And you know, trying to help school teams understand that our beginning points with struggling readers often look the same whether or not there is

Both during the interviews, and as I engaged in the coding process, I noticed that participants expressed significant emotions related to personal experiences with RD. As asserted by Saldaña (2016), “careful scrutiny of a person’s emotions reveals not just the inner workings of an individual, but possibly the underlying mood or tone of a society – its ethos” (p. 125). Given my research interest in how educators’ perceptions are shaped, as well as their perceptions of supports and hindrances, attending to such emotion during the Phase 3 classroom teacher interviews helped me to identify the shaping forces that participants emphasized. For this reason, I decided to re-code the Phase 3 classroom teacher data using Emotion Coding (Saldaña, 2016) to highlight the participants’ emotional states when discussing particular areas of content.

Emotion Coding involves labelling the emotions either directly expressed or experienced by a participant or inferred by the researcher. To capture participants' emotions throughout the interview, I had to closely examine the in-vivo codes to extract those that had emotional content, and I had to re-watch the video recordings of each interview, to make note of non-verbal expressions of emotion. Rather than focusing on precise determination of emotion, given the potential to misjudge another's internal experience, I focused on outward indicators of emotion such as increase in vocal volume, tears, and nonverbal hand gestures. To determine how the emotions overlapped with the particular topics being discussed, I compared the Emotion Coding results with the Descriptive and In-Vivo Coding results by sketching an "emotional arc" (Saldaña & Omasta, 2018, p. 193) over a horizontally printed sequence of the descriptive codes from each classroom teacher interview, which illustrated the trajectory of emotions that participants experienced or recounted as they spoke about particular topics (captured by descriptive codes). This process assisted me in identifying common emphases that became themes through the second cycle Pattern Coding process (Saldaña, 2016) as I refined my first cycle coding choices into broader patterns.

Stage 3. To distill the content of the data into themes that constitute the study's units of analysis as per the third stage of Braun and Clarke's (2006) model, I followed Saldaña's (2016) process of second cycle coding. In second cycle coding, the first cycle codes were sorted and grouped into a smaller number of codes that represented over-arching themes, as per the guidance of Creswell and Guetterman (2019). Pattern Coding (Miles et al., 2020) was applied as a second cycle method to group the first cycle codes meaningfully. This was initially done in *NVivo* by combining codes that represented semantically similar topics. I then created a concept map, sketched by hand, so that the emergent themes could be further grouped meaningfully. By

scrutinizing the emergent codes, those that overlapped conceptually were grouped together under candidate themes and sub-themes. In this way, the second cycle coding process resulted in a sort of “meta-code” (Miles et al., 2020, p. 79) to describe the data.

Stage 4. In this stage of thematic analysis, the process involved reviewing themes along two levels. As per the guidance from Braun and Clarke (2006), the first level of review required me to re-read all of the coded data extracts within each theme, to see if they seemed to create a cohesive pattern. After doing this for all themes, some data extracts were moved to other themes and some themes were refined slightly. The second level of review required me to re-read all of my data to ascertain whether or not the themes fit with the overall data set. After I refined the themes slightly, I was able to create a final thematic map.

Stage 5. Within this stage of analysis, each of the themes from the refined list generated in Stage 4 were named and defined. According to Braun and Clarke (2006), names of themes “need to be concise, punchy, and immediately give the reader a sense of what the theme is about” (p. 93). This is what I endeavoured to do as I reviewed the collated excerpts of data and built the narrative that they represented in written form, as relevant to my research questions. This ongoing writing as analysis is an essential component of research (Creswell & Poth, 2018).

Stage 6. The final stage of thematic analysis focused upon production of the interpretive report. Given the importance of writing as part of the analytic work of a researcher, a challenge that I encountered in this stage was to include extracts that illustrated the themes that I drew from the data. Not only did I strive to select particularly illustrative extracts of data, but I also sought to go beyond mere description of the data to present an argument related to my research questions, as per Braun and Clarke’s (2006) model of thematic analysis.

Integrity of the Study

Along with the flexibility afforded to researchers who employ case study methodology, comes an inherent responsibility to adequately describe the case being studied and methodologically justify the approach selected (Hyett et al., 2014). I have endeavoured to do this throughout this research to structure my own considerations of the integrity of my study. In addition, in the following section, I address the critical issues of credibility, dependability, and transferability outlined by Merriam and Tisdell (2016), as well as the issue of confirmability (Bloomberg & Volpe, 2019) to assure the integrity of my case study results.

Credibility

The consideration of the credibility of research findings is often discussed parallel to the concept of internal validity, both of which seek to address “the question of how research findings match reality” (Merriam & Tisdell, 2016, p. 242). In accordance with Merriam and Tisdell’s (2016) conceptualization, this study was designed to ensure credibility through three specific strategies, namely: triangulation, transcript verification, and engagement in data collection.

Triangulation of data involves the use of multiple sources of evidence to increase likelihood of credibility or accuracy (Yin, 2018). In a case study in particular, triangulation adds rigour to the study by considering different perspectives, gathered in different ways, at different points in time (Bloomberg & Volpe, 2019). This is relevant to this study in that it “corroborates the coding and enhances trustworthiness of the findings since a participant’s statements about what his values, attitudes, and beliefs are might not always be truthful or harmonize with his observed actions, reactions, and interactions” (Saldaña, 2016, pp. 131–132). In my study, I included document analysis, questionnaires, and interviews to collect data from various sources, which served to triangulate the different forms of data.

As noted by Saldaña and Omasta (2018), accuracy of interview transcripts is essential. As such, I transcribed interviews myself, in order to “gain a deep cognitive understanding of every word spoken and gain embodied ownership” (Saldaña & Omasta, 2018, p. 170) of the data. To further ascertain the accuracy of the data, I shared the transcripts from the interviews done across all three study phases, to offer participants the opportunity to verify their responses before further data analysis proceeded. None of the participants expressed a desire to alter their responses as they were transcribed.

As a researcher, I engaged with the data collection process in a manner that got me as close as possible to participants’ actual understanding in several ways, similar to the assertions of Merriam and Tisdell (2016). I conducted a pilot test of the questionnaire instrument and teacher interview protocols with a few teacher colleagues from the school where I was employed. Since they were ineligible to participate in the broader data collection process due to ethical considerations regarding dual relationships, I sought out their constructive input on the format and content of the questionnaire form before it was sent to the actual sample. This feedback provided verification that the format of the instruments was readily comprehensible for teachers as I had developed them. In addition, I endeavoured to be up-front about my own position, relative to the study, as an administrator within the same school district. Throughout all phases of the study, I kept a reflexivity journal in which I recorded my initial impressions and reflected on how my own role in the district may have influenced my thinking. Finally, this research was subjected to peer examination through the dissertation process by soliciting and incorporating feedback from my graduate supervisor, academic committee members, and fellow graduate students.

Dependability

Merriam and Tisdell (2016) acknowledged that concepts of dependability in qualitative research can be problematically linked to concepts of reliability in quantitative research. This is due to differing ontological and epistemological underpinnings, as well as differences in methodology, that result in differing emphases in research. Given that qualitative research is bound by space and time, seeks multiple realities, and focuses on ever-changing human action, relative to its context, it is not fundamentally concerned with replication (unlike the quantitative notion of reliability) (Merriam & Tisdell, 2016). For my descriptive case study, the more important question of dependability is “whether the results are consistent with the data collected” (Merriam & Tisdell, 2016, p. 251). Accordingly, these authors offer key strategies that a researcher can use to ensure the dependability of results as follows: triangulation, peer examination, investigator’s position, and the audit trail.

Given that I already addressed the use of triangulation and investigator’s position in the data collection process in the previous section on credibility, I only address the establishment of an “audit trail” (Merriam & Tisdell, 2016, p. 251) and a new element of peer examination here. According to Yin (2018), efforts to increase the dependability (referred to as “reliability” in his writings) involve attention to being explicit about research processes to the extent that another researcher could repeat the procedures. Although Yin relies on a psychometric definition of reliability that is less relevant for a study that unfolds flexibly and inductively, such as mine, I have nevertheless been as explicit as possible about my research procedures, in order to provide dependability of results. My interview transcripts with accompanying field notes, as well as the spreadsheet of my questionnaire data with its accompanying codebook are available in a clear record. This is consistent with Merriam’s definition of an audit trail (Merriam, 2009).

An element of peer examination that can add to the dependability of findings, is intercoder agreement (Saldaña, 2016). This refers to “two or more researchers might work collaboratively on coding the data to better ensure consistency of interpretations—a form of intercoder agreement” (Saldaña & Omasta, 2018, p. 32). Within this study, I engaged with my faculty supervisor in the co-coding of an early sample of an interview transcript, in order to ensure dependability of results.

Transferability

The concept of transferability in qualitative research is often discussed alongside considerations of external validity that focus on generalizing results across contexts in positivist-framed research (Merriam & Tisdell, 2016). Given that my study is a descriptive case study, the aim was not to generalize results across contexts, but rather to achieve rich description of the context of interest (Merriam & Tisdell, 2016). According to Pearson and colleagues, (2015) it is essential for a case study researcher to provide a detailed description of the case context, so that readers can determine the appropriateness of transferring findings to their own contexts. This is a reference to the “vicarious experience” (Stake, 2010) that readers may have when they review findings.

Likelihood of transferability is increased in my study design in that “all who have a stake in the outcome of the case study might be enabled to provide input, to read and use the case report for a better understanding and for practice improvements” (Abma & Stake, 2014, p.1152). My sampling of educators across roles in this context, as well as my efforts to achieve both a faraway (i.e., through document analysis, questionnaires) and close-up (i.e., through individual interviews) depiction of educators’ perceptions about teaching students identified with RD should prove informative to a wide variety of stakeholders. For example, school district

policymakers may be interested in the overall degree of self-efficacy reported by grades 4-7 teachers across the district, whereas other grades 4-7 teachers may be interested in making their own interpretations of similarity or difference in their own experiences, as compared with others in similar roles.

Confirmability

Confirmability is highlighted by Bloomberg and Volpe (2019) as an essential quality of research that is trustworthy, a concept which they draw from the work of Lincoln and Guba (2018). In my role of researcher as “primary instrument” (Bloomberg & Volpe, 2019, p. 329) within my analyses, I endeavoured to ensure that my analyses represented the actual reality of the case in three ways. First, I established an audit trail so that my work could be scrutinized by others, including my graduate supervisor, committee members, and two of my fellow graduate students, from whom I sought consultation. Second, I collected multiple sources of data to seek triangulation of my results. Third, my ongoing reflexivity journaling throughout the data analysis process allowed me to critically self-reflect on my potential biases that influenced the data analysis process.

Limitations and Delimitations

There are four limitations of the characteristics of this study’s methodology that create “constraints regarding transferability, applications to practice, and/or utility of findings” (Bloomberg & Volpe, 2019, p. 332). First, in using case study methodology, my role as researcher is subjective. Although this is a valued component of my interpretation of findings, it is also something to be mindful of, lest it decrease the legitimacy of participants’ perspectives (Merriam & Tisdell, 2016). This is a possibility, given the highly interpretive methods of analysis that I used. Second, the trustworthiness of my research findings hinged on my adherence

to methodological integrity, which has problematically been noted to be lacking in some case studies (Hyett, et al., 2014). A third potential limitation of this study is that I am known to some of the educators who were invited to participate, which may have influenced their willingness to participate, as well as their actual responses (Creswell & Creswell, 2018).

The fourth and final limitation of the study is that transferability of the findings is limited. This may be, given that it involved a small, context-bound sample. Importantly, the sociocultural theoretical underpinnings of the proposed study actually aim for contextual specificity, as opposed to viewing it as problematic. The transferability of my findings will rely on the quality of description that I create, to invoke “vicarious experience” (Stake, 2010) in the reader, potentially leading to transfer of learning from the situation depicted in my study, to similar situations known to the reader (Merriam & Tisdell, 2016).

The delimitations of a study refer to the “characteristics that define and clarify the conceptual boundaries of your research” (Bloomberg & Volpe, 2019, p. 332). Since sociocultural influences on human thought and behavior are known to be context-specific (Cole, 1996), the case was delimited to the context of one school district in Canada. Given that existing research (Lopes, 2012) has shown that teachers’ perceptions about their own teaching are specific to particular facets of teaching, only perceptions regarding teaching students identified with RD were included. Grades 4-7 teachers from across the district with current responsibility for teaching one or more of those grades were selected for inclusion, given that RD is not typically diagnosed until these grades. Secondary teachers were excluded, as the distinctions between subjects and the reduced responsibility for explicit teaching of reading at the secondary level was thought to decrease teachers’ opportunity to consider many teaching practices for students identified with RD.

Ethical Considerations

In any research, it is impingent upon the researcher to be aware of possible ethical concerns that may surface and their effects on participants (Bloomberg & Volpe, 2019). As a proactive measure, the researcher must create and carry out a plan to address ethical issues at all stages of the research process (Creswell & Poth, 2018). Accordingly, I have addressed potential ethical concerns through seeking approval of my study by the university research ethics board, taking steps to address complications given my dual roles in the context of interest, and mitigating risk by avoiding a setting in which I have vested interests.

As a graduate student at the University of Calgary, my research proposal was formally approved by the Conjoint Faculties Research Ethics Board (CFREB). This was based on review of the recruitment documents, instruments and protocols included within the appendices of this document. In addition, given that the research was conducted in a public school district, approval from the local school board was also obtained in advance. I completed the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans Course on Research Ethics (TCPS 2: CORE). No data collection with participants was initiated until formal approval from the aforementioned parties was obtained.

Dual Roles

As an employee of the school district in which I conducted my research, I was previously known to some of my participants. In the case of the classroom teachers, there was the potential for a power differential, as I am known to be an administrator in the district. Despite this, I was new in this role the year that data was collected, having spent many years as a school psychologist who was a part of the local teachers' union as well. According to Pearson and colleagues (2015), particular care needs to be taken by researchers who have dual roles, where

participants may be colleagues. In such cases, confidentiality may be difficult to maintain in day-to-day interactions. This was minimized by my administrative assignment in only one school in the district, rather than across the district's schools. Participation in the study was not offered to teachers from the school where I was employed. By fully disclosing my dual role as both vice principal and research leader to my participants, I minimized potential conflicts between my dual roles. Of the six interview participants, only two were known to me, prior to the interview. It is also essential to note that in a descriptive case study such as mine, researcher bias need not be eliminated, but rather, acknowledged through critical self-reflection that considers how the researcher's position may affect the study as it is designed and analyzed (Berger, 2015; Merriam & Tisdell, 2016). I endeavoured to do this throughout this study by ongoing reflexivity journaling as the study unfolded, making notes following each educator interview to consider references they made to my role in the district, or staff members I knew, and my own reactions to those references.

Mitigation of Risk

As a researcher, I had to be mindful that site selection for research should take into consideration any possible vested interests (Creswell & Creswell, 2018). This was essential, in order to allow for the full expression of multiple perspectives within the data, rather than only those that might support any researcher presuppositions. To this end, I conducted the research in schools where I do not work, and therefore, do not have vested interests. Further, given that analysis of sociocultural artifacts from within a particular site was central to this study, I had to take care to protect the identity of that site. For this reason, I have not included specific references for artifacts that would reveal the identity of the school district.

Chapter Summary

The aim of this descriptive case study was to gain insight into how educators' perceptions about teaching students with reading disabilities are shaped by salient secondary sociocultural artifacts in one school district. As situated within the case study research tradition as aligned with Merriam's conceptualization (1988; Merriam & Tisdell, 2016), this study does not require my values and biases as the researcher to be separated from analysis, but rather, it requires me to consider them in relation to my role in the context of interest (Creswell & Poth, 2018). The perceptions of grades 4-7 educators from one school district were selected purposefully, establishing clear boundaries for the case of interest. This study proceeded through three phases of data collection involving the use of document analysis, questionnaire, and interview methods. To analyze my data and move beyond description to interpretation, I followed the guidance of Braun and Clarke's (2006) six-step process of thematic analysis. In the next chapter, I present the analysis and findings from my study.

CHAPTER FOUR: ANALYSIS AND FINDINGS

In this chapter, I present the analysis and findings from my case study. I used Braun and Clarke's (2006) thematic analysis guidelines to synthesize the data into inter-connected themes that inform how grades 4-7 educators' perceptions about teaching students identified with reading disabilities (RD) are shaped by secondary sociocultural artifacts in the context of this school district. Analysis produced two broad themes within secondary sociocultural artifacts: special education and inclusive education. Three themes emerged from analysis of educators' perspectives about reading disabilities: learning deficit, needing to teach differently, and knowing from personal experience. There were three themes evident following analysis of educators' perceptions of their self-efficacy: commitment, insight from accumulated experience, and access to resources. Four themes were found through analysis of educators' perceptions of the influence of secondary sociocultural artifacts on their teaching: system barriers, opportunities for learning, union matters, and under-preparation. In the sections that follow, I present the context for the study, profiles of participants, and the overall analysis of findings.

Study Context

In this study, I sought to understand how educators' perceptions about teaching students identified with RD are shaped by secondary sociocultural artifacts in the context of one British Columbia (BC) school district. Given that secondary artifacts represent traces of human activity (Cole, 1996), study of the artifacts salient to a particular school district is necessary to understand the historical, social, and cultural forces that shape educators' professional worlds (Baustien Siuty, 2017; Thorius, 2016). This contextual focus is especially important to researching teaching practices for students identified with RD in Canada, where education policies and practices vary by province and territory (Killoran et al., 2013). Even within the

province of BC, there is variation across districts. The district studied here offers such an example. There is a locally developed policy of inclusion to guide the practices of educators in the district, but a simultaneous need for adherence to guiding provincial special education policy (British Columbia Ministry of Education, 2016). In addition, there is a single, local university from which many of the district's teachers graduate that has its own guiding principles, separate from the school district.

Reading disabilities are recognized by the BC Ministry of Education (2016) at least in part when there is “persistent difficulty learning” as demonstrated by “inadequate response to instruction or intervention” (p. 48). This means that children typically aren't identified within the BC school system as having RD until they have been in school for at least a few years. For this reason, the activities of educators responsible for teaching students in grades 4-7 in one district were examined for this study. In the section that follows, I provide a description of the participants of this study.

Study Participants

Educators in various roles from the school district of interest in this case study participated in different phases of this research. One district-level administrator who had direct responsibility for overseeing district supports for students identified with RD participated in the Phase 1 interview. Twelve grades 4-7 classroom teachers completed the Phase 2 questionnaires, from which three teachers were selected for follow-up interviews in Phase 3, based on the goal of probing variation in responses. One elementary support teacher and one elementary school principal also completed interviews in the final phase of the study. Overall, 15 participants were included. To contextualize the presentation of my findings, I offer brief demographic profiles for

each interview participant (assigned pseudonyms here), as well as a general description of the demographics of the questionnaire respondents (see Table 2).

Table 2

Questionnaire Participants' Demographic Characteristics

Grade Currently Teaching:				
	4 th	5 th	6 th	7 th
<i>n</i>	7	3	1	1
Years Teaching Experience:				
	<5	5-10	11-15	16-20+
<i>n</i>	1	2	3	6
Highest Degree:				
	Bachelor's	Post-Graduate	Master's	Doctoral
<i>n</i>	4	2	5	1
Coursework in Teaching Reading:				
	None	Personal Interest	Undergraduate	Graduate
<i>n</i>	1	6	4	1
Number of Students Identified with RD Taught:				
	None	1-3	4-6	7-10+
<i>n</i>	0	5	2	5

Jen

Jen is currently a grade 4/5 teacher with 26 years of teaching experience. She originally completed her 4-year degree in Education through the local university, followed by a 5th year in which she specialized in children's literature. Jen completed a Master of Arts in Leadership approximately 20 years ago. She began her teaching career in grade 5 and has since moved

through several different grades and schools in the same district in which she now works. She taught in a private school briefly and spent a year working as a vice principal and student support teacher in a different urban district in the province, before coming back to the current district.

Kate

Kate is a grade 4/5 classroom teacher with approximately 24 years of experience, who initially completed a degree in Child and Youth Care. She spent some time working in group homes with children identified with severe intellectual disabilities who required intense personal care, as well as working as an education assistant with students with complex behaviours from marginalized families. After completing her Bachelor's degree in Education in another province, her first teaching job was in the same district where she currently works. She spent a few years in an itinerant role supporting students identified as having complex social-emotional needs before moving into classroom teaching in grades 4-7, across a few different schools. At the time of her interview, Kate had just applied to enter a Master's degree program in Inclusive Education.

Laurie

Laurie has approximately 22 years of teaching experience in both preschool and elementary settings in major urban centres, as well as a 10-year stint in another country. She has been teaching in the district for 4 years, moving between a variety of schools. Currently, she is working as a grade 4/5 classroom teacher. Laurie completed a Bachelor of Arts degree, followed by a Bachelor of Education with a major in Early Childhood Education in another province.

Sarah

Sarah is an educator and administrator with approximately 30 years of experience in the field. After completing an undergraduate degree in English and History, she completed a post-degree diploma in Education in another part of the province and worked mostly as a grades 4-7

elementary classroom teacher for some time before deciding to pursue further education. Sarah completed a Master's degree in Educational Leadership at the local university, focused on Universal Design for Learning (Meyer et al., 2014). She then moved into the role of an elementary support teacher in another district, followed by the role of a school-based principal in a couple of different schools, and eventually a district administration role with responsibility for inclusive education in that same district. Following this, Sarah moved to the district where this study took place, where she worked as a school principal for a couple of years before moving into her current role as a district administrator with responsibilities for inclusive education. She has been in this role for 2½ years.

Sandy

Sandy is in her 14th year as an elementary school principal. Prior to becoming a principal, she spent 2 years as a vice-principal and approximately 15 years as a classroom teacher in primary grades, mostly grades 1 and 2. All of her professional experience has been in this school district. She completed her Bachelor of Education degree with a minor in Learning Assistance elsewhere in the province, followed by a Master's degree in Curriculum and Leadership outside the province.

Annika

Annika has been teaching for approximately 10 years altogether. She began her career as a substitute teacher in a First Nation's school for a year, followed by 6-7 years with an independent distributed learning school where her students had diverse abilities, including RD. She has been a support teacher in the district for the past 2½ years, during which time she has worked in two different schools. Annika completed a Bachelor of Arts in English and History, a

Bachelor's degree in Education, and a Graduate Diploma in Inclusive Education, all at the local university.

Summary of Participants

As evidenced in the profiles of participants, perceptions were collected from a variety of educator stakeholders in the teaching of students identified with RD. In considering not only the direct perceptions of classroom teachers, but also the adjunct perceptions of other educators whose work contributes to the teaching of these students, a comprehensive understanding of the phenomenon emerged. The shaping of this understanding could only surface alongside consideration of salient artifacts that represent important social, cultural, and historical activities pertinent to teaching students identified with RD in this school district. In the sections that follow, four over-arching findings are presented through analysis of emergent themes within secondary artifacts, as well as participants' perceptions and understandings.

Thematic Analysis

Inter-connected themes emerged from analysis of data from documents, questionnaires, and interviews, collected across three study phases. All data were coded and synthesized into apparent pattern themes. This facilitated the identification of constructs relevant to the shaping of educators' perceptions by secondary sociocultural artifacts in the context of this school district. In the next section, four overall findings are presented through discussion of the themes that emerged in response to each of the research sub-questions. These findings are: the artifacts that influenced educators' perceptions represented a special versus inclusive education binary, educators' perspectives on RD represented a fixed deficit view, perceptions of their self-efficacy to teach students identified with RD varied, and special education-aligned artifacts were perceived as inhibiting teaching of students identified with RD.

Emergent Themes within Secondary Sociocultural Artifacts

The first research question addressed through analysis was “What secondary sociocultural artifacts have influenced educators’ perceptions about teaching students identified with reading disabilities within this context?” Given the sociocultural theoretical underpinnings of this research, the potential for secondary sociocultural artifacts to reveal important information about the social, cultural, and historical forces operating within a given context (Cole, 1996) was taken as a critical first step in investigating how educators’ perceptions are shaped. I initially identified key local secondary artifacts (websites, brochures, policies, professional contracts) that aligned with the influences on educators’ perceptions found in the literature review (policies and procedures, pre-service training, in-service training, and teaching roles), based on my insider knowledge of the context. Additional artifacts emerged from the Phase 1 interview of Sarah (senior district administrator), as well as the Phase 3 interviews with Jen, Kate, and Laurie (classroom teachers), Annika (support teacher) and Sandy (school principal).

After reading through the 10 artifacts (eight documents and two websites) and completing overviews of their content using Bloomberg and Volpe’s (2019) document analysis template, all artifacts were considered for their alignment with categories of influences on teacher perceptions that emerged from the literature review and were incorporated into the conceptual framework. This involved attending to not only what was written, but how it was written (Saldaña & Omasta, 2018), including attention-getting features such as fonts and images. The artifacts are categorized accordingly in Table 3. This revealed that all broad categories of influences found by previous research were also represented within the artifacts examined for this study.

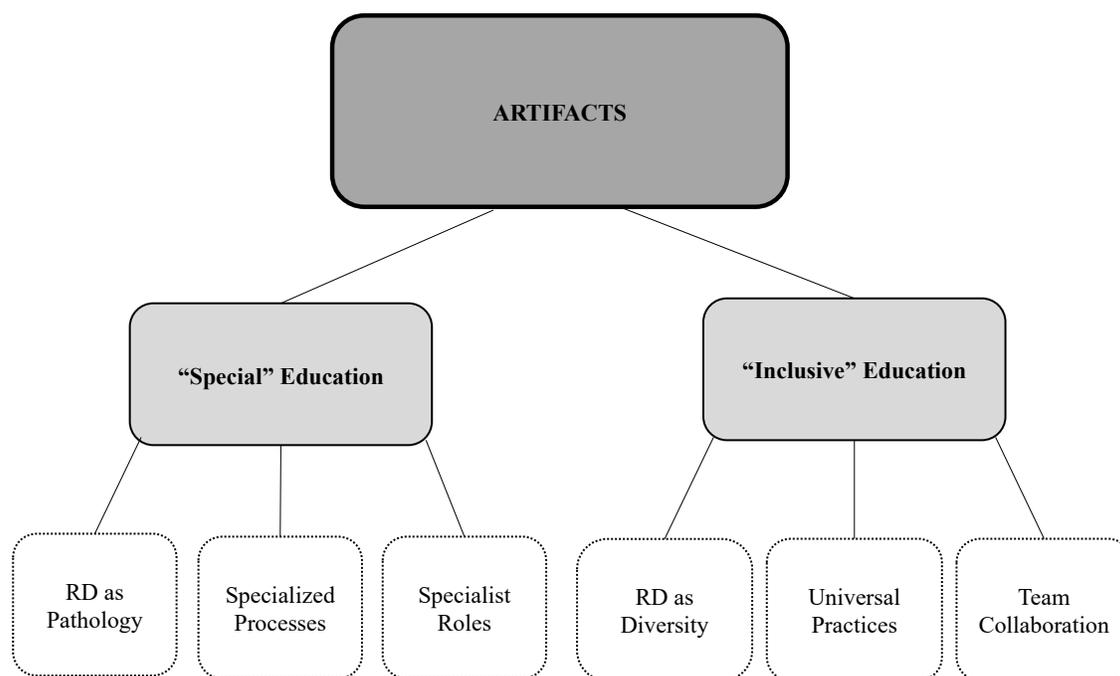
Table 3*Secondary Sociocultural Artifacts as Aligned with Conceptual Framework*

Artifacts	Policies & Procedures	Roles	Pre-Service Training	In-Service Training
Provincial Special Education Policy	X	X		
School District Inclusion Policy	X			
School District Inclusive Education Services Public Document	X	X		
School District Vision, Mission, and Values Statements	X			
Local Teachers' Union Letter of Understanding-Working Conditions	X			
Local Teachers' Union Collective Agreement		X		
Local University Teacher Education Program/Course Description			X	
Local University Teacher Education Program Vision Statement			X	
Local Teachers' Union Professional Development Events Website				X
School District Professional Learning Website				X

Once salient secondary artifacts were identified, I applied Saldaña’s (2016) first and second cycle coding procedures, continually grouping related codes, and refining the patterns detected, until six sub-themes emerged. These six sub-themes were then further grouped into two over-arching themes. These themes represented opposing poles of a binary that could be described as Special Education versus Inclusive Education. The primary finding about the artifacts was that each of them predominantly reflected one side of the binary. These two sides and the resulting sub-themes within each side are illustrated in Figure 3. These themes as they are represented in the salient secondary sociocultural artifacts from this context are further explored in the subsequent discussion.

Figure 3

Emergent Themes within Secondary Sociocultural Artifacts



Special Education

The strongest representation of themes consistent with a traditional model of special education emerged from four particular artifacts. The Ministry of Education special education policy document (originally published in 1995, most recently revised in 2016) was characterized by references to diagnostic criteria and detailed procedures for identifying students who qualify for specialized services. Similarly, the local teachers' union letter of understanding on working conditions that was originally published close to the same time, had explicit procedural guidance around issues of class size limits and class composition parameters regarding limits on the number of students identified with exceptionalities. Importantly, this document serves as the guide for reinstated teachers' contract language following lengthy, well-publicized court proceedings in the province that included two teacher's strikes and was finally resolved in 2016 (O'Neil & Sherlock, 2016, November 10).

Further content that aligned with a special education model emerged from the more recent teachers' collective agreement (negotiated within the last few years), as well as the course descriptions for the Bachelor of Education program on the local university's website. The language of these artifacts appeared to be largely aligned with the language of the Ministry policy document. The date of origin or last revision of the course descriptions is unknown. Each of the artifacts described above remain active references for the guidance of teaching of students identified with RD in this context. Further analysis of the content of the four secondary sociocultural artifacts consistent with special education as described above, revealed three sub-themes: RD as Pathology, Specialized Processes, and Specialist Roles. Each of these sub-themes is explored in detail in the following sections.

Reading Disabilities as Pathology. One of the persistent themes throughout the artifacts characterized as representative of special education was an emphasis on students identified with RD as having an inherent pathology. The Ministry policy document (2016) was especially representative of this theme, as was evident in the use of terms such as “deficits” (p. 49), “disorders” (p. 47), “weaknesses” (p. 49) and “impairments” (p. 49). Further, it focused on the permanence of this pathology as “genetic” (p. 47), “neurological” (p. 47), and “life-long” (p. 47) differences. The teachers’ union letter and the Faculty of Education coursework descriptions from the local university also used language that aligned with RD as pathology. These included the use of terms such as “severe learning disabled”, “special needs”, and “exceptionalities” applied to describe students. The latent content revealed by the language used in each of these artifacts is one of deviation from a standard norm, implying individual pathology.

Specialized Processes. Along with the specification of characteristics of students identified with RD, these artifacts also mandated procedures for identifying, placing, and intervening with students identified with RD. The teachers’ union letter included references such as students being integrated into a “regular class”, “teacher aide time”, and “individual education program”. The most prominent language within this document that pertained to students identified with RD was the stipulation of a class maximum of two students with exceptional needs. This prevents the placement of more than two students with identified special education designations according to Ministry criteria (including those with RD) into one class. The Ministry policy document was closely aligned with the language of the letter of understanding overall. It provided considerable detail for processes such as “formal diagnosis” (p. 50), “intensive intervention” (p. 49) and “remediating” (p. 50). These procedures rely on standardized processes to determine deviation from the norm and determination of abilities as average or

otherwise. References to specialized processes found in the local university Faculty of Education course descriptions tended to reflect Ministry language, including “low- and high-incidence designations”. Overall, it was evident that these artifacts represented mandated processes regarding education for students identified with RD that are different than those for the rest of students.

Specialist Roles. Along with an assumption of pathology and mandated distinct educational processes, the need to have staff with specialized roles and qualifications guiding the education of students identified with RD was prominent across artifacts that were aligned with special education in this study. The Ministry policy document (2016) stipulated the need for assessments to identify students identified with RD needing to be done by “appropriately qualified professionals” (p. 50), typically psychologists. Further references to specialists who should guide these students’ educational experiences included speech language pathologists, occupational therapists, medical professionals, and teachers with additional qualifications such as “Learning Assistance” (p. 52). Similarly, the union letter of understanding also named and mandated involvement of some of the same roles as outlined in the Ministry document. These were named as part of the process required in the planning of class size and composition. The artifacts examined here emphasized the role of specialist educators as central in guiding the educational experiences of students identified with RD. In contrast, in the next section, I present themes from different artifacts that emphasize other factors in the teaching of students identified with RD.

Inclusive Education

The thematic content of the six remaining artifacts I analyzed within this study shifted away from a focus on individual disability and qualification for services from specialists to an

inclusive model that emphasized a respect for diversity, emphasis on universal practices, and collaborative efforts shared across a team. Many of the artifacts that aligned with the inclusive education theme were broad statements of mission, vision, and values (i.e., for the school district and the local university's Faculty of Education) or collections of professional learning resources (i.e., the local teachers' union professional development website and the school district's professional resources website). Some offered targeted guidance for processes or procedures (i.e., the school district's public document on inclusive education services).

The school district's inclusion policy was notable, in that it was a policy document required to guide practices in the district's schools. Its existence speaks to the school district's intention to recognize diversity in a respectful manner, and a commitment to providing educational experiences that follow principles such as respect and equity. The district's mission, vision, and values statements were similarly aligned, as each used terms such as inclusive or inclusion. The district's public document outlining inclusive education services carried an overall tone of inclusion, with no mention of special education or disability. Instead, the emphasis was on person-first language and explaining universal teaching practices that emphasized the role of the classroom teacher, the classroom as the primary location where learning takes place, and the involvement of a team of professionals. The intent of the document appeared to be explanation of how students receive the educational supports they need and to provide an inclusive approach while still following Ministry policy. It would be readily interpretable by students' parents and staff, alike.

A few other artifacts were worthy of note for their consistency with the tenets of an inclusive educational theme. The school district's website of compiled teaching resources, mainly locally developed by district staff, was aligned to the district's inclusion policy. It offered

resources to use in teaching to diverse student needs, including literacy, as well as resources to address issues of social justice. The local teachers' union professional development website of compiled professional development opportunities for teachers included a variety of opportunities to build capacity in meeting diverse needs in classrooms. The predominant tone of each of the artifacts described above reflected a shift away from the language of traditional special education. As I further analyzed the content of each of the six artifacts that I had deemed consistent with the over-arching theme of inclusive education, I detected three further sub-themes: RD as diversity, universal practices, and team collaboration. I explore these sub-themes in detail in the following sections.

Reading Disabilities as Diversity. Throughout the artifacts aligned with the inclusive education theme, emphasis was on diversity that exists across all students, as opposed to a disability located only in some individuals. The district's inclusion policy document emphasized diversity in its explicit use of that term in multiple instances to describe both students and staff, and further recognized diversity as not only visible, but also less visibly apparent, and linked to marginalization that is a form of injustice. The district's public document to explain inclusive education services used person-first language to describe students with unique learning needs, rather than reference to disability labels. The district's vision statement used inclusive language to describe the need for personalized learning environments. Its values statement explicitly included appreciation of diverse human characteristics as one of its values. Similarly, the district's website for locally compiled teaching resources included sections for teaching inclusively and addressing injustices of marginalization.

There were a few remaining references in artifacts noted to align with the theme of diversity, including listings for professional development opportunities to meet diverse student

needs on the teachers' union website. The local university's Faculty of Education vision statement directly acknowledged diversity and unique characteristics of individuals. The artifacts I determined to be aligned with inclusive education all included a recognition of diversity, either explicitly, or implied within their content.

Universal Practices. In contrast to the specialized processes emphasized in the previously presented artifacts aligned with the special education theme, the six artifacts aligned with inclusive education focused on strong teaching practices for all students. The school district's public document outlining inclusive education services explained assessment and teaching processes that follow the Ministry special education policy but emphasized the classroom and the classroom teacher as central to all processes of teaching and assessment available to all students. In one instance, it was explicitly stated that students are provided support whether they have a formal Ministry designation or not. The district's vision, mission, and values statements contained language focused on success and opportunities that are accessible for all learners, implying a commitment to practices for every student, rather than a select few, as in a special education model. Further references to universal practices were found within the district's inclusion policy. This was best reflected in a statement that commits to continuous improvement of practices to ensure equitable experiences for all.

Within the local university's Faculty of Education vision statement, there was an explicit commitment to equitable opportunities and addressing matters of social justice as aligned with inclusive universal practices. The content of the district's website for teaching resources also reflected attention to universal practices, including resources for the teaching of literacy and educational technology, both of which are especially relevant for students identified with RD. The teachers' union professional development website offered a few opportunities to build

classroom teaching skills in reading and the use of digital tools, which are also particularly relevant to students identified with RD. Emphasis on universal practices of teaching to lead to the success for all students was evident throughout each of the artifacts aligned with the inclusive education theme.

Team Collaboration. Artifacts that were consistent with the inclusive education theme included references to the importance of team collaboration amongst educators in supporting all students. Within the school district public document explaining inclusive education services, specialist staff roles were included, but their involvement was framed as members of a team which always included the classroom teacher. A few references to team collaboration were also made or implied in the use of the term “community” to describe both staff and students in the district’s vision, mission, and values statement and inclusion policy. Notably, in contradiction to its otherwise special education-oriented content, the Ministry policy document (2016) also referred to the importance of a “collaborative team approach” (p. 51) when supporting classroom teachers to build the skills necessary to support their students identified with learning disabilities. This instance is a notable exception within that artifact, which generally emphasized the role of specialists instead. The local university’s vision statement did not make explicit reference to educators as part of a team but did refer to educators as global citizens. Throughout the artifacts that were classified as representing inclusive education overall, team collaboration amongst educators was emphasized in the teaching of all students, rather than only those identified as having RD.

Summary of Emergent Themes within Secondary Sociocultural Artifacts

The primary finding regarding the 10 artifacts found to influence educators’ perceptions about teaching students identified with RD was that their contents aligned with either special or

inclusive education. Themes from the artifacts gathered and analyzed as part of the first phase of this study provided important detail to guide the analysis of perceptual data gathered in the subsequent questionnaires and follow-up interviews. Given a lack of research examining the linkage between such artifacts and how educators' perceptions of RD are shaped in a given context, this study aimed to better understand this phenomenon. My thematic analysis of the content of the artifacts also supported the relevance of the content of the instruments developed for both the questionnaire and the interview phases of this study. With a comprehensive understanding of the salient secondary artifacts in place, my analysis moved into educators' directly reported perceptions.

Emergent Themes within Educators' Perceptions

The analyses from this study are grounded in the social constructivist view that multiple realities exist and are created through human activities in varying contexts (Creswell & Poth, 2018). As such, the importance of considering educators' unique perceptions regarding their teaching was essential. In search of understanding not only the "what", but also the "how" of secondary artifacts shaping perceptions, I examined the following types of perceptions, as aligned with my remaining three research questions:

- How do educators characterize their perspectives on reading disabilities?
 - (Perspectives on RD)
- How do educators characterize their self-efficacy beliefs to teach students identified with reading disabilities?
 - (Self-Efficacy Beliefs)
- To what extent do educators perceive specific secondary sociocultural artifacts as supportive or inhibitive to their teaching of students identified with reading disabilities?

- (Perceptions of Artifacts)

As per the guidance of Bloomberg and Volpe (2019), I have reported and expanded upon my findings according to the themes that emerged from participants' reports (taken from both questionnaire items and transcripts of their interviews). A summary of these themes is presented in Table 4, and further described in the following sections.

Table 4

Emergent Themes within Educators' Perceptions

Themes in Educators' Perceptions		
Perspectives on Reading Disabilities	Self-Efficacy Beliefs	Perceptions of Artifacts
Learning Deficit	Commitment (Perception of Failing, Positive Relationships)	System Barriers
Needing to Teach Differently		Opportunities for Learning
Knowing from Personal Experience	Insight from Accumulated Experience (Lack of Consistency, Learned on the Job)	Union Matters
	Access to Resources (Need More, Success with Specific)	Under-Preparation

Perspectives on Reading Disabilities

The major finding regarding perspectives on RD of participating grades 4-7 classroom teachers was that they more closely aligned with a fixed deficit view than a social construction perspective. On the *Perspectives on Reading Disabilities* closed-ended questionnaire items (maximum possible score 35), higher raw scores indicated greater alignment of thinking with a

fixed deficit model, while lower scores indicated greater alignment with a view of RD as a social construction. The results of all participants who completed this portion of the questionnaire are presented in Table 5.

Table 5

Educators' Perspectives on Reading Disabilities from Closed-Ended Questionnaire

Raw Score	Frequency <i>f</i>
10	1
18	1
19	1
20	1
21	2
23	1
27	2

n=9

Seven out of nine teachers' responses emerged above the mean score ($M=18.6$), in the top third of possible raw scores on the questionnaire. Another teacher's responses fell just below the mean. Only one teacher's responses reflected a predominantly social construction view of RD, with the result emerging well below the mean score, in the bottom third of possible raw scores. This participant did not offer consent for a follow-up interview. Of the participants who consented and were selected for follow-up interviews, all three reported perspectives on RD that emerged in the middle third of possible responses. As teachers expanded upon their understanding of RD in their open-ended questionnaire and interview responses, three themes emerged, as follows: learning deficit, needing to teach differently, and knowing from personal experience.

Learning Deficit. As a whole, teachers understood RD to be a deficit in learning that was located in the being of the student. This was reported by eight of nine respondents in their open-ended questionnaire responses. Such responses tended to describe neurological, genetic, or

biological underlying causes and compared students' reading skills to a hypothetical, normative type. For example, one questionnaire respondent stated:

I believe a reading disability is a genetic or biological issue that is preventing the connections that need to be made between eye, brain, ear, sound, and memory from happening thus inhibiting the ability to read in the same way that other people may read.

Similarly, another teacher reported that “when you have a disability, there are biological factors holding you back”. Additionally, teachers described RD in permanent terms as an inability or impairment. One respondent explained this as “there is a lack of change, improvement, retention, lack of use of taught strategies and struggles to make connections in the text by making connections between words.”

Collectively, all three teachers interviewed described RD as a matter of biology that is fixed within individual students. In her explanation of RD, Jen often spoke of neurological differences and the long-term impacts of a reading disability. One such example was her comment about one of her students, stating “that’s just gonna be his trajectory until he’s done.” Even though she often referenced external contributing factors such as lack of adequate access to instruction, Kate’s explanations always fell back on RD as something inherently unique in the student. For example, after describing students’ responses to her teaching methods in detail, she added, “So, and then some of it just seems like it's genetic. Like there's just something going on.” Across all teacher participants, RD was described as an internally caused, fixed individual difference as compared to a hypothetical normative ideal.

Needing to Teach Differently. Despite their perceptions that RD is an inherent condition in only some students, teachers expressed discomfort with the term disability, emphasizing the need for specialized teaching methods, rather than individual pathology. Five of the nine teachers

who responded to the questionnaire referenced the need for students identified with RD to receive specialized instruction to learn how to read. Such commentary seemed to reflect teachers' desire to convey a sense of empathy and hopefulness for their students' learning, even though they perceived them to have a permanently disabling condition. One teacher's comment on the questionnaire illustrated this particularly well:

It is when a student has a less common way of being able to read. It's when a student needs other opportunities/strategies to be able to read in comparison to what majority of students need. The student may have a disability, but they are still able to learn to read. It may just take longer and with adaptations.

All three teachers interviewed expressed confidence that students identified with RD could learn to read if they received specialized teaching methods. In Jen's interview, this was evident in her comment that "what we now deem a learning disability is, means you have this capacity, but your output is not showing it. So, your child is really bright. We just have to find a way for them to show us what they know." Laurie similarly expressed her perspective that students identified with RD require different teaching methods than most children and that she is not equipped to offer such teaching. She cited three examples of students in her class who have been identified with RD and expressed her frustration that the type of different teaching they require could be better provided by someone else, yet this was not available. Such access to different teaching methods was reported by all interview participants to be essential for students identified with RD.

Knowing from Personal Experience. In their open-ended questionnaire responses to explain their fixed deficit perspectives on RD, seven of nine teachers referred to direct personal experiences with individuals they knew who had experienced difficulties learning to read. They

shared examples of long-term struggles, often characterized as life-long challenges, from their own experiences as learners, the experiences of their own children, or those of others close to them. Participants made it clear that the insights they gleaned from experiences in their personal lives have shaped their thinking about RD as a fixed deficit.

During the interviews, teachers expressed conviction about their perspectives on RD when sharing personal experiences. This was indicated by expressions of emotion such as tears or raised voices. Jen's strong sense of certainty in her understanding of RD emerged throughout her interview. Her assuredness was evident:

I live it. I know from personal experience how learning is difficult. I know as a parent of a child who experiences how learning is difficult, so, and I know myself... I feel that I know this story. I know this pretty well.

Similarly, while talking about the dire consequences of their students identified with RD not learning how to read, both Laurie and Kate made connections to individuals they knew. Laurie described her experience working in a factory alongside co-workers who she saw as "stuck" in positions with limited growth potential. Similarly, Kate shared insight from having seen her father struggle as an adult with limited proficiency in reading. In all instances of teachers sharing their related stories, it was clear that they perceived a greater understanding of RD, because of these experiences with others who had struggled learning to read. In the next section, analysis of teachers' beliefs about their own efficacy for teaching students identified with RD is presented.

Self-Efficacy Beliefs

The finding about grades 4-7 classroom teachers' perceptions of their self-efficacy for teaching students identified with RD is that they varied across participants, depending on facets of their teaching that they emphasized. On the *Self-Efficacy for Teaching Students with Reading*

Disabilities Questionnaire (maximum possible score of 40), higher raw scores indicated stronger confidence in one's own ability, while lower scores indicated less confidence. The results of all participants who completed this portion of the questionnaire are presented in Table 6.

Table 6

Educators' Self-Efficacy Beliefs from Closed-Ended Questionnaire

Raw Score	Frequency <i>f</i>
12	1
13	1
17	2
20	1
25	1
27	2
28	2

n=10

The mean score ($M=21.4$) of participants' responses emerged at the mid-point of all responses. Only two out of 10 emerged in the bottom third, indicating relatively low self-efficacy. Four out of 10 emerged in the top third, indicating relatively high self-efficacy. Given that there were no open-ended questionnaire items that addressed self-efficacy specifically, interview data was analyzed to explore the influences on self-efficacy.

The teachers selected for follow-up interviews were those who reported self-efficacy beliefs that emerged at the relative extremes of the scale. Laurie and Jen reported the lowest self-efficacy scores (respectively) of all participants, while Kate reported the highest. Continuities and disparities in their beliefs that emerged from their interviews are examined in further detail in this section. Overall, within teachers' accounts of their efficacy to teach students identified with RD, three themes emerged, along with six sub-themes (indicated in parentheses): commitment (perception of failing, positive relationships), insight from accumulated experience

(lack of consistency, learned on the job), and access to resources (need more, success with specific).

Commitment. The theme of commitment emerged from the interviews of all three classroom teachers as they expressed a sense of dedication to doing their best to teach their students identified with RD. This was evident in comments made by each one that they chose to participate in the study due to their interest and desire to improve learning for students identified with RD. Despite their commitment to supporting their students, the sub-theme of perception of failing their students emerged as teachers expressed low self-efficacy for effective pedagogy to meet the needs of students identified with RD. Conversely, they emphasized the potential of positive relationships between students and teachers to cushion negative effects of the experiences of living with RD. Each of these sub-themes is explored in further detail in the following sections.

Perception of Failing. Although despair that they may be failing their students identified with RD was a predominant sentiment expressed by teachers, it did reveal their sense of commitment to helping their students achieve success. Each of the interview participants spoke passionately about their sense that they may be letting their students down by not providing them with the teaching that they need to be successful. For Laurie, this was expressed as, “I’m doing the best I can”, along with explanations of her efforts and questioning whether these efforts were enough. Kate similarly shared her worry that she may be failing her students identified with RD, stating, “I don’t feel like I’ve done my job to meet their needs, really.” As teachers spoke, it was evident that they spent a great deal of time thinking about how to best help their students identified with RD in their classrooms. Laurie’s commitment despite her sense of low self-efficacy to support her students identified with RD was evident when she cited her persistent, yet

unsuccessful, efforts to convince her mid-elementary aged students to take risks even though they feel self-conscious of their difficulties in comparison to their classmates.

Positive Relationships. As they spoke about the roles of teachers and their commitment to making a positive impact on students identified with RD, all three teachers emphasized the importance of building strong relationships between students and teachers. They referenced the need for emotional connections, believing in students, and commitment to persevering in the face of inconsistent progress. Jen shared:

...we were truly blessed [child's name] met [name of teacher] who is a student support teacher at [name of school] who loved him, believes in him, and has supported him. Now this is where I'm gonna get choked up...he couldn't have done this journey without her.

Similarly, Kate emphasized her belief in the need for strong relationships with students to foster their risk-taking in learning. She referenced many examples of this throughout her interview, often explaining that such positive relationships can serve to counteract a lack of motivation that students identified with RD who encounter frequent learning challenges might otherwise feel. This belief appeared to be linked to Kate's relatively high self-efficacy, as compared to all other teachers who completed the questionnaire. One example of Kate's belief in the positive power of the student-teacher relationship emerged when she stated:

I know that this child struggles, but I know that I can get this child to do "X", so I'm going to push them to do "X", even if it hurts a bit, rather than not push and make them uncomfortable. Right? So, I think we also have to give kids, kids can handle more than we realize. So, one of my philosophies, whether it's with reading disability is, I have to build a relationship with them, number one.

This emphasis on relationship appeared to bolster Kate's self-efficacy beliefs, even though she expressed her simultaneous worry about ineffective instruction. Although she did speak to reading-specific pedagogical strategies and resources, Kate emphasized the centrality of strong relationships with her students above all, to foster their learning success.

Insight from Accumulated Experience. From analysis of all three teacher interviews, the theme of insight from accumulated experience consistently emerged as influential in participants' self-efficacy beliefs. Each teacher cited examples from their own classrooms and schools to illustrate and explain what they felt made them effective or not in teaching students identified with RD. All participants spoke of their frustration with a lack of consistency in teaching methods used across the school district. In contrast, teachers shared stories of successful strategies that they have gleaned from their experiences on the job as positively contributing to their self-efficacy for teaching students identified with RD. These sub-themes are presented in detail in the subsequent sections.

Lack of Consistency. Each of the teachers interviewed expressed their perception that a lack of consistency in teaching practices for reading across the school district negatively affects their teaching of students identified with RD. Kate described this phenomenon as, "...there's no continuity. You move on to another teacher... there's a lack of communication." For Laurie, this was especially salient, as she has moved between a few schools in the district, within the last few years. She shared her experiences of confusion and frustration when she moved to a new school in September that seemed to follow a different model for teaching reading than the one that she had just left. She explained that this was after she had established confidence with her teaching of reading at her previous school by accessing guidance from a specialist teacher in literacy. Laurie reported that she thought she would be able to put her acquired skills in teaching reading

into practice at any school in the district but was frustrated to find out that her new school did not support the methods she had just learned at her school the year before. Laurie followed up her story of teaching at previous schools by sharing:

I don't really feel like we have a model at the school that I'm at. To be honest, I feel everybody is really, is really doing their own thing...like at our school for example, somebody started using Zoo Phonics, but then the next teacher uses Jolly Phonics, and then the next teacher might use a different program. And the next teacher might not use a program at all, and it might just be, well, 'I think the kids need this, so I'm going to do this,' or 'They need this, so I'm going to do this.'

As a teacher who had only been in the district for a few years, Laurie indicated that she had resigned herself to trying to figure out how to teach reading on her own, by doing her best to align her methods with whatever other methods were happening in the school to which she was assigned. Although Laurie expressed resignation in accepting a lack of consistency in teaching strategies in the district, she did express her ongoing concern that such inconsistency is especially problematic for students identified with RD "who are already confused about reading anyway".

Learned on the Job. Despite their perceptions that a lack of consistency in how reading is taught is detrimental to the learning of students identified with RD in the district, teachers shared numerous examples of instructional practices that they have identified as successful, based on their learning on the job. Jen referred multiple times to "nuggets" of successful teaching strategies that she had gleaned over her career, throughout her interview. She explained this as, "...over the years it's been, you know, definitely there's nuggets that I've held onto. But I have, I am forever looking and searching for something that is different, something better, something

that will work.” Her enthusiasm for the successful practices that she has learned about throughout her teaching career was evident as she physically pointed around her classroom and jumped up in the middle of her interview and grabbed a particular resource to show as she talked about how she used it in her teaching.

Kate also spoke of strategies that she has found to be successful through her teaching over the years. She characterized her application of these strategies as “trial and error”. A quote that exemplifies what she meant by this was, “...after all this time, you just kind of, with experience, you try things. ‘Oh, that didn't work. Oh, this worked.’” Both Kate and Jen acknowledged that their many years of teaching experience have been necessary to accumulate teaching strategies that they perceive to support their sense of self-efficacy for teaching students identified with RD.

Access to Resources. In my analysis of classroom teacher interviews, access to resources for teaching students identified with RD emerged as a common theme within discussions of participants’ self-efficacy beliefs. A common sub-theme was that they need more resources that are specific to teaching students identified with RD. In addition, each of the teachers offered examples of success that they felt they have experienced using particular resources. Support for these sub-themes is offered in this section.

Need More. Low self-efficacy identified by teachers in interviews stemmed from their identified need for more teaching resources to address the needs of students identified with RD. All three teachers characterized their access to effective resources as inconsistent and coming from a variety of sources, depending on their schools and their teaching colleagues, as opposed to consistent, targeted resources for all teachers. This was also attributed by each of the participants to a lack of adequate access to the services of specialist educators, such as support

teachers. In her interview, Jen characterized the lack of access to resources as a symptom of the broader problem that people don't understand "learning differences":

I really feel that number one, people aren't able, I think people can see students have challenges, but we don't know enough about the learning differences to be able to identify it, to be able to come to figure out what the steps are, and how to execute a way to support.

Jen's commentary throughout her interview indicated her perception that more resources were needed to support her teaching of students identified with RD, although she did not identify specific resources. In contrast, both Kate and Laurie emphasized the need for more human resources in terms of specialist educator support, specifically.

Success with Specific. Despite identifying an overall lack of access to teaching resources to support students identified with RD, during interviews, teachers were able to share their successes with some specific teaching resources. Each teacher gave examples of specific, published literacy instructional resources that they felt were successful, at least to some degree, with their teaching of students identified with RD. As an example, Laurie's reported experiences teaching reading in another country were especially detailed. She was enthusiastic as she outlined her experiences with using synthetic phonics teaching resources. Laurie reflected on her experiences by acknowledging that she did not appreciate the resources she was provided with in that previous context, at first:

I really had a struggle when I first got there, because it's a very prescriptive sort of system. Now, in hindsight, I see a lot of benefits to some of the things that they do, and especially the planning and the objective-led planning.

Laurie's example illustrated the sub-theme of success with specific resources that offered a source of self-efficacy for her teaching of students identified with RD. This finding emerged

from analysis of all the teacher interviews as well. In the next section, findings regarding teachers' perceptions of secondary sociocultural artifacts as supportive or inhibitive to their teaching of students identified with RD are presented.

Perceptions of Artifacts

The primary finding here was that although classroom teachers reported no more than minimal or some influence of all categories of secondary sociocultural artifacts in their closed-ended questionnaire responses, analysis of open-ended questionnaire responses and interview transcripts from educators across various roles revealed that those artifacts aligned with special education were perceived as inhibiting teaching of students identified with RD. No awareness of inclusive education-aligned artifacts amongst classroom teachers was found. On the *Influence of Sociocultural Artifacts Questionnaire*, teachers considered each category of artifact for its influence on their teaching of students identified with RD. The ratings on each of the four closed-ended items ranged from 0 ("Not at all") to 5 ("A Great Deal"). The aggregated teachers' ratings are presented as mean scores within the four primary categories of secondary sociocultural artefacts in Table 7. Higher mean scores indicate relatively higher perceived influence on teaching practices.

Table 7

Educators' Perceptions of Artifacts from Closed-Ended Questionnaire

Artifact Categories	Mean Scores <i>M</i>
Pre-Service Education	2.22
In-Service Professional Learning	3.33
Policies and Procedures	2.22
Teaching Roles	3

n=9

Results from the closed-ended items on the classroom teacher questionnaire indicated that none of the categories were perceived as having “A Great Deal” of positive influence when mean results were considered. Professional learning opportunities available as a teacher were perceived as most influential (aligned with the “Somewhat” response choice), followed by support from staff in specialist teaching roles. Both pre-service education and policies and procedures emerged as having “Very Little” influence on teaching practices. Of all teachers who completed the questionnaire, Jen reported the lowest perceived influence overall. Both Laurie and Kate’s reported perceptions emerged just above the mean for all participants’ responses. Variations in perceptions were evident in open-ended questionnaire responses and educator interviews. This included interviews with individuals in the adjunct educator roles of senior administrator, support teacher and elementary school administrator. Four major themes about how secondary sociocultural artifacts support or inhibit teaching students with reading disabilities emerged: system barriers, opportunities for learning, union matters, and under-preparation.

System Barriers. In each of the teacher interviews, dissatisfaction with elements of the system, framed largely as linked to special education policies and procedures, emerged as hindrances to teaching students identified with RD. Jen, whose questionnaire responses indicated low perceived influence (either positive or negative) of any of the categories of secondary sociocultural artifacts on her teaching, actually identified many examples of perceived hindrances created by policies and procedures when she was interviewed. For example, she expressed her frustration with the process in place for identifying students (coded as “Q” by Ministry policy) as follows:

Isn't there a universal way of doing this? No. So, [name of local district] is not identifying these little Q learners. So, I go what the hell? I think it's worse, because we're not identifying these Q learners, because Q learners we just have to differentiate, we just have to adapt. Well, that's just not good enough, my friends. Adapting and differentiating the learning is not helping them.

Kate's frustration with identification of learners with RD was similar to Jen's. Across the teachers interviewed, there was a clear perception that identifying students as having RD is an essential first step to them accessing the supports that they need to be successful learners. This was referenced by each of the teachers in different ways, but each one implied that specialized teaching procedures are only available to students once they are formally identified.

Dissatisfaction with the special education model of how supports are provided to students identified as having RD was evident in Jen's interview. She expressed frustration with how support teachers offer their support to students identified with RD, saying, "They maybe see a kid and they pull them out 30 minutes here, 30 minutes there." Kate spoke of her worry that students identified with RD need to have some of their needs met outside of her classroom, implying that she has difficulty meeting their needs in her classroom. She expressed this by saying, "I'm not always so sure that the child who has a severe learning disability is getting the same benefit in that big classroom."

Perceptions that limitations in the system are preventing the needs of learners identified with RD from being addressed were also evident in interviews with the educators in supporting roles. Annika, in the role of support teacher, noted that teachers often perceive the process of designation that identifies students as having RD as essential to student success. In reference to the concerns that classroom teachers bring forward to her, she indicated that, "Like they're really

pushing for a designation. Like it seems like that's like the end goal.” She further expressed her understanding that classroom teachers are acting in what they perceive to be the best interests of their students but acknowledged that this comes across as pressure on her to provide direct support to students when the teaching in the classroom is also valuable.

Reflecting on her role as a school principal, Sandy shared many examples of how she sees classroom teachers perceive that they don't have the capacity to meet the needs of students identified with RD. She contrasted this with looking to specialists to meet those needs, exclusively, as has been the predominant thinking and practice in the district, historically. While she acknowledged progress in her own school, she did indicate that, “it can just take such a long time to move people forward and get out of that same, you know, stuck mindset.” She further connected her own role as school principal to shifting thinking about the system by saying, “I find that that's my role too, and kind of giving the people that ‘A-ha’ moment.”

Similarly, Sarah, as a senior administrator, expressed her belief that thinking amongst classroom teachers is focused predominantly on the processes of the traditional model of special education, rather than looking for their own capacity-building. This is evident in her statement that, “...you end up spending a lot of time at school-based teams, with referrals where their goal is to get a test, not to learn more about their learner or even reflect on the stuff they're already doing.” Along with perceptions of barriers within the system, educators reflected on opportunities for their own learning, as described in the next section.

Opportunities for Learning. When reflecting on classroom teaching of students identified with RD, educators unanimously perceived that there were not enough ongoing opportunities to learn about effective teaching practices. The most referenced positive supports were opportunities to connect with colleagues in different roles, either through formal structures

such as professional learning communities, professional development workshops, or informal, collegial sharing of resources and moral support. Although classroom teachers acknowledged that some of their professional development was supported through their teachers' union, none of the teachers referenced professional learning resources provided by the district.

Both Jen and Laurie spoke in detail about their perceived need for working alongside colleagues in specialist teacher roles. They referred to these colleagues as having skills and training to meet the needs of students identified with RD that they lacked. Kate expressed self-doubt that she has sought out enough professional learning to support her teaching of students identified with RD, but shared stories of help she received from a support teacher in the past. She also shared:

Would I love to have a, just a specific reading specialist? I would love it at my school, who'd say, 'Okay [Kate], when I spent time with this kid, these are the things they struggle with. Here's a strategy that you can implement.'

Similarly, Laurie referenced past experiences of success working alongside teachers in specialist roles. Despite this, she expressed confusion about how to access such supports in the district:

I do think we've got learning mentors, there are learning mentors in here, like literacy learning mentors and I think like there's [name of literacy coordinator] ... but I know, like those... I do think they actually work with specific schools. I don't know how schools get them. I don't know like what enables a school to be considered a literacy focus school or whatever, right?

All three teachers shared their perceptions that specialist colleagues could support their teaching but expressed concerns that limitations in access prevented it occurring as needed.

In considering the perceptions of those in adjunct roles to classroom teachers, they expressed their efforts to create opportunities to build classroom teachers' capacity to teach students identified with RD. As a support teacher, Annika expressed her desire for teachers to see her as a source of support for their own classroom teaching with all students. She stated, "Yeah, like I also want them to see me as not just someone that pulls kids, right? Like I want them to see me in the classroom and stuff too...I work with everybody."

Perhaps not surprisingly, administrators spoke of their efforts to create structures that enable capacity-building for classroom teachers. Sarah reflected on her efforts and the challenges she experiences, as:

I think we've got a long way to go with classroom teachers understanding not just what their role is in terms of interventionists or providing supports or opportunities for kids is, but even just understanding the whole journey that a student with a learning disability might be on.

In her role as a school principal, Sandy indicated that, "You can support them and give them time to go watch a teacher and have a student support teacher doing push-in and trying to help." She shared a successful example from her school of supporting classroom teachers to use assistive technology as a universal classroom strategy that provides an important tool to students identified with RD. Despite her acknowledgement of some success with creating such opportunities for teachers to support one another to meet the needs of students identified with RD, she also acknowledged that further creation of such opportunities is needed, but difficult to achieve with practical constraints such as time. She reported that teachers need more access to resources to address diverse students. In addition to sources of support for classroom teaching of

students identified with RD, educators also reflected on related matters connected to the teachers' union, as identified by classroom teachers, and described in the next section.

Union Matters. As they spoke of both supports and hindrances to the teaching of students identified with RD, educators often made references to particular quotes from two of the special education-aligned artifacts. These included the “professional autonomy” clause in the teachers' collective agreement and the language regarding class size and composition from the letter of understanding between the teachers' union and the school district. Each teacher prefaced their sharing about these artifacts by indicating their wish to be respectful of their union and acknowledging the positive intent of these documents. With respect to the matter of professional autonomy, Jen spoke of the challenge to balance the positive facets of autonomy for herself and her colleagues, with her simultaneous belief that consistency in teaching methods would benefit students identified with RD. She attributed this to teacher efforts to protect professional autonomy. This was evident in her commentary, as follows:

Like, why have we not, you know, looked at a scope and sequence from K to 7? You know, this is what we are in control of in this building, around building literacy skills, those writing skills. Like why can't we figure that out? Because teachers are saying, 'I have professional autonomy'.

When asked about the impact of respecting teachers' professional autonomy, Sandy, in her role as a principal, commented:

I always feel that tension. And when you want certain staff members to move the pace of their own learning along, and you know, try some other things...

Like the dialogue with all interview participants about the juggle to balance teachers' professional autonomy with the perceived need for consistency in teaching practices, both

supportive and hindering commentary emerged regarding the formal language that dictates class composition in the school district. This is the language from the formal letter of understanding between the union and the school district regarding a limit of “no more than two” students identified with designations as per the provincial Ministry special education policy, which includes students identified with RD. Laurie’s comments illustrated this tension most directly. She spoke of the support she perceived for her school when it was allocated an extra classroom teacher, to reduce class sizes and accommodate the numbers of identified students to stay within the composition limits. Nevertheless, she wondered about the impact on all learners, including those identified with RD, when she stated that “we just had these like really, really weird mix of classes”. She further explained this as classes with limited numbers of students in particular grades, or groupings of students with less-than-ideal social connections in the classes. When asked about the impact of the class composition language, Sandy indicated:

I find that still a bit frustrating and how we might want to set up a classroom to best support the students and there might be you know, someone with a Q designation [Ministry code for learning disability] or whatnot and you'd rather put them with you know, a kid who needs a different type of support, so then the EA can help with getting that technology going... I find that it's been more challenging.

Along with the related matters connected to artifacts representing agreements with the local teachers’ union discussed here, the theme of under-preparation from teacher education programs also emerged from educator interviews. It is described in the next section.

Under-Preparation. When referencing artifacts, a universally emergent theme across all educator questionnaire and interview responses was the perception that pre-service teacher education did not prepare them adequately for teaching students identified with RD. No

responses on the questionnaire emerged above “Somewhat” regarding the influence of pre-service teacher preparation on teaching practices for students identified with RD. Discussion of this topic was emphatic in all teacher interviews, eliciting a strong sense of certainty about the inadequacy of their teacher preparation program to enable them to meet the needs of their learners identified with RD. Jen expressed her perception by saying, “Nothing in teacher training. And that was not, I thought, ‘Oh I should take it if I’m gonna be a teacher.’ It wasn’t, it was even an elective.” Kate described the contribution of her teacher education program to her teaching of students identified with RD as “ZERO! Zero.” With respect to the teaching of reading in general, Laurie stated, “I don’t know NOW, but back when I did my training, the idea of teaching reading wasn’t really taught--like how you would go about teaching that.”

When educators in adjunct roles were asked about their own pre-service teacher education, they each expressed solidarity with the classroom teachers’ general feeling of under-preparation. Sandy indicated that, “I remember graduating and getting a grade 1 job and how everyone told us ‘Oh, they never give new teachers grade 1.’ And thinking, ‘How am I going to teach reading?’” Similarly, Sarah stated, “...if I didn’t go take a course on learning disabilities, nobody was going to mention that there might be kids with differences.” Annika expressed a sense of pressure that she felt when she started as a brand-new support teacher, saying, “Yeah, like I felt like I was treated like I already knew everything and I didn’t, so it was pretty stressful for sure.”

As administrators who have supervised many teachers over time, both Sandy and Sarah expressed their perceptions that, in general, pre-service teacher education programs are still inadequate to prepare new teachers to teach students identified with RD. Sandy indicated, “...maybe that’s teacher education needs to change, so that people really realize they are

supporting all the learners in their class.” In reflecting on her interviews of new teacher candidates coming into the school district, Sarah reported, “I do find our younger teachers are coming in with some textbook knowledge about that stuff, but I think it's highly dependent on their practicum experience whether or not they have lived experience.” The theme of under-preparation of teachers to teach students identified with RD within pre-service teacher education programs was evident throughout not only classroom teachers’ reports, but also those of educators in supporting roles, as reviewed here.

Summary of Emergent Themes within Educators’ Perceptions

A number of themes emerged from educators’ perceptions, leading to three primary findings. First, classroom teachers’ perspectives on RD aligned with a fixed deficit view, as evident in the emergent themes of RD as a learning deficit, needing to teach differently, and knowing from personal experience. Second, teachers’ self-efficacy for teaching students identified with RD varied according to themes of commitment (perception of failing, positive relationships), insight from accumulated experience (lack of consistency, learned on the job), and access to resources (need more, success with specific). Third, educators across multiple roles characterized special education artifacts as inhibitive to their teaching, with emphasis on themes of system barriers, opportunities for learning, union matters, and under-preparation.

Chapter Summary

In this chapter, I presented the findings on both secondary sociocultural artifacts and educators’ perceptions related to the teaching of students identified with reading disabilities in a British Columbia school district. Emergent themes presented here addressed the four research sub-questions of this study. The first major finding regarding the secondary sociocultural artifacts salient to this school district is that the contents of each of the artifacts aligned with

either a special or an inclusive education model. Second, regarding classroom teachers' perspectives on reading disabilities, they aligned with a fixed deficit model overall, explained through reference to personal experiences with artifacts of special education. The third finding regarding teachers' beliefs about their own self-efficacy to teach students identified with RD was that they varied, based on which aspects they emphasized in their reflections on teaching students identified with RD. The final finding of this study about educators' perceptions of secondary sociocultural artifacts as supportive or inhibitive is that those artifacts aligned with special education were perceived as inhibiting classroom teaching of students identified with RD. In the next chapter, I discuss my findings for each of the research questions as they relate to prior educational research and inform a revised conceptual framework for the primary inquiry of this study.

CHAPTER FIVE: DISCUSSION

In this chapter, I present a discussion and interpretation of the findings of my study as they relate to the four research sub-questions and previous research about sociocultural shaping of educators' perceptions about teaching students identified with reading disabilities (RD). I address each of the research sub-questions to consider the findings in relation to relevant literature. This consideration is then woven into a revised conceptual framework that addresses the primary research question about how secondary sociocultural artifacts shape intermediate educators' perceptions of teaching students identified with RD in the context of the school district studied here.

Influential Secondary Sociocultural Artifacts

The first research question addressed in my study was, "What secondary sociocultural artifacts have influenced educators' perceptions about teaching students identified with RD?" In my study, I adopted a sociocultural analytical lens (Cole, 1996) through which secondary artifacts (Wartofsky, 1979) are seen to represent the preserved beliefs and modes of action of educators in the context of this school district. In consideration of research that has demonstrated the potential of secondary artifacts to mediate teaching practices in special education (Thorius, 2016, 2019b), it was essential to have a thorough understanding of the secondary artifacts that have shaped educators' perceptions about teaching students identified with RD.

The major finding from my study regarding secondary sociocultural artifacts from this district was that each of the ten artifacts identified aligned with one end of a binary representing the theoretical underpinnings of either a special education or an inclusive education model. The four special education-aligned artifacts referred to procedures for identifying RD in students that were based upon diagnosis of pathology within individual students. They also referred to

specialized procedures to place and remediate students that relied on guidance from educators in expert roles. In contrast, the six artifacts aligned with inclusive education referenced diversity instead of disability, emphasized universal teaching practices for all students, and focused on the collaborative efforts of a team of educators.

My finding that the content of the artifacts represented a binary supports the original work of Jordan and Stanovich (2004) that examined teachers' beliefs, rather than the content of secondary artifacts. These scholars asserted that teachers' beliefs exist along a bipolar continuum like the one that characterized the content of the secondary artifacts analyzed in my study. One end of the continuum emphasized inherent pathology, standardized assessments, and experts (i.e., special education) and the other emphasized diversity in learning and teaching activities, as well as the role of the classroom teacher (i.e., inclusive education). This similar, bipolar distribution has since been widely adopted in the study of perceptions of educators about inclusive education across several contexts (Jordan, 2018b; Jordan & Stanovich, 2004; Jordan et al., 2009; Lanterman & Applequist, 2018). The alignment of the secondary artifacts and their content with previous research on educators' beliefs about students identified with disabilities supports the importance of considering the influences on such perceptions, which has been largely lacking in the literature to this point (Jordan, 2018a, 2018b). As per Wartofsky's (1979) original assertion that secondary artifacts serve the purpose of "preserving and transmitting a mode of action" (p. 201), recognizing key differences between special and inclusive education models and analyzing evidence of these within the secondary artifacts in a school district offered insight into the shaping of teachers' perceptions about their teaching activities. Analysis of the secondary artifacts identified in my case study of this school district revealed a critical difference

in how the discourse was presented within artifacts that aligned with special or inclusive education.

Special Education as Authoritative Discourse in Secondary Artifacts

In the Ministry policy document (Ministry of Education, 2016), the union collective agreement and letter of understanding on working conditions, and the local university's Faculty of Education course descriptions (i.e., the special education-aligned artifacts) rigid directions for steps to follow were either provided, or such guidance was alluded to. This is best understood through consideration of Bakhtin's (1981) notion of authoritative discourse. Such discourse "demands that we acknowledge it, that we make it our own; it binds us, quite independent of any power it might have to persuade us internally" (p. 342). Such discourse is presented in such a way that it cannot be questioned or re-interpreted, but rather, the information must be taken as given.

Special education within my study refers to the mandated educational practices that are grounded in a medical model of disability and can be distinguished as *special* in that they apply only to those students who meet specific criteria, to be distinguished from perceived normative student characteristics (Killoran et al., 2013). Since the practices mandated across educational jurisdictions differ internationally, and within Canadian provincial and territorial contexts, such practices are best considered within specific contexts (McGhie-Richmond et al., 2013). In my study, the secondary artifacts that guide local teaching practices of students identified with RD were examined. Given the assertion that secondary artifacts representing procedures of special education constrain teaching practices generally, (de Valenzuela, 2014), it was important to further understand how such artifacts from this school district depict RD. Four out of 10 artifacts

aligned with a special education model, as represented by three themes in their overall content: (a) RD as pathology, (b) specialized processes, and (c) specialist roles.

Reading Disabilities as Pathology

The artifacts that aligned with special education all presented elements of Bakhtin's (1981) notion of authoritative discourse on RD as pathology. Particularly in the Ministry policy document (2016) whose language was mirrored in the union letter of understanding on working conditions and the university course descriptions, the understanding that RD is a pathology that is located within an individual was presented as unquestionable. It conveyed authority in its references to "brain function" and "disorders" (p. 47) through the opening text that was presented at the top, center of the first page, highlighted and shaded for emphasis, that referenced the adoption of its definition from the "Canadian Learning Disabilities Association". Worthy et al. (2016) found a similar reinforcement of authoritative discourse through references to dyslexia advocacy organizations such as the International Dyslexia Association whose "generally acknowledged truths" (Bakhtin, 1981, p. 344) are often referenced in legislations and policies in the U.S. Overall, these artifacts depicted RD as pathology through authoritative discourse (Bakhtin, 1981).

Specialized Processes

The artifacts aligned with special education referenced specialized processes pertaining only to students identified with RD, reflecting authoritative discourse (Bakhtin, 1981). In the Ministry policy document (2016), authority was conveyed by the bolded font and distinct headings stipulating specialized processes for identifying, assessing, and reporting on students with learning disabilities. These rigid procedures must be followed exactly for the district to access supplemental funding for these students, above the funding provided to other students. In

the union letter of understanding on working conditions, the use of formal legalese and references to numbered sections of the collective agreement created a tone of authority. This authority superseded classroom teachers (and all educators for that matter) and demanded that its procedural guidance for singling out students identified with disabilities and limiting the number assigned to any one class be adhered to. The local university's course descriptions used language to refer to types of disabilities that was taken from Ministry policy on special education. This further reinforced the separateness of practices needed for students identified with RD, as per the model laid out in the Ministry document. Each of the special education-aligned artifacts contained elements of authoritative discourse (Bakhtin, 1981) in their depiction of specialized processes for students identified with RD.

Specialist Roles

Specialist roles needed to support teaching students identified with RD were emphasized in the special education artifacts, further reinforcing the authoritative nature of the discourse in the documents. In the Ministry policy document (2016), "Level C assessment" (p. 49) was indicated as necessary to identify students. Since this can only be done by psychologists and would likely not be well-understood by classroom teachers, this depicted specialists as the authorities. This finding is consistent with Worthy et al.'s (2018) finding that educators in specialist roles related to RD perceive themselves as authorities on RD teaching practices, as supported by documented policies.

Support for specialist educators as authorities on the teaching of students identified with RD also emerged in the union letter of understanding on working conditions, which named some of the educators by role (e. g., resource room teacher, school psychologist) who must be consulted when limits on numbers of students identified with disabilities are exceeded in

classrooms. Further authority granted to the knowledge and skills of specialist educators was found in the university course descriptions. This was evident in language that referenced the need for classroom teachers to be aware of special methods of assessing and intervening, that pertained particularly to students who are exceptional in the way they learn. This further reinforced the authority of educators with specialist training in this area to serve as experts on the teaching practices for students identified with disabilities. Taken together, the secondary artifacts that aligned with a traditional model of special education created an authoritative discourse (Bakhtin, 1981) on RD that supported the roles of specialists as experts and superseded the skills and knowledge of classroom teachers.

Internally Persuasive Discourse and Inclusive Education Secondary Artifacts

The rigid, rule-oriented special education-aligned artifacts contrasted with the comparatively flexible, open-ended principles for educators within inclusive education-aligned artifacts (i.e., the school district's and local university's Faculty of Education statements of mission, vision, and values, the local teachers' union professional development website, the school district's professional resources website, public document on inclusive education services, and inclusion policy). According to Bakhtin, as individuals have the opportunity to consider contrasting discourses, they can begin to form their own ideology about topics (i.e., ideological becoming) through development of "internally persuasive discourse" (1981, p. 342). By engaging in an internal dialogue, differing perspectives can be considered, and meaning can be created in individuals. Educators critically considering contrasts within the discourses of artifacts can raise their awareness of how their perceptions align (or not) with the content of different artifacts. As per Matusov's (2007) support for the application of Bakhtin's work in educational settings, this engagement offers the potential for educators to dissect not only pedagogical

practices, but also the arrangements of educational institutions. Accordingly, it may be possible to shift educators' perceptions about teaching students identified with RD by stimulating such internally persuasive discourse. This is consistent with Thorius' (2016) assertion that inclusive education can be re-imagined when teachers have the chance to become aware and consider the cultural and historical roots of practices within their professional community. The contrast between the discourses presented in the special education versus inclusive education artifacts is therefore relevant to my interest in how educators' perceptions are formed by the influence of artifacts.

Inclusive education is defined in my study as per Artiles and Kozleski's (2007) conceptualization as "belonging, nurturing, and educating [of] all children and youth, regardless of their differences in culture, gender, language, ability, class, and ethnicity" (p. 357). As opposed to the authoritative discourse that characterized the special education-aligned secondary artifacts, the inclusive education-aligned artifacts contained numerous contrasting examples that could, with critical consideration, support Bakhtin's (1981) notion of internally persuasive discourse. Regarding the topic of teaching students identified with RD, for example, these artifacts raised topics such as equity (e.g., in the school district's vision, mission, values statement) and social justice (e.g., in the school district's inclusion policy). These issues were referenced generally, as guiding principles, rather than step-by-step procedures to follow.

Given the broad definition of inclusive education adopted for my study, it is important to note that the scope of inclusive education models has been noted to vary across contexts, from broad to narrow (Jordan, 2018b). In some contexts, inclusive education is defined narrowly, as the physical placement (i.e., integration) of students identified as having special educational needs into mainstream classrooms (Jordan, 2018b). Such a narrow definition that is focused on

procedure seems more closely aligned with the authoritative discourse found in the procedural guidance of the special education-aligned artifacts. In contrast to this narrow definition, when I examined the contents of the secondary artifacts identified by educators in this school district, six out of 10 aligned with a broad definition of inclusive education. The inclusive education-aligned artifacts contained three overall thematic elements: (a) RD as diversity, (b) universal practices, and (c) team collaboration.

Reading Disabilities as Diversity

Rather than a focus on individual pathology, RD was characterized as one aspect of human diversity in the secondary artifacts aligned with inclusive education from this school district. Across all six artifacts, there was no mention of disability, nor RD specifically. In the school district's public document about inclusive education services, rather than identifying specific disability labels, supports were explained as available to any students who need learning, social-emotional, medical, or other supports. Aligned with this broad reference to educational needs, the district professional resources website and the union professional development website did not organize resources or opportunities specific to gaining skills to teach students identified with RD. Rather, relevant links were organized under general categories that are inclusive of all students, such as literacy, technology, and inclusive support.

The school district's vision/mission/values statements emphasized the existence of diversity across all students. In its inclusion policy, the district stated the expectation that all staff, students, and the larger school community build school cultures that are sensitive to diverse needs across both individuals and groups. It went on to reference the need for all to understand issues of access and outcomes related to diversity in education. Further, it stated the need to recognize injustice related to marginalizing any students (including consideration of ability) and

supported equitable treatment for all. The local university's Faculty of Education vision statement made a similar reference. These statements represent a perspective on disability that is re-framed within the broad notion of diversity, differing from the rigid adherence to the authoritative discourse of the special education artifacts. The contrasting depiction of RD in these artifacts from special education-aligned artifacts holds the potential to foster consideration of multiple perspectives on RD amongst educators. Such consideration is consistent with Bakhtin's (1981) internally persuasive discourse. Overall, RD is characterized as one facet of human diversity within the secondary artifacts aligned with inclusive education from this school district.

Universal Practices

Instead of authoritative discourse on explicit procedures for the teaching of students identified with disabilities, the inclusive education-aligned artifacts spoke to universal practices that are effective for all learners. References to engagement of the whole learning community were emphasized in the school district's inclusion policy, its mission/vision/values statements and the university's vision statement. Although the district's public document did offer some guidance on how inclusive education services are provided, it specified the classroom as the primary location for learning for all children, which contrasted the traditional stipulation of a resource room for pull-out intervention models of support for students identified with disabilities (de Valenzuela, 2014). Similarly, the professional learning resources and professional development opportunities offered on both the district and union website were not distinguished by area of student disability, but rather, were presented within universal topics that apply to all students. This is consistent with calls from scholars of inclusive education for teachers to be critically self-reflective, disrupting the traditional discourse of modifying and retrofitting

teaching practices for students identified with disabilities (Baglieri et al., 2011). The artifacts aligned with inclusive education were open-ended, such that when considered in contrast to the rigid discourse of special education-aligned artifacts, educators may begin to consider meeting all learners' needs in ways they hadn't previously considered. That is, they may engage in internally persuasive discourse (Bakhtin, 1981). In this sense, such discourse is noted to be "open; in each of the new contexts that dialogize it, this discourse is able to reveal ever newer *ways to mean*" (p. 346). Engaging educators in considering the universal practices emphasized within inclusive education-aligned artifacts holds the potential to disrupt perceptions, which is viewed as a necessary precursor to transformative pedagogy (Thorius, 2016).

Team Collaboration

The inclusive education artifacts from this district focused on the collaboration of a team of educators, including the classroom teacher, to address the needs of students identified with RD, rather than exclusive reliance on the work of specialists. Such artifacts can encourage educators to reflect upon their practices in new ways as they transition into a model of collective responsibility for meeting all students' needs, from a prescriptive, specialist educator-driven model (Worthy et al., 2018). This is most evident in the public document on inclusive education services, which acknowledged the different educator roles within the district, but emphasized how they collaborate via the structure of the school-based team to support students. Rather than pointing to the need for specialists, the district's inclusion policy called for all employees to reflect on their own part in creating an inclusive environment. Further, the district's mission/vision/values statements emphasized collaboration and respect among staff, students, and parents. No particular role was elevated in status over another.

Although the university's vision statement did not directly reference team collaboration, it implied that collaboration was important through its references to building relationships within its community. Neither the professional resources nor development website included explicit references to team collaboration, although their focus on building knowledge of topics across educational areas historically separated by barriers between special and regular education spoke to increased responsibility of all educators for all students, regardless of role. Making this shift may require educators to develop an internally persuasive discourse (Bakhtin, 1981) in order to consider the rationale for changing from reliance on specialists to collaborating as a team to meet the needs of students identified with RD. The inclusive education-aligned artifacts from this district reflected this movement towards team collaboration to meet the needs of all students.

Summary of Sociocultural Artifacts Influencing Educators' Perceptions

Each of the 10 secondary artifacts relevant to the shaping of educators' perceptions about teaching students identified with RD in this school district emerged at opposite ends of a binary that represented the tenets of either special education or inclusive education. Although no comparable analysis was located in the research, the alignment of the artifacts with bipolar extremes did appear consistent with pre-existing research on educators' perspectives of RD (Jordan, 2018b; Jordan & Stanovich, 2004; Jordan et al., 2009; Lanterman & Applequist, 2018). Careful analysis of the artifacts revealed that special education-aligned artifacts represented unequivocal, authoritative discourse as per Bakhtin's assertions (1981), whereas inclusive education-aligned artifacts offered the potential for stimulating emergent considerations of multiple perspectives when compared with the artifacts that aligned with special education, as per Bakhtin's internally persuasive discourse. This framing of the artifacts as representing

competing discourses offers insight for responding to the subsequent research questions that directly address educators' perceptions in the sections that follow.

Educators' Perspectives on Reading Disabilities

The second research question of my study was, "How do educators characterize their perspectives on RD?" For the purposes of my study, Jordan and Stanovich's (2004) bipolar model of educators' perspectives on the characteristics of disability was adopted. This positioned teachers' perceptions of what RD is in relation to two extremes: a fixed deficit (what Jordan and Stanovich termed "pathognomic"), and a social construction (what Jordan and Stanovich termed "interventionist"). The major finding was that classroom teachers' perspectives on RD aligned with a fixed deficit view, similar to the findings of Jordan and Stanovich (2004). Teachers explained their perspectives using authoritative language, while sharing their own experiences with the secondary artifacts aligned with special education.

Within my study, as classroom teachers spoke about RD and their perceptions and experiences of teaching students identified with RD, they often used language taken from special education-aligned artifacts (e.g., "IEP" and "designation"). The sources of these references seemed to be unknown or undetected by the teachers, as none of them identified the connection to their sources. As per the assertions of Matusov (2007) regarding authoritative discourse (Bakhtin, 1981) in educational settings, educators' perceptions reflected the notion that their ideological content was unquestionable and universally correct. Their references served as "language walls which blocked critical investigation into the basis of a statement or even an inquiry about it" (Matusov & Duyke, 2009, p. 183). This perpetuated the authoritative discourse (Bakhtin, 1981) of the special education-aligned artifacts. Further, it seemed to close off the teachers' internal debate or consideration of other possibilities for interpretation (i.e., Bakhtin's

notion of internally persuasive dialogue). Although Worthy and colleagues (2018) similarly found that language walls were used by special educators when speaking about their teaching practices for students identified with dyslexia, in my study, they were used by classroom teachers when speaking about their understanding of what RD is. The authoritative discourse of these artifacts was reflected in teachers' speaking about what RD is, making it seem absolute and unquestionable. Notably, this contrasts with the reality of the research on RD, which is complicated by differences in definitions, identification processes, and therefore, a lack of unequivocal recommendations for teaching (Grigorenko et al., 2019).

Learning Deficit

In their explanations of what constitutes RD, all teachers, across the questionnaire and interview responses, integrated elements of the fixed deficit depiction of RD presented in the Ministry policy manual. These included distinctions of neurological differences in those with RD, as compared to a norm. Within questionnaire responses, teachers used terms like “neurologically based”, “learning difference”, and “genetic or biological” to describe what RD is. Such references to scientific or medicalized depictions of disability with an implied deviation from “normal” students were similar to those used by special educators in the research of Worthy et al. (2018). Using terminology of this nature depicted an authoritative discourse that was scientific, and presumably, therefore, credible.

In interviews, the language that teachers used to explain their perspectives of the fixed, inherent learning deficit nature of RD often reflected the language from the special education artifacts. As an example, in her interview, Jen referred to “Q learners” in a blanket reference to students identified with RD, as the letter “Q” is a code assigned to identify these students within the Ministry special education policy document. Kate spoke to the characteristics of one student

by saying, “she's so severely learning disabled, and it might even be more than that” to imply that she might also meet other diagnostic or designation criteria. The term “integration” was used in the course descriptions from the local university to refer to physical placement of a student identified with a disability in a general classroom (Jordan, 2018b). It was also used by Kate, revealing her underlying perception that students identified with RD have some essentially deficient characteristics as compared to other “typical” students:

...integration is awesome. It does build empathy and then we get exposure to all types.

So we do that, but some of those children, even with integration, so the kids who are, I will call them “typical” [gestures air quotes] right? Typical kids who meet them, it's not the right word, but “typical”, just you know, they build empathy, they get... so they get a lot of benefit because they learn to be empathetic and everyone's different and accepting.

For Laurie, as she spoke about RD, she repeatedly distinguished those students “with IEPs” and their learning needs as different from other students in her class. The findings of my study support previous research (Gibbs & Elliott, 2015; Woodcock & Hitches, 2017; Woodcock & Vialle, 2015) that found teachers’ perceptions about students changed in the presence of a disability label. In general, teachers’ explanations of the fixed deficit, within-individual nature of RD was confounded by references to, or direct quotation of, special education artifacts from the context of the local school district.

Needing to Teach Differently

When speaking of their teaching of students identified with RD, teachers often referenced the need for specialized practices, as per the special education-aligned artifacts. This finding aligned with previous research by Worthy et al. (2018) that found some educators believed that instruction for individuals with RD must involve a prescriptive intervention. This was evident in

my study as teachers explained their perception of the difference between reading difficulties and RD. One stated, “Difficulties are when a student needs reinforcement of typical strategies, whereas a disability is where a student needs other intervention or adaptations to be able to learn to read.” Another distinguished the two, stating, “Reading disabilities are students who are diagnosed and require more specialized reading instructions. Reading difficulties are students who struggle with reading for a variety of reasons.” The use of language such as “intervention” and “adaptations” are taken directly from the Ministry policy document and the local university’s course descriptions.

Reliance on the authoritative discourse (Bakhtin, 1981) of the special education artifacts undermines the efficacy of classroom teachers to provide the teaching that students identified with RD need. Instead, it positions educators with specialized training and knowledge as superior. This is consistent with the findings of Worthy et al. (2016) who found that classroom teachers reported lower confidence in their knowledge of RD (called dyslexia within the study) than educators who were certified dyslexia interventionists. They linked this finding to the existence of a mandated policy in the state where the research took place. This policy stipulated regulations for specialized training and qualifications of interventionists. Essentially, the researchers determined that classroom teachers’ confidence was undermined by the authoritative discourse (Bakhtin, 1981) of the policy document that demanded rigid adherence to its model that placed the interventionists as experts.

In the interviews for my study, each teacher referenced their perception that students identified with RD do not always receive the specialized teaching they need, because of protected professional autonomy in classroom teachers. In support of her point, Jen often spoke of “autonomy” which is language from the local teachers’ union collective agreement, as

referenced in the union letter of understanding on working conditions. She expressed her perception that autonomy has allowed a gap to exist in some teachers' awareness of RD. Jen described this at length, using examples of the challenges and successes that her own child had with various teachers.

Laurie reported that the protection of classroom teachers' autonomy has created a lack of willingness on the part of some teachers to follow district direction on instructional practices. She used her own perspective from early teaching experiences as an example, saying, "Nobody's going to tell me what to do. I'm autonomous. I can teach how I want to teach, right?" Kate explained the gap by stating that teacher autonomy allows for variation in classroom teaching styles. Kate expressed concern with the impact of classroom teachers' autonomy to choose methods of teaching reading when she stated, "We're all teachers, so everyone should have their own style, right? Like that's, we all have our own, and that's a hundred percent great. But you know..." Kate followed this statement up with an explanation of how different teaching styles can impede students identified with RD from accessing specialized teaching from specialist teachers. Overall, classroom teachers' references to language and content from the special education artifacts characterized RD as a fixed deficit that requires different teaching than for other students.

Knowing from Personal Experience

As they explained RD as a fixed, individual deficit aligned with special education artifacts, teachers in my study tended to rely on their own personal experiences as evidence to justify their perspectives. For example, the justification of understanding RD as a fixed deficit from her personal experiences was most apparent in Jen's passionate interview. She frequently raised her voice and once became teary as she spoke about both her own personal experiences as

a learner with an undiagnosed RD, as well as those of her child with RD. Jen's use of language walls (Matusov & von Duyke, 2009) such as "I know", "I am certain", and "believe me" indicated her confidence in her understanding of RD due to her lived experiences. They also seemed likely to create a barrier that would block her consideration of alternative perspectives on RD. Jen further conveyed a sense of authority in her knowledge of RD as a fixed, biological deficit by referencing a genetic connection to the reading difficulties experienced by both she and her son, stating, "Knowing what I know now, I am certain...my son was definitely, had my little genetic, cognitive make-up." She then applied her conviction to identifying RD through her direct teaching experience with the students in her classroom. As she sat in her empty classroom, she pointed to different desks, stating "I can look in my classroom right now and go, 'He has [RD], he definitely has [RD], he definitely has [RD], and I could, there's more. In my years of experience, at least 10% of my classroom every year..." Across both her open-ended questionnaire and interview responses, Jen's use of language walls depicted a sense of certainty that could not be disputed.

Although Kate's interview, in my study, did not convey confidence in understanding the nuances of RD like Jen, she did present an indisputable language wall (Matusov & von Duyke, 2009) when she said, "I know there's something up" in reference to her intuitive knowledge that one of her students had RD. Kate's interview was characterized by frequent references to direct teaching experiences with a particular student who became identified with RD the year after she taught her. In reflecting on her challenges trying to teach the student, she stated her perception that the student had inherent differences as compared to other students, making it impossible for Kate, as a classroom teacher, to know how to teach her. Kate shared, "How to help, I can't do

that. I know there's something up, just based on my experience and what I see. I'm not sure how to work with her.”

In her interview, Laurie drew upon her accumulated teaching experiences to express her perspective that her current students identified with RD need different instruction than the other students in her class. She conveyed that she understood reading instruction for most students, given her considerable experience teaching kindergarten and grade 1, but did not understand how to teach students identified with RD in the context of her larger classroom. Laurie reported that, “With two of the kids with IEPs, just like fresh IEPs for reading, and another who really needs to be tested...I know where they need to go, but I don't feel like I can deliver that program in my class.” Although she did not speak to a fixed deficit directly, Laurie referenced the “IEPs” that the students have, which clearly set them apart from the rest of her students. Traces of the authoritative discourse (Bakhtin, 1981) of the special education artifacts shaping her perspective are evident in her references to “IEPs” and “needs to be tested”. Additional evidence of authoritative discourse emerged when she used a language wall (Matusov & von Duyke, 2009) to state, “I know”, demonstrating rigid thinking about the needs of students identified with RD as different than the needs of other students.

The reliance of teachers in my study on personal experiences to shape perspectives is consistent with the findings of Jordan et al. (2009) who noted that teachers' beliefs about disability were attributed to personal experiences. This was also noted in pre-service teachers by Delorey et al. (2020). These researchers found that direct teaching experience with students identified with disabilities, personal experiences with diversity, related work experience with individuals with diverse needs, and explicit coursework in diverse learning needs were rated in that order as most influential to pre-service teachers' perspectives. Within my study, in-service

teachers explained RD as a fixed, individual deficit, in alignment with special education artifacts, relying on their own personal experiences as evidence.

Summary of Teachers' Perspectives of Reading Disabilities

Classroom teachers' perspectives of RD represented a fixed deficit that is located within individual students, needing different teaching practices than other students. The authoritative discourse (Bakhtin, 1981) about a fixed deficit model of RD found in special education-aligned secondary artifacts from this school district was evident in the teachers' explanations. To justify their perspectives, teachers drew upon their personal experiences, a finding that supports previous research on beliefs about inclusive education (Delorey et al., 2020; Jordan et al., 2009). Understanding that classroom teachers in the school district perceived RD to be a fixed, within-individual deficit is critical to interpret the remaining research questions about educators' perceptions, presented next.

Educators' Self-Efficacy Beliefs

The third research question addressed was, "How do classroom educators characterize their self-efficacy beliefs to teach students with reading disabilities?" Within my study, self-efficacy was understood from the work of Bandura on social cognitive theory (1986, 1997) regarding individuals' beliefs about their own capabilities. As stated by Pajares (1996) in his interpretation of Bandura's work as it relates to the field of education, "self-referent thought mediates between knowledge and action" (p. 543). Pajares' depiction was especially important in this study to consider the way that teachers' self-efficacy mediates their perspectives on RD to ultimately influence their teaching practices.

Given that previous research has linked educators' self-efficacy beliefs to inclusive teaching practices (Benton-Borghi & Change, 2012; Malinen et al., 2013; Savolainen et al.,

2012; Siwatu, 2011; Vaz et al., 2015), I sought to understand classroom teachers' beliefs about their teaching of students identified with RD in their school district. My predominant finding was that these beliefs varied across teachers, according to which aspects of their own teaching that they emphasized. Identified from my study were three major aspects (themes) of teaching and six sub-themes were emphasized within teachers' reports of their self-efficacy: a) commitment (perception of failing and positive relationships), b) insight from accumulated experience (lack of consistency and learned on the job), and c) access to resources (need more and success with specific). These aspects of teaching are considered here in relation to relevant literature with respect to Bandura's (1997) four theorized sources of self-efficacy: mastery experiences, vicarious experiences, verbal persuasion, and physiological arousal.

Mastery Experiences

According to Bandura (1997), mastery experiences are the most powerful influence on self-efficacy beliefs. In the case of teachers teaching students identified with RD, such experiences are those in which they achieved success with these students. In my study, in contrast to Bandura's assertion about mastery experiences and previous findings about self-efficacy for teaching in general (Tschannen-Moran & Woolfolk Hoy, 2007), teachers' questionnaire responses placed mastery experiences as the second highest source of self-efficacy reported overall. In my study, the sample of teachers who completed the questionnaire reflected a mix of years of experience, although the interview participants all had 16 or more years. The findings from my study are similar to those from past research on teachers' self-efficacy beliefs specific to literacy instruction in that mixed sources of self-efficacy were reported, likely due to less accumulation of perceived mastery with teaching students identified with RD, as compared to that for teaching in general (Tschannen-Moran & Johnson, 2011).

In their interviews, although experienced teachers Jen and Laurie reported low self-efficacy as compared to the rest of the teachers overall, individually, both reported mastery experiences (Bandura, 1997) in teaching students identified with RD as their greatest source of positive self-efficacy. In her interview, Laurie emphasized her access to phonics teaching resources and success with specific synthetic phonics resources in teaching early primary grades, which she perceived as supportive to her teaching of students identified with RD. She shared this by saying:

I generally have spent most of my time in kindergarten or in early years and kindergarten-grade one, so I've kind of always been at the forefront of...teaching kids to read or phonological knowledge or phonics or any of that sort of stuff.

Jen similarly shared her perceived successful teaching, which she attributed to insight from accumulated experience of things she learned on the job. She stated, "I've always, you know, worked really hard to, worked hard to understand the best approaches to teaching reading. I am very much an explicit teacher, very scaffolded."

In contrast to Laurie and Jen's emphasis on mastery experiences in reading instruction specifically, but still consistent with Bandura's assertion (1997) that mastery experiences are most influential to self-efficacy, Kate emphasized her past experiences of mastery in building positive relationships with her students identified with RD. Although mastery experiences were tied for her lowest rating as a source of self-efficacy in her questionnaire responses, Kate's overall self-efficacy was still relatively highest amongst all teachers who participated. In thinking back on her mastery experiences in building positive relationships with students identified with RD, Kate shared:

That's my fallback. That's always. If nothing else happens this year, they had a positive experience being in the building, in the classroom. That could carry them. Maybe not this year. Maybe not next year, but that is, for me, that's number one.

Kate and the other teachers' reports of mastery experiences with teaching students identified with RD represented positive sources of self-efficacy, as per Bandura's (1997) original assertion. Overall, teachers in my study reported mastery experiences as the second highest source of their self-efficacy for teaching students identified with RD.

Vicarious Experiences

Vicarious experiences are those in which behaviours modelled by others serve to promote positive self-efficacy beliefs (Bandura, 1997). As clarified by Tschannen-Moran and Woolfolk-Hoy (2007), the degree to which an observer (in this case a teacher) identifies (i.e., they are not different in ways that seem important to the observer) with the individual who is modelling the behaviour, influences the degree to which self-efficacy can be bolstered. This suggests that learning through witnessing the modelling of effective teaching by classroom teacher colleagues should be a source of enhancement to self-efficacy. Within this study, teachers' questionnaire responses placed vicarious experiences as minimal to moderate sources of self-efficacy for teaching students identified with RD overall. This is similar to existing research that determined that vicarious experiences through the form of pre-service learning and professional development experiences accounted for only minimal variance in self-efficacy reports for elementary and middle school classroom teachers (Tschannen-Moran & Johnson, 2011).

In the classroom teacher interviews of this study, some evidence of vicarious experiences supporting teachers' self-efficacy for teaching students identified with RD emerged. Both Laurie and Jen tended to describe their successful experiences with using particular resources

recommended by trusted educators as a source of efficacy for teaching students how to read. This finding was similar to Tschannen-Moran and Woolfolk Hoy's (2007) study that found that access to teaching resources was a significant source of self-efficacy for novice teachers.

Although not a novice teacher, Laurie expressed her belief that she needed more access to resources like the ones she had learned about from trusted educators while teaching in previous jurisdictions. She did this by citing examples of vicarious professional learning experiences that she felt had contributed positively to her teaching of reading in the past. In reference to one such professional learning opportunity in which the facilitator modelled her approach to teaching phonics, Laurie stated, "Well, I did her training, and I was like, I was completely a believer."

While sharing her insight from accumulated experience and a frustration with a lack of consistency in teaching practices across teachers and schools generally, Jen illustrated her point by describing a time early in her career when she felt especially efficacious in her teaching of reading. She described a vicarious experience working alongside a pair of teachers who shared pedagogical resources with each other and with her, leading to consistency across the teaching in their classrooms. Jen expressed appreciation for what she had learned on the job through observing their efforts to teach consistently, saying:

Probably one of my, my best year of teaching was actually at [name of school] and it was with [name of teacher] and [name of teacher] ...we all had grade 2 and during literacy time all the kids did [name of reading program].

This finding was similar to Tschannen-Moran and Woolfolk Hoy's (2007) finding with novice teachers, who reported interpersonal support as a source of self-efficacy.

To account for her relatively high self-efficacy for teaching students identified with RD, Kate drew upon examples of things she had learned by watching and collaborating with her

teacher colleagues. As Bandura stated, such “social comparison operates as a primary factor in the self-appraisal of capabilities” (1997, p. 87). By considering her own skills in relation to those of her close colleagues, Kate developed confidence that she fared well in comparison. She was especially confident about teaching practices that she had learned on the job, through a process of trial and error that she shared with the teacher in the classroom down the hall. This occurred through frequent, informal visits to each other’s classrooms. Kate also referenced vicarious experience when she had the opportunity to learn from a veteran teacher early in her career. She said, “Now she was...I worked there one year, now she was ahead of the game and progressive. Her and another teacher, oh man they had all these strategies. They used to run workshops. They were brilliant.” In general, Kate emphasized the role that vicarious experience learning from her teaching colleagues played in her sense of self-efficacy for teaching reading. Overall, in this study, teachers reported that vicarious experiences were minimal to moderate sources of self-efficacy for teaching students identified with RD.

Verbal Persuasion

Of all Bandura’s (1997) theorized sources of self-efficacy, verbal persuasion was cited the least by teachers within this study. This may be a critical missing source of support for classroom teachers’ self-efficacy beliefs about their teaching of students identified with RD. As Bandura (1997) stated, “People who are persuaded verbally that they possess the capabilities to master given tasks are likely to mobilize greater efforts and sustain it than if they harbor self-doubts and dwell on personal deficiencies when difficulties arise” (p. 101). Given the challenge to make sense of sometimes contradictory information in the literature on teaching reading (Castles et al., 2018) and in the research on RD (Elliott & Grigorenko, 2014), classroom teachers

seem likely to require reassurance from respected others as they engage in the challenge of teaching students identified with RD.

As with other sources of self-efficacy examined in this study, Kate reported the highest degree of positive verbal persuasion from her colleagues regarding her teaching. This perception fits with Kate's overall emphasis on her positive relationships with both her students and her colleagues. Kate's depiction of the verbal exchanges between herself and her colleagues was complimentary and positive. This was especially true when she spoke of her conversations about teaching students identified with RD with her teacher friend from down the school hallway. She said, "Those kinds of relationships, when people get excited, like, oh my gosh it's so cool! Let's do this! Right? You know, that's [name of teacher colleague] for me." Given Kate's depiction, it is clear that she draws a sense of positive self-efficacy from the positive verbal comments of respected teacher colleagues.

In contrast to Kate, neither Jen nor Laurie reported having received positive verbally persuasive comments from others about their teaching of students identified with RD. Laurie reported having received negative comments from a teacher she identified as a literacy specialist teacher. She recounted the discouraging comments made to her when she tried to apply practices she had learned from a previous school to students at her new school. Laurie shared:

But then when I went to [name of school] I thought, "Oh I'll do the same thing, because I think that seems reasonable, you know that kids practice." And then they were like, "Oh no, no, we believe that kids should have their own...", this is like *the* teacher who was there, but she's like, "We believe that kids should have their own book bags, they should choose just right reading, it should be reading for enjoyment only." And so, then I was like, "Okay well, what about the practice reading part?"

In Laurie's example, the negative verbal persuasion detracted from her self-efficacy to teach students identified with RD. As posited by Tschannen-Moran and Johnson (2011), as teachers endeavour to use new teaching strategies and inevitably experience lowered self-efficacy until they learn, additional coaching support is beneficial. Similar to the work of Worthy and colleagues (2018), this may be because Laurie perceived the individual who offered the feedback to be an expert in teaching reading. As indicated by the perceptions of classroom teachers from this study, although it was not frequently experienced, positive verbal persuasion may have the potential to support their self-efficacy for teaching students identified with RD. Despite this, of all Bandura's (1997) theorized sources of self-efficacy, verbal persuasion was reported the least as a source of self-efficacy by teachers within this study.

Physiological Arousal

The fourth source of self-efficacy beliefs outlined by Bandura (1997) is arousal through physiological and affective states. As stated by Tschannen-Moran and Johnson (2011), "arousal also adds to a feeling of capability or incompetence, depending upon whether it is experienced as a sense of anxiety or excitement about a performance" (p. 752). In their questionnaire responses, classroom teachers in this study reported physiological arousal as the highest overall source of self-efficacy for their teaching of students identified with RD.

From my study, Kate, in particular, demonstrated evidence of positive physiological arousal as the highest source of self-efficacy for her teaching. This was most evident in the positive affect she conveyed as she spoke of her commitment to her students. Kate emphasized positive relationships with her students identified with RD as protective factors that helped them to trust her to teach them, even when they faced setbacks in learning. She conveyed a confident, positive affect when she spoke, saying, "...so they have to have a relationship. They have to

understand what feedback is because it's in their best interest. They have to trust me. And then you have to be okay with tears sometimes.”

Along with their reported low self-efficacy for teaching students identified with RD, both Jen and Laurie indicated that their physiological arousal when thinking about such teaching was a mix of negative and positive somatic experiences. For example, to convey her perception of failing her students identified with RD, Jen used the phrase “Sometimes I feel like I am beating my head against the wall” to report a negative somatic experience. In contrast, she shared her confidence in the power of positive relationships as, “You know, we *know* this about making connections and believing in. We know how powerful that is and I truly believe that that is a huge component,” to reflect a positive somatic experience. Laurie shared a negative state of arousal when speaking of her perception of failing her students identified with RD, saying, “the four I’m most worried about”. She quickly added, “Although I do worry about those kids in the middle”. Despite this, Laurie also conveyed a positive affective state when speaking of her commitment to teaching her students identified with RD. She said:

I mean, I do a lot of professional reading on my own...anything that's about reading and writing and moving kids along. I’m a big, I mean the one thing I’m really, really passionate about is actually writing. And I really think if kids can write well...then they should be able to read well.

The classroom teachers who reported more negative affective experiences than their peers when talking about teaching students identified with RD, also reported lower self-efficacy. In contrast, the classroom teacher who conveyed the highest self-efficacy in this study also reported more positive physiological arousal when talking about teaching students identified with RD. Overall,

for their teaching of students identified with RD, classroom teachers in this study reported that physiological arousal was the highest source of self-efficacy.

Summary of Educators' Self-Efficacy Beliefs

Teachers' self-efficacy beliefs for teaching students identified with RD varied by individuals and the sources of self-efficacy that they emphasized. Evidence of Bandura's (1997) four sources of self-efficacy were present in each of the classroom teachers' reports, to varying degrees. The teachers who reported low self-efficacy overall emphasized their mastery experiences as positive (albeit limited) sources of self-efficacy, while the teacher who reported high self-efficacy emphasized physiological arousal. These findings suggest that classroom teachers in this district would increase their self-efficacy through more experiences of all four sources identified by Bandura (1997). In the next section, this discussion turns to understanding educators' perceptions of secondary sociocultural artifacts in this school district.

Educators' Perceptions of Artifacts

The final research question was, "To what extent do educators perceive specific secondary sociocultural artifacts as supportive or inhibitive to their teaching of students identified with reading disabilities?" On the questionnaire, when asked directly about the influence of each of the four categories of artifacts drawn from the literature review (policies and procedures, pre-service teacher education, in-service teacher professional learning, and teaching roles), classroom teachers reported nothing greater than "Somewhat" of an influence of any of them. Despite this, in my study, classroom teachers' dialogue during interviews reproduced the discourse of the artifacts that were special education aligned. My finding is consistent with previous studies of special educators' discourse (Thorius, 2016, 2019b), as well as that of classroom teachers (Tan & Thorius, 2019; Worthy et al., 2016).

As stated by Artiles (2015), although they are apparently intended to help students with disabilities, policies and procedures aligned with special education may “end up reifying the *status quo*” (p. 2) as they shape local practices. This speaks to a powerful, implicit influence of these artifacts on educators’ perceptions and therefore, teaching practices. Educators in adjunct roles who reported a greater awareness of inclusive education artifacts from within the school district, reported their perceptions that special education-aligned artifacts inhibit classroom teachers’ practices. Drawing upon responses from across educator roles, the major finding from my study was that special education-aligned artifacts were perceived as inhibiting classroom teaching of students identified with RD.

Importantly, classroom teachers seemed unaware of the sources (i.e., special education-aligned artifacts) of the language they used, and how it conveyed their perceptions. This is consistent with Matusov’s (2007) and Matusov and von Duyke’s (2009) interpretation of the work of Bakhtin (1981) on the difference between authoritative and internally persuasive discourse in the context of the field of education. The classroom teachers in my study appeared unaware that the actual words they used came from someone else’s voice (i.e., the voice of the authors/developers of the artifacts). This lack of awareness may reflect an acceptance and internalization of the authoritative discourse presented in the special education-aligned artifacts. This adherence to authoritative discourse contrasts with the internally persuasive discourse that Matusov (2007) argued is essential to the act of ideological becoming (Bakhtin, 1981) that he sees as the goal of education. In other words, engagement in an internally persuasive dialogue requires that, “...we are aware that our words cannot be understood without consideration of the words of others – the meaning of our words emerge and exist on the borders of our and others’ voices” (p. 178).

In contrast to the discourse presented by the classroom teachers, educators in supporting roles showed evidence of emergent internally persuasive discourse (Bakhtin, 1981) as they reflected on their efforts to shift teaching practices away from a special education model, toward an inclusive education model. This represented evidence of ideological becoming (Bakhtin, 1981) that included critical consideration of the differences between the discourse of both special education and inclusive education artifacts. Such consideration has been noted to be essential in environments (e.g., schools) that bring together diverse individuals (Freedman & Ball, 2004). The evidence of internally persuasive discourse amongst supporting educators within the same context as the classroom teacher participants suggests that the process by which educators' perceptions are shaped is dynamic. That is, adjunct educators appear to have had the opportunity to become aware of, and critically consider the artifacts shaping their perceptions. Creating such opportunity for classroom teachers could lead to changes in perceptions, and therefore, teaching practices. Examination of the overall themes from educators' perceptions about how artifacts support or inhibit their teaching of students identified with RD revealed that classroom teachers were not aware of how their perceptions were shaped by the special education-aligned secondary sociocultural artifacts from their school district.

System Barriers

When speaking of how their teaching of students identified with RD was inhibited by secondary sociocultural artifacts, teachers explained it as barriers in the system. For classroom teachers in my study, this was evident in their frequent references to the special education-aligned artifacts and the reproduction of their authoritative discourse (Bakhtin, 1981). In my study, although classroom teachers did not identify artifacts by name, they indirectly referred to them by using language taken directly from them, revealing their influence on perceptions

through adoption of authoritative discourse (Bakhtin, 1981). For example, Laurie referenced challenges in having multiple students in her class with “designations” and difficult “class composition”. Jen spoke of her frustrating experiences with pressure to “de-designate” a student with RD, as well as with challenges in meeting the goals within an “IEP”. Kate referred to the work for classroom teachers to complete “school-based team” referral paperwork as an extra demand on them. The examples of the system barriers given by classroom teachers reproduced authoritative discourse (Bakhtin, 1981) via specific language terms found in artifacts such as the Ministry policy manual and the union letter of understanding that outline processes required for special education. Attributing the lack of success for students identified with RD to external causes protects classroom teachers from assuming responsibility for the students’ lack of success (McPhail & Freeman, 2005), and places it as a responsibility for remediation led by special educators, as has been asserted in previous research (Thorius, 2016, 2019b).

All three classroom teachers spoke of their perception of system barriers, given that their students identified with RD did not receive enough or appropriate support from specialist teachers. Laurie stated, “You know you've sort of got this like little extra group of kids that still needs support. And it's just that we just don't have enough support.” Similarly, in reference to specialist teachers, Kate stated, “I meet them, they're amazing. This is the fundamental problem, I think. Their caseload is too big. Their caseload is too big. It's just not, they can't follow up and maintain a pace with that number of clientele.” Jen declared, “...pulling kids and doing really intensive work, I think has some validity. But I don't know that's the model that's happening, that I've witnessed.” The expectation that students with identified disabilities need to have different teaching than the rest of their peers, from teachers in specialist roles beyond the classroom teacher, is consistent with previous research that has identified special educators as the

“gatekeepers” for access to learning for students identified with disabilities (e.g., Tan & Thorius, 2019), as well as the special education processes outlined in those artifacts.

In my study, educators in adjunct roles expressed perceptions about classroom teaching of students identified with RD that shed further light on how processes drawn from the special education-aligned artifacts inhibit teaching practices. Across all three interviews with educators in supporting roles, evidence of their own internally persuasive discourse (Bakhtin, 1981) emerged as they compared and contrasted content of special education and inclusive education-aligned artifacts. As they each reflected on how the discourse of special education artifacts constrains classroom teaching of students identified with RD in this district, adjunct educators demonstrated how “both pedagogy and educational institutions themselves come under participants’ scrutiny” (Matusov, 2007, p. 219).

In her role as a district administrator, Sarah repeatedly expressed the difficulty in shifting teachers’ practices towards a model of inclusive education that does not rely on disability identification to determine access to effective teaching practices. She expressed this by saying:

One of the big things that we've been trying to assert for, is it shouldn't matter if you have a specific designation, for us to help you...that serves a purpose in the sense that we do have some things we know about you that we might not know about other learners. And we have a responsibility to learn and understand the things that you need us to be supporting you with, and provide those individuals plans and goals, but we should still help you if you're struggling with reading, whether you've got that plan or not.

As a school-based administrator, Sandy spoke of numerous strategies that she uses with her staff to support them in building their awareness of teaching approaches for all students, including those with RD. She described this as requiring classroom teachers to shift their thinking away from

special education practices and recognize the potential for what they can do in their own classroom teaching. Sandy stated, “I think the main thing is helping teachers to...realize what they could do.”

In her support teaching role, Annika described her challenge with classroom teachers as trying to shift their expectations of her. Instead of only pulling students out for specialized interventions, as was traditionally associated with special educator roles, she expressed her desire to sometimes push into classrooms to support the teaching of all students. Annika reported this by saying:

...because there's a lot of experienced teachers there. So me coming in, is new. I could see how sometimes it can be like a little hard to be willing to try new things or hear something from someone when you're very experienced and kind of do things the way you've always done it.

Overall, adjunct educators' responses reflected emergent critical reflection consistent with internally persuasive discourse (Bakhtin, 1981). In contrast, classroom educators' responses reflected the unconditional acceptance of authoritative discourse (Bakhtin, 1981) of the special education artifacts. Across all educators, perceptions that special education-aligned artifacts create system barriers that inhibit teaching students identified with RD were reported.

Opportunities for Learning

All educators in my study reported a need for increased opportunities for classroom teachers to engage in professional learning about their practices to support students identified with RD. Classroom teachers tended to characterize this as a need for the opportunity to work alongside their specialist teacher colleagues, to learn from their expertise, as previously found by Tan and Thorius (2019). This notion of expertise about RD is consistent with the depiction of those in specialist roles as essential to effective identification and intervention within the special

education-aligned artifacts of this school district. The negative impact of such distinction on classroom teachers' practices is evident in past research that has found low confidence about teaching students identified with RD amongst classroom teachers (Worthy et al., 2016) and high confidence amongst special educators (Worthy et al., 2018). This has been linked to the authoritative discourse (Bakhtin, 1981) of artifacts that positions special educators as experts in RD (Worthy et al., 2016).

When they spoke of their own efforts to improve their teaching of students identified with RD, classroom teachers shared examples of learning from their specialist teaching colleagues. Laurie reported that she relied on a literacy coordinator at her previous school for specific teaching strategies but spoke of her frustration that she does not have a literacy coordinator at her current school. She further stated, "I mean we generally ask the SST [School Support Teacher]. Like what is that again? And that sort of thing, but you know thinking a little cheat sheet would be handy to have." Kate expressed similar faith in the teaching strategies that came from the psychoeducational assessment of one of her students that resulted in identification of RD. After expressing a lack of confidence in her own knowledge of teaching strategies, she explained that she would need to reach out to the specialist to find out what strategies to use with her student. She simultaneously expressed her concern that the process of assessment and identification to obtain access to these strategies wasted precious learning time, saying:

I don't want to like try and make her do something. And then, well it's useless to her, right? So yeah, trial and error is great, but we do need to find what works, a little bit quicker. Like if we're spending four months, five months trying to figure what the strategy is, well now we've got five months of school left.

Despite the perceived obstacles to student learning success inherent in the system of special education processes, classroom teachers did not question the authoritative discourse (Bakhtin, 1981) of the artifacts that outline those processes. This reflects a lack of critical analysis, such that the reliance on the expertise of specialist educators was unquestioned, as it had become a part of the classroom teachers' thinking as a "compact and indivisible mass" (Bakhtin, 1981, p. 343).

In their interviews, adjunct educators reflected on the need for classroom teachers to experience professional learning that allows them to critically consider a different perspective on teaching students identified with RD, besides the special education perspective. They expressed their perceptions that such processes are constraining classroom teaching of students identified with RD. This contrasted with the adherence to the authoritative discourse of special education found in the classroom teachers' perceptions and instead, reflected "the process of distinguishing between one's own and another's thought" (Bakhtin, 1981, p. 345). The educators in adjunct roles demonstrated awareness of the contrasting ideologies underpinning practices that is essential for engaging in internally persuasive discourse. For example, Annika reported that classroom teachers problematically view her role through the narrow lens of special education-aligned "group work and interventions". She further reported that she struggles with some teachers to help them see that there is a connection between what happens in the classroom and the work that she does with students outside of the classroom.

Both Sandy and Sarah, in their roles as administrators, spoke of the need for ongoing professional learning opportunities to help classroom teachers consider new ideas and ways of teaching their students identified with RD. Sandy referenced examples such as pairings between "teacher leaders" or support teachers and less confident teachers, as well as coverage of classroom teachers so that they can observe colleagues' practices. From a district level, Sarah explained her

efforts to shift specialist educator roles away from an exclusive focus on students identified with disabilities:

What we've tried to do is take the learning coordinators and make this notion of tier one and really good pedagogy part of their world. So I do think that while that's not specifically targeted at kids with reading disabilities, it is going to support those learners in classrooms if their classroom teachers have some of those skills and understandings.

Drawing upon Bakhtin's notion of internally persuasive discourse (1981), the evidence from educators in supporting roles indicated their emergent critical awareness of the contrast between the underpinnings of special and inclusive education approaches. They further spoke about their perceived need to offer classroom teachers professional learning opportunities to shift their practices. Although classroom teachers also indicated the need for professional learning, their vision aligned with continued practices of traditional special education, revealing the ongoing constraint of its authoritative discourse (Bakhtin, 1981) on their perceptions. Overall, educators perceived that teaching students identified with RD is inhibited by special education-aligned artifacts, creating a need for more opportunities for professional learning.

Union Matters

Both classroom teachers and educators in supporting roles spoke of two teachers' union matters from the special education-aligned artifacts that they perceived as inhibiting teaching of students identified with RD. These were reflected in specific language from the teachers' collective agreement about respect for autonomy as professionals and the related letter of understanding on teachers' working conditions about a limit of two students with identified disabilities in a classroom. As determined through earlier analysis, the legalese of both artifacts reflected authoritative discourse (Bakhtin, 1981) in their binding stipulations for practices of

special education. Such explicitly authoritative commentary (i.e., in legislation and district regulations) about teaching practices has been identified as a barrier to classroom teachers' confidence in teaching students identified with RD (Worthy et al., 2016). The barrier it posed to teaching practices amongst classroom teachers who participated in this study was apparent through their direct quotation of the language of these artifacts.

All three classroom teachers independently referenced the notion of autonomy as professionals as having negative implications for their teaching of students identified with RD. This came from their collective perception that increased consistency in how reading is taught across classrooms is needed for the benefit of all learners, yet individual teachers have the right to determine how instruction is planned and presented. According to all the teachers in my study, this has resulted in unclear guidance for how to teach students in this district. Such lack of consistent guidance has previously emerged as a barrier reported by classroom teachers of students identified with RD (Worthy et al., 2016). The tension in respecting teachers' autonomy and simultaneously improving pedagogical practices for all students emerged in the reports of the administrators, as well as classroom teachers. From her district-level role, Sarah reported several efforts to build consistent practices across the district, but she qualified her statement with, "you also have to create an environment that allows for professional autonomy, and that doesn't violate collective agreements". The tension between the competing interests of teacher autonomy and consistency in teaching practices across the district emerged as inhibitive to teaching practices for students identified with RD across both classroom teachers and adjunct educators.

Class composition language specifying a limit of two students identified with disabilities assigned to one class was reported by some educators as inhibiting teaching of students identified

with RD. This element of authoritative discourse (Bakhtin, 1981) from the special education-aligned artefact of the teachers' union letter of understanding on working conditions represents an unquestionable voice on teachers' practices in this district. Such artifacts have been critiqued for their focus "on disability instead of ability" (Nepo, 2017, p. 212), leading to reactive and ineffective teaching. Laurie referenced the impact of this artefact on her practice as causing "bad compositions" sometimes. She explained this as groupings of students that didn't combine well socially, or had small numbers represented in one grade of a split grade class. Jen recounted the process that her school uses to try to anticipate class assignments for September at the end of the prior year. Despite this, she indicated that:

...now we have our two designated within a [grade] four-five and you know, over the years, it was not such a challenge. I am finding it more challenging. I said I don't know how I've been doing this for 26 years and my job is getting harder.

Sandy made a similar comment, referencing her 14 years as a school administrator, and stating that classroom composition is "trickier" now than it used to be, across all schools.

Sarah offered some insight from her role as a district administrator. She reported a perceived regression in the thinking of educators in the district because of the restored class composition language, stating:

I think we had been working really, really thoughtfully around this notion of tiered support, and the classroom teacher's role in providing, you know, deep and sustained programming for their kids. And all of a sudden, we started counting how many IEPs we have in our class, and we even have stopped talking about students with designations and started talking about "I have three IEPs" again. And I thought we'd moved past those days, right?

So that... that really bothers me. It bothers me that we're now having a conversation about which learning disability *counts* more than the other learning disability.

As illustrated by Sarah's comment, as well as the comments from educators across various roles, matters pertaining to the teachers' union that are included in the special education-aligned artifacts were perceived as inhibiting teaching of students identified with RD. Although secondary artifacts have been found to constrain classroom teaching of students identified with RD in the past (Worthy et al., 2016), this finding regarding union matters is a novel contribution, perhaps unique to the context of this study.

Under-Preparation

There was a unanimous expression across classroom teachers and educators in supporting roles that their pre-service teacher education did not adequately prepare them to teach students identified with RD. Similar findings have emerged historically from experienced teachers' reports about teaching students identified with a learning disability (DeSimone & Parmar, 2006). Teacher education programs in Canada have historically been shaped by the dominant discourse of special education, focused on disability identification and deficits within students (Gilham & Tompkins, 2016). Within this study, artifacts representing the specific pre-service education experiences of all participants could not be collected, given that they completed their education in multiple universities, across a broad historical timespan. The artifacts representing pre-service teacher education relevant to this school district that were examined earlier in this study did not necessarily represent the pre-service education experiences of all interview participants. They were relevant to the overall research, nevertheless, given that many educators in the school district have graduated from the local university.

Each of the classroom teachers interviewed indicated that they did not learn how to teach students identified with RD in their pre-service education. This included both general strategies to teach reading as indicated by Laurie, as well as awareness of the nature of RD and effective inclusive teaching practices, for which Jen indicated that she learned “nothing in teacher training.” Educators in supporting roles expressed a similar lack of coverage in their own pre-service education. When they reflected on their experiences supporting classroom teachers, the administrators expressed concern that not all novice teachers learned to teach students identified with RD during their pre-service education. Sarah summarized participants’ perceptions overall with her comment that:

I think if you're a reasonably new teacher, you have come out with a message from your university that says you're supposed to figure that out. That is part of your realm as an educator. I think if you were trained twenty years ago, you were taught that kids who had difficulties got help from somebody else. So you go find somebody else that's going to help you with that. Right? And your job was to teach curriculum. And it... maybe even to teach children in the terms of relationship and community in your classroom, but certainly it wasn't your job to understand what it meant to have a learning disability and how that could impact you. Other than you put them in the lower reading group.

Sarah’s perception was characteristic of all participants’ responses, generally. This may be linked to a broader legacy of special education-aligned programs of teacher education across Canada (Gilham & Tompkins, 2016). In my study, each of the educators perceived that their pre-service education experiences inadequately prepared them to teach students identified with RD.

Summary of Educators' Perceptions of Artifacts

Classroom teachers only reported minimal to moderate influence of each of the four categories of artifacts drawn from the literature review (policies and procedures, pre-service teacher education, in-service teacher professional learning, and teaching roles) on their teaching of students identified with RD. Despite this, their explanations of their perceptions reflected the influence of the authoritative discourse (Bakhtin, 1981) of the special education-aligned artifacts relevant to this school district. This contrasted the perceptions of adjunct educators who demonstrated emergent internally persuasive discourse (Bakhtin, 1981) as their perceptions reflected awareness of the contrasting underpinnings of special versus inclusive education-aligned artifacts. The following section offers a revised conceptual framework for the shaping of educators' perceptions considering the discussion of the findings presented here.

Revised Conceptual Framework

As indicated by Ravitch and Riggan (2017), a conceptual framework is not a static representation, but rather, it is a dynamic depiction of the interplay between theory and method. Accordingly, as my understanding of the shaping of grades 4-7 educators' perceptions about teaching students identified with RD in the context of one school district has evolved over the course of this study, the conceptual framework originally presented in Chapter Two has also evolved. The original framework visually depicted the primary constructs of interest (secondary sociocultural artifacts, teachers' perspectives on RD, and teachers' self-efficacy beliefs to teach students identified with RD) addressed in the first three research sub-questions, as a series of concentric circles. The constructs were nested to indicate my assertion, based on the literature review, that those in each progressively smaller circle were shaped by the constructs in the circles that surrounded it. This was intended to emphasize the importance of the local

sociocultural context as “that which surrounds” (Cole, 1996, p. 132) in shaping educators’ perceptions.

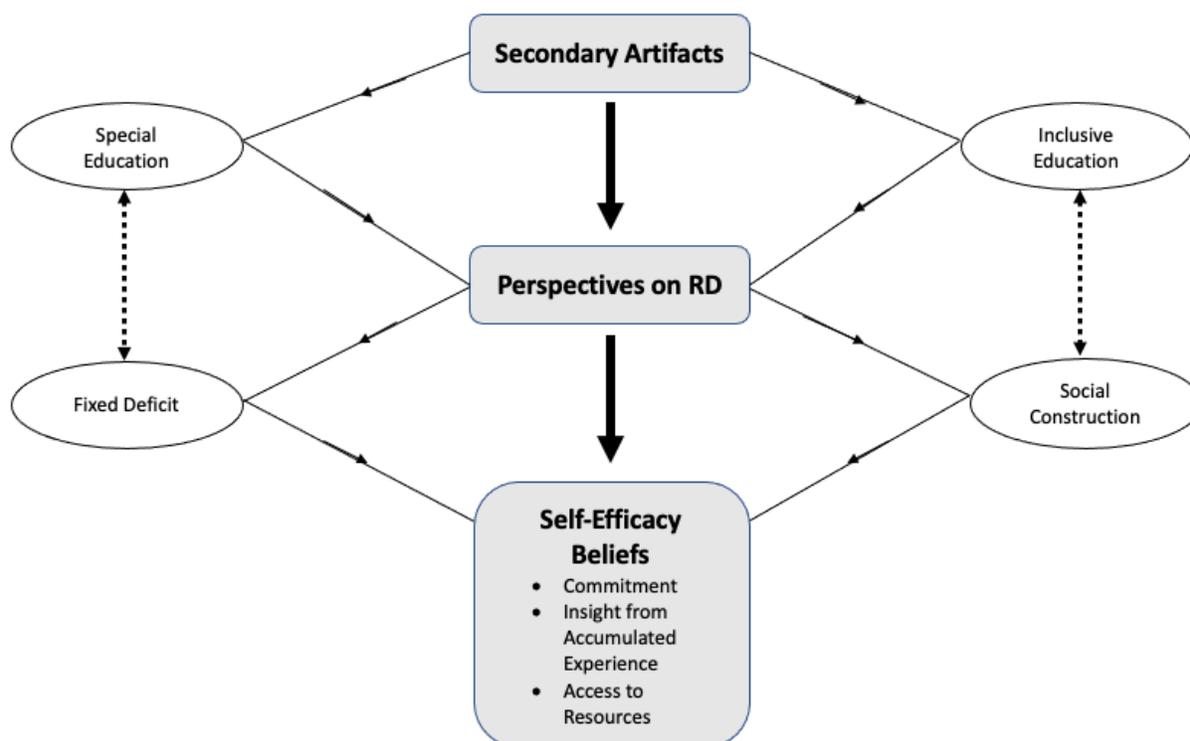
Analysis within my study led to a more nuanced understanding of how secondary artifacts shape educators’ perceptions about teaching students identified with RD. This necessitated a change in the type of visual used to convey the conceptual framework. Drawing further upon the work of Cole (1996), the metaphoric use of nested circles to represent context was noted to neglect a temporal aspect and create potential confusion by conveying contextual circumstances as static. Given that I came to understand that educators’ perceptions could be re-shaped through a process of ideological becoming via development of internally persuasive discourse about the contrasting discourse of sociocultural artifacts representing special and inclusive education (i.e., as reported by the adjunct educators), the metaphor of weaving together became a more relevant means to depict the dynamic shaping of educators’ perceptions. As Cole (1996) stated, “An ‘act in its context’ understood in terms of the weaving metaphor requires a *relational* interpretation of mind; objects and contexts arise together as part of a single bio-social-cultural process of development” (p. 136). In this sense, my revised conceptual framework depicts the shaping of intermediate educators’ perceptions about teaching students identified with RD as the weaving together of perspective on RD and self-efficacy beliefs, derived from secondary sociocultural artifacts.

In Figure 4, the shaping of educators’ perceptions is depicted as it emerged from the analyses of this study. A solid arrow from the secondary sociocultural artifacts at the top, down to the perspectives on RD, and further down to the self-efficacy beliefs below represents the progressive influence of each construct on the next. That is, the artifacts influence how an educator thinks about RD (i.e., special education-aligned artifacts lead to a fixed deficit

perspective, whereas additional consideration of inclusive education-aligned artifacts can lead to a perspective of RD as a social construction), which in turn, influences their beliefs about their own efficacy to teach students identified with RD. The diagonal lines reaching away from both the artifacts and the perspectives on RD depict the bipolar nature of both the secondary sociocultural artifacts and the educators' perspectives on RD found in this study. These lines reach back to the center from the poles to depict the weaving together of each component through the one beneath it, in a progressive shaping of educators' perceptions. The dashed bi-directional arrows connecting the types of artifacts and perspectives on RD on either side of the diagram represent the overlap and mutual influence between these components. The bullets within the self-efficacy beliefs indicate the themes evident in educators' reports of their own beliefs.

Figure 4

Revised Conceptual Framework for Shaping Educators' Perceptions



Chapter Summary

In this chapter, I presented a discussion of my findings in response to the four research sub-questions that guided my study. Drawing upon the thematic patterns found and their connection to existing literature, I presented a revised conceptual framework for the shaping of grades 4-7 educators' perceptions about teaching students identified with RD in the context of the school district I studied. In the next chapter, I offer conclusions from the study, my reflections on the research process, including limitations, implications for both educational practice and policy, and recommendations for future research.

CHAPTER SIX: CONCLUSION

The purpose of my case study was to explore how educators' perceptions about teaching students identified with reading disabilities (RD) are shaped by sociocultural artifacts in the context of one school district. Accordingly, the conclusions I drew from this study are summarized in this chapter, as aligned with the four research sub-questions and primary findings: (a) sociocultural artifacts relevant to one school district represented a special education versus inclusive education binary; (b) classroom teachers viewed RD as a fixed deficit internal to their students; (c) classroom teachers' self-efficacy for teaching students identified with RD varied by the facets of their own teaching that they emphasized; and (d) educators across various roles perceived special education-aligned artifacts as inhibiting teaching practices for students identified with RD. After discussing these conclusions, I offer my reflections on the research process, including the strengths and limitations of this study. I then outline the implications for educational policy and practice, followed by recommendations for future research and a conclusion.

Summary of the Study

The findings from this exploration of how educators' perceptions about teaching students identified with RD are shaped by sociocultural artifacts in the context of an urban, western Canadian school district offers understanding through in-depth description. Data were collected in three phases that progressed from a broad overview of the context and educators' perceptions to a targeted examination of those perceptions. The methods of data collection included document analysis, questionnaires, and interviews. When the data from each phase of collection were analyzed and themes derived from them, it was evident that educators' perspectives on RD and their self-efficacy for teaching students identified with RD were influenced by the content of

the artifacts from this school district in important ways that have implications for future policy and practice.

Four major findings emerged from this study. The first was that sociocultural artifacts in this school district aligned predominantly with either the tenets of special education, or those of inclusive education. The artifacts that represented special education presented RD as a pathology inherent to individual students, requiring specialized processes of assessment and teaching, delivered primarily by educators with specialist qualifications. Artifacts representing inclusive education represented RD as one aspect of student diversity that required strong universal teaching practices and the collaboration of a team of educators.

The second major finding was that classroom teachers reported their views of RD as a fixed deficit that is located within their students. They connected this understanding to their perceived need to teach students identified with RD differently than most other students. Teachers expressed certainty about their perspectives, based on personal experiences. Although they did not attribute the source of their understanding to particular artifacts, the language they used reflected the content of the special education artifacts.

The third finding was that classroom teachers reported self-efficacy for teaching students identified with RD that varied by the facets of their own teaching that they emphasized. Drawing upon individual teacher interviews, those teachers who reported relatively low self-efficacy emphasized the limited occasions on which they had experienced a sense of mastery with strategies to teach reading as positive supports to their efficacy. The teacher who reported relatively high self-efficacy emphasized her positive physiological arousal when she experienced success in building relationships with both students and colleagues.

The fourth finding was that educators from across various roles perceived special education-aligned artifacts as inhibiting teaching practices for students identified with RD. They characterized this as due to barriers in the system, the need for more opportunities for teacher learning, the interference of some union matters, and under-preparation in pre-service education. Although classroom teachers did not attribute their perceptions directly to the artifacts, they were clearly aware of the content of the special education artifacts, but not the inclusive education artifacts, as reflected in their use of language and portrayal of content. In contrast, educators in supporting roles demonstrated emergent critical awareness of both the special and inclusive education artifacts, as reflected in their acknowledgement of tensions between them.

The conceptual framework (see Figure 4) developed from the literature review and revised based on the findings depicts how educators' perceptions are successively shaped by the weaving together of the content of the artifacts, through educators' perspectives on RD, and ultimately, through their beliefs about their self-efficacy to teach students identified with RD. Although the aim of this study was not to generalize findings beyond the setting of this school district, understanding of this context nevertheless reinforces the importance of considering sociocultural influence via secondary artifacts upon educators' perceptions. Educators from classroom and adjunct roles, as well as educational leaders and policymakers with an interest in shaping teachers' perceptions in order to shape their practices should find relevance in these findings.

Reflections on the Research Process

As a novice researcher engaged in research requiring my own reflexivity, I found that conducting this study presented both challenges and successes. In the middle of the planning and proposing of this study, an international pandemic occurred (COVID-19). Although the methods of data collection could all be done online, I suspect that the participation rate for the

questionnaires in the second phase of the study was negatively impacted by educators' preoccupation with challenges associated with teaching during the pandemic. Further, in my eagerness to commence and move through the phases of data collection, the time period for completion of the questionnaires was directly prior to the winter school holiday, which is noted to be an inopportune time for teachers (Roberts & Hyatt, 2019). This may have limited the quantity of responses considered in the broad snapshot of perceptions amongst educators across the district as a whole.

Along with the challenges presented within the data collection process, I also experienced successes while conducting the study. Despite a limited participation rate for the questionnaires, the educators who participated in the interviews expressed enthusiasm about their participation, given their perceived need for more research about the topic of RD. They had each given generously of their time to complete open-ended written items on the questionnaires and spoke at length during interviews. Given that the descriptive nature of the case study undertaken was focused on deep understanding of a particular context, rather than generalization of findings across settings, the breadth of many educators' perceptions was less critical to the intent of the study than the depth of a few individual educators' perceptions as assessed through individual interviews.

As I proceeded through the data collection and analysis phases from a broad overview of the sociocultural context to a detailed understanding of the perceptions of individual educators, I found that the data of each phase naturally informed how I proceeded with the next one. For example, seeing the broad pattern of classroom teachers' perceptions allowed me to compare the perceptions of individuals with those of the larger group. Analysis unfolded inductively, with each phase genuinely shaping each successive phase.

Strengths of the Study

There are three strengths within the contributions of this study. First, considering the direct voices of classroom teachers as they reflected upon their underlying perceptions about RD, rather than examining the effectiveness of their implementation of inclusive teaching practices, was a relatively novel contribution to research in Canada, to the best of my knowledge. As indicated by advocates for transformative inclusive educational practices (e.g., Artiles & Kozleski, 2007; Baglieri et al., 2011; de Valenzuela, 2014; Dudley-Marling & Burns, 2014; Jordan, 2018a; Jordan & Stanovich, 2004; Tan & Thorius, 2019; Thorius, 2019a, 2019b; Waitoller & Thorius, 2015, 2016; Worthy et al., 2016), the first step to making meaningful change is engaging educators in critical reflection.

Second, a sociocultural-framed investigation of reading disabilities as opposed to the predominant framing of this research through an educational psychology lens offers a potential disruption to the dominant medicalized model that has not produced widescale success for students identified with disabilities in schools (Artiles & Kozleski, 2007, 2010, 2016; Baglieri, 2020; McDermott, 1993; Sleeter, 1986; Thorius, 2019a, 2019b; Worthy et al., 2016, 2018a, 2018b). The change-making potential of contemporary efforts to increase access, acceptance, participation, and achievement for all students, including those identified with RD, through what has been deemed “inclusive education” has historically been hampered by findings that fail to account for contextual factors that shape educators’ practices (Artiles & Kozleski, 2016). This shift in understanding beyond the constraints of disability as an individual pathology, to be remediated through prescriptive teaching, places the responsibility to support all students on all educators across the system, rather than only a few.

Third, focused examination of the context of one school district may lead directly to meaningful change within that context. Given evidence of the contextual specificity of the social, cultural, and historical influences on inclusive teaching practices generally (Conner, 2013; Malinen et al., 2013; Savolainen et al., 2012; Siwatu, 2011; Tan & Thorius, 2019; Thorius, 2016, 2019a, 2019b), as well as teaching of students identified with RD specifically (Worthy et al., 2016, 2018a, 2018b), efforts to make change to practices must take the unique characteristics of contexts into account. This is consistent with the “strongly local flavour” (Artiles & Dyson, 2005, p. 37) of inclusive education practices and therefore, the importance of considering contextual specificity of the shaping of perceptions. It is especially necessary in Canada, where public education falls under provincial jurisdiction (Calder Stegemann, 2016; Killoran et al., 2013), rather than federal, as in the U.S.

Limitations of the Study

There were two limitations for this study. The first limitation was related to the artifacts examined as representative of pre-service teacher education. When examining the secondary artifacts pertaining to all four categories drawn from the literature review, those pertaining to pre-service teacher education were taken from the local university. Although these have relevance to the context of the school district, given that many teachers come from that university to the district, it was not possible to collect and analyze artifacts representing the pre-service education experiences of all participants in this study. This was because some of the educators in this study completed their teacher training in different universities across Canada. Although the shaping of educators’ perceptions by artifacts representing their pre-service education could be determined in part by their direct reports of the perceived degree of influence they had, it was not possible to compare the language they used with the artifacts from their pre-

service universities. Given that educators' language was found to reflect the discourse of the artifacts examined here, it would be interesting to compare each participant's reported perceptions with actual artifacts from their pre-service universities.

A second limitation was that the classroom teacher interview participants represented a homogeneous group in terms of grades taught and years of teaching experience. All interview participants reported that they currently teach either grade 4 or a combined grade 4 class.

Another element of homogeneity was that each interview participant reported having 16-20+ years of teaching. In general, detailed demographic information was not collected on educator participants in this study. Given the interest of this study in examining implications of the identification of disability, gathering information from educators about their own identification as an individual with or without a disability would also be of interest.

Implications for Educational Practice and Policy

Rather than supporting educators' practices towards effective teaching for all students, the secondary artifacts of special education have been noted to diminish success for the very students they are purported to protect (de Valenzuela, 2014). The conceptual framework developed within this study can underpin professional learning for educators that offers the opportunity for critical consideration of how their perceptions of teaching students identified with RD develop in the context of particular sociocultural artifacts. In this study, I adopted the guidance of Artiles and Kozleski (2007) about the three critical elements required to transform inclusive educational practices, namely: (a) analysis of the link between cultural and historical dimensions and ideologies that underlie teaching practices, (b) understanding one's community and participation in it, and (c) engagement in a transformative agenda. Such transformation

requires educators to engage deeply in an internally persuasive dialogue (Bakhtin, 1991) that recognizes the tensions between special and inclusive education artifacts.

As stated by Matusov and von Duyke (2009), as teachers “we must justify why what we did was good for our students’ learning – in this case, to become good teachers of diverse populations of kids.” (p. 192). This engagement of educators aligns with an overall shift in the goals of education for students, as Matusov (2007) puts it:

Traditionally, the primary educational goal has been defined as the acquisition of skills and knowledge (through different processes such as transmission or discovery learning). However, for the last twenty years this goal has been criticized as too decontextualized and nonontological. A number of different goals for education have been proposed, including identity development, transformation of participation in a community of practice, raising critical consciousness, and so on. (p. 217)

Noting the similarity in the goals described by both Matusov (2007) and Artiles and Kozleski (2007), there is an opportunity to embrace such understanding in the design of opportunities for professional learning for educators regarding teaching practices for students identified with RD.

In the context of the school district studied, creating a tertiary artefact “in which there is a free construction in the imagination of rules and operations different from those adopted for ordinary ‘this-worldly’ praxis” (Wartofsky, 1979, p. 209) could remove the constraints of the special education artifacts and the authoritative discourse (Bakhtin, 1981) they transmit. This would give educators a chance to reimagine their practices in ways that can better meet the needs of students identified with RD (Thorius, 2016). Further, stimulation of internally persuasive discourse could be fostered through consideration of the contrasts between special and inclusive

education artifacts (Bakhtin, 1991). The importance of such engagement for teachers is supported by Matusov and von Duyke (2009) in their statement that:

Testing ideas within the bounds of a future imagined practice constitutes, in our view, a legitimate participation in professional discourse, as the evaluation of and setting a course for (future) ethical actions is an important part of any practice (p. 174).

In considering the conceptual framework from this study and its successive weaving together of artifacts into perspectives on RD, and ultimately, self-efficacy beliefs for teaching students identified with RD, creating a tertiary artefact to disrupt teachers' perceptions about special education and increase their awareness of the tenets of inclusive education holds potential to transform practice. As teachers shift perspectives on RD from fixed deficit to social construction, there is potential for them to recognize RD as diversity, value the role of universal practices, and see new opportunities for team collaboration.

As noted by Matusov and von Duyke (2009), transformation of education experiences through fostering internally persuasive discourse holds the potential to facilitate ideological becoming. As Bakhtin (1981) points out:

One's own discourse and one's own voice, although born of another or dynamically stimulated by another, will sooner or later begin to liberate themselves from the authority of the other's discourse, acquiring new form and meaning in the social world (p. 348).

This is consistent with the findings of Gilham and Tompkins (2016) who determined that the development of a pre-service inclusive education model for teachers must be based upon raising critical awareness to recognize injustices of current practices and commitment to constantly pursuing better practices. This avenue for exploration of multiple viewpoints, including a

sociocultural definition of disability offers promise to transform the efficacy for teaching students identified with RD amongst teachers entering the profession.

Taking the results of this study together with the findings of others reviewed, it appears that teachers' practices to support students identified with RD are likely to continue to be constrained by their special education-aligned perceptions, as long as they are unaware of how their perceptions are shaped. That is, they are unlikely to feel a sense of self-efficacy to teach students identified with RD effectively as long as their perceptions are primarily shaped by the special education-aligned artifacts within this context. This is consistent with Bandura's (1997) contention that self-efficacy beliefs (e.g., for teaching students identified with RD) are established early in the learning of skills and that once these beliefs become set, "they are stable and resistant to change without some kind of shock to provoke a reassessment" (Tschannen-Moran & Johnson, 2011, p. 758). It is important to consider tertiary artifacts in education such as the prospects proposed here for teachers' pre-service or in-service professional learning as opportunities to counter dominant practices (Hoffman-Kipp, Artiles, & López-Torres, 2003). Given that the beliefs and actions that have guided special education since its inception are problematically viewed as discriminatory by many scholars (e.g., Artiles & Kozleski, 2016; Baglieri et al., 2011; de Valenzuela, 2014; Thorius, 2019a), continued efforts to shape educators' perceptions in ways that support more inclusive teaching practices are needed.

Recommendations for Future Research

A number of potential avenues for further research exploration emerged from this study. One such avenue, given the intersectionality of race and RD (Ontario Human Rights Commission, 2022), is that further research within the same school district could expand on this study by asking, "To what extent are educators aware of the intersectionality of race and

identification of disability?” For example, it is important to assess educators’ understanding of how race intersects with the process of disability identification as outlined in the special education-aligned artifacts. In the province of British Columbia, 11.3% of all students self-identify as Indigenous, but they represent 22% of all students identified with disabilities or diverse abilities (British Columbia Ministry of Education, 2021). There is scope for further exploration through a descriptive case study of all educators’ perceptions about intersectionality across the same school district (e.g., through a broad survey, interviews). This could be complemented by follow-up efforts to raise awareness of the lived experiences of Indigenous students identified with disabilities by collecting the perspectives of Indigenous stakeholders (e.g., via interview or focus groups). This is especially relevant, given the need for critical consideration of one’s own community and participation in it (Artiles & Kozleski, 2007), as well as the legacy of discrimination associated with residential schooling that continues to negatively affect opportunities for Indigenous students to achieve educational success (Ontario Human Rights Commission, 2022).

A second avenue for future research within the same school district could be to apply a comparative case study methodology focused on determining “How do educators with varying demographic attributes characterize their perspectives on RD, as well as their perceptions of their self-efficacy to teach students identified with RD?” Data collection could take place using questionnaire and/or interview methods. A further addition could be to collect observational data of educators’ actual teaching practices with students identified with RD. Although consideration of educator gender was not central to the research questions addressed here, consideration of differences by gender would add nuance to the findings. Previous research has found gender-based differences in perceptions about inclusion (Specht et al., 2015). Although grade 4-7

teachers were intentionally targeted in this study, given the salience of reading disability identification at that age level, it would be interesting to compare perceptions of teachers across grade levels. This is especially relevant, given that previous research has found differences in teacher perceptions about inclusion by grade level taught (McGhie-Richmond et al., 2013). Further study of educators' perceptions across varying levels of accumulated relevant experience is also needed. Previous research has found differences in teachers' perceptions about influences on their inclusive teaching practices (e.g., Delorey et al., 2020), perspectives on RD (e.g., Soriano-Ferrer et al., 2015), and self-efficacy reports (e.g., Tschannen-Moran & Woolfolk Hoy, 2007) based on experience levels.

A third avenue for future research would be to expand beyond the exploratory nature of this study to conduct parallel investigations (using the same data collection methods from this study) in the contexts of other school districts. By asking, "How do secondary sociocultural artifacts shape perceptions of educators?" in school jurisdictions both within and outside of Canada, different sociocultural milieus can be investigated. As secondary sociocultural artifacts represent the ideologies of their authors, and the historical residue of previous generations (Wartofsky, 1979), they contain important information about the sociocultural influences operating within a specific context. It would be interesting to see if the conceptual framework developed in this study transfers to other contexts where sociocultural artifacts may represent different underlying ideologies regarding teaching of students identified with RD.

A fourth area for further investigation could focus on the artifacts specifically representing one of the four categories determined from the extant literature to be influences on teaching practices for students identified with RD. For example, a comparative content analysis of the secondary artifacts representing different pre-service teacher education programs would

illuminate critical similarities and differences between them. The guiding research question might be, “How do the secondary artifacts of various pre-service teacher education programs across the country represent the ideologies of special or inclusive education?” A method such as document analysis could be employed as a starting point for such a study. Despite historical challenges of teacher education programs to adequately prepare teachers to teach students with disabilities (Specht et al., 2015), research has shown promising practices for increasing teacher efficacy in the context of pre-service education for inclusive practices (Baustien Siuty, 2017; Gilham & Tompkins, 2016; Lanterman & Applequist, 2018). Developing this nuanced understanding could potentially contribute to widescale transformation of teacher preparation.

Conclusion

The aim of educators to support students in acquiring traditional print-based literacy skills in schools has persisted throughout the existence of formal education. Despite this, some students have persistently struggled to learn to read throughout their school experiences. The discourse that has dominated special education has characterized this struggle as a pathology within individual learners. Traditional practices of special education have been informed by a medical model of disability identification and associated prescription of intervention approaches. Despite decades of research framed within positivist-informed educational psychology approaches, students continue to struggle to learn to read and end up identified as having a reading disability.

In response to calls for a sociocultural-informed approach to investigating this situation, this descriptive case study offered a fresh investigation into the teaching of students identified with reading disabilities by considering the unique social, cultural, and historical influences on the teaching practices in the context of one school district. These influences were examined via

analysis of the secondary artifacts identified as salient within the setting. Such human-created artifacts were understood to transmit underlying ideology through their mediation of human action. Further, by exploring educators' perspectives about what a reading disability is, as well as their beliefs about their own efficacy to teach students identified with reading disabilities, a conceptual framework for how secondary sociocultural artifacts shape educators' perceptions was developed. This was critical, given the importance of educators' perceptions in influencing their actual teaching practices. Given this study's determination of how sociocultural artifacts shape educators' perceptions, creating an opportunity for classroom teachers to critically reflect on the differences between special and inclusive education artifacts offers hope for change. Emergence from the tension created by such differences into efficacious teaching practices for students identified with reading disabilities appears possible and likely if this opportunity is created. Such facilitation of educators' ideological becoming holds promise to transform inclusive teaching practices that reach all students.

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APPENDIX A

Artifacts - Document Summary Form

Name of Document:

Date of Review:

Document Publication Date:

Author(s) of Document:

Document Location:

How Document Accessed:

Page #	Keywords/Concepts	Comments: Relationship to Research Questions

Brief summary:

Significance or Purpose:

Is there anything contradictory about document?

Yes

No

Salient Questions/Issues to Consider:

Additional Comments/Considerations:

Source: Adapted from Bloomberg & Volpe (2019, Appendix Q)

APPENDIX B

Senior Administrator Interview Protocol

Time:

Date:

Location:

Interviewer:

Interviewee:

(Interviewer notes in italics)

Preamble

- Turn on recording device.*
- Thank participant for their willingness to participate.*
- Chat informally about what degrees obtained, where degrees obtained, years of experience in various educational roles, title of current role, how long occupying current role.*
- Tell interviewee that the interview is about what they think influences the perceptions of teachers in this district about teaching students with reading disabilities.*
- Inform interviewee that the interview will last about 30 minutes.*
- Inform interviewee that the recording is for transcription only.*
- Obtain permission from participant to continue with the interview.*

Primary Questions

1. What are the policies or strategies the district uses/has used to support teachers with teaching students identified with reading disabilities?

Depending on responses to question 1, ask specifically about strengths/challenges of each.

2. To what extent do you believe that _____ has influenced teachers' perceptions about teaching students with reading disabilities? Give me an example of that.
 - university preparation
 - in-service training
 - district/provincial policy/leadership
 - responsibilities of specific teacher role
3. What additional influences or issues of relevance to how teachers in this district think and feel about teaching students identified with reading disabilities would you like to add?

- Thank participant for their time.*

APPENDIX C**Teacher Questionnaires**

Thank you for agreeing to take part in this study. The purpose of this study is to gather teachers' perceptions about teaching students with reading disabilities. Please attempt to answer all questions.

Demographic Questionnaire

1. What is the grade you currently teach?
 - 4
 - 5
 - 6
 - 7

2. How many years have you been teaching?
 - Less than 5*
 - 5-10*
 - 11-15*
 - 16-20+*

3. What is the highest degree that you hold?
 - Bachelor's Degree*
 - Post-Graduate Diploma*
 - Master's Degree*
 - Doctoral Degree*

4. Have you taken coursework/training for teaching reading?
 - None*
 - It was part of my undergraduate degree.*
 - It was part of my graduate degree.*
 - I took this as personal professional learning.*
 - Other*

5. Approximately how many students with BC Ministry of Education designations of reading disabilities (category Q) have you taught?
 - None*
 - 1-3*
 - 4-6*
 - 7-10+*

Perspectives on Reading Disabilities Questionnaire

Please rate how much you agree with the following statements about reading disabilities.

1. Reading disabilities are caused by biological factors.

1	2	3	4	5
Not at all	Very Little	Somewhat	Quite a Bit	A Great Deal

2. Learning to read well is possible for all students.

1	2	3	4	5
Not at all	Very Little	Somewhat	Quite a Bit	A Great Deal

3. Reading disabilities are best addressed by the support of specialists.

1	2	3	4	5
Not at all	Very Little	Somewhat	Quite a Bit	A Great Deal

4. Some people are born with a predisposition to being a good reader.

1	2	3	4	5
Not at all	Very Little	Somewhat	Quite a Bit	A Great Deal

5. Reading disabilities are genetically based.

1	2	3	4	5
Not at all	Very Little	Somewhat	Quite a Bit	A Great Deal

6. Classroom teachers are in the best position to teach students with reading disabilities to read.

1	2	3	4	5
Not at all	Very Little	Somewhat	Quite a Bit	A Great Deal

7. Children with reading disabilities require specialized intervention to learn to read.

1	2	3	4	5
Not at all	Very Little	Somewhat	Quite a Bit	A Great Deal

8. How would you describe what a reading disability is?

[Textbox in which to type response]

9. What do you believe is the difference between reading disabilities and reading difficulties?

[Textbox in which to type response]

10. Describe your experiences with people with reading disabilities (may include both personal and professional experiences).

[Textbox in which to type response]

11. Anything else you would like to add?

[Textbox in which to type response]

Self-Efficacy for Teaching Students with Reading Disabilities Questionnaire

Please rate how much the following statements apply to you as a teacher.

1. I have had success with helping students with reading disabilities learn to read.

1	2	3	4	5
Not at all	Very Little	Somewhat	Quite a Bit	A Great Deal

2. I have had the opportunity to learn from colleagues who modelled effective teaching of students with reading disabilities.

1	2	3	4	5
Not at all	Very Little	Somewhat	Quite a Bit	A Great Deal

3. I feel discomfort (e.g., nervous “butterflies”, sweating, headaches) when I think about the challenges of teaching students with reading disabilities.

1	2	3	4	5
Not at all	Very Little	Somewhat	Quite a Bit	A Great Deal

4. I have increased my own skills in teaching students with reading disabilities by learning from skilled colleagues.

1	2	3	4	5
Not at all	Very Little	Somewhat	Quite a Bit	A Great Deal

5. I have had success with helping students with reading disabilities use assistive technology (such as Google Read Write or other speech to text or text to speech tools).

1	2	3	4	5
Not at all	Very Little	Somewhat	Quite a Bit	A Great Deal

6. Even when teaching students with reading disabilities gets hard, colleagues remind me that I can be successful.

1	2	3	4	5
Not at all	Very Little	Somewhat	Quite a Bit	A Great Deal

7. I feel positively about my teaching of students with reading disabilities.

1	2	3	4	5
Not at all	Very Little	Somewhat	Quite a Bit	A Great Deal

8. I have received positive feedback from colleagues about my teaching of students with reading disabilities.

1	2	3	4	5
Not at all	Very Little	Somewhat	Quite a Bit	A Great Deal

Influence of Sociocultural Artifacts Questionnaire

Please rate influences on your teaching of students with reading disabilities.

1. To what extent has your **university coursework/training** influenced your teaching of students with reading disabilities?

1	2	3	4	5
Not at all	Very Little	Somewhat	Quite a Bit	A Great Deal

2. To what extent has your **in-service professional development** influenced your teaching of students with reading disabilities?

1	2	3	4	5
Not at all	Very Little	Somewhat	Quite a Bit	A Great Deal

3. To what extent have **district/provincial policies** influenced your teaching of students with reading disabilities?

1	2	3	4	5
Not at all	Very Little	Somewhat	Quite a Bit	A Great Deal

4. To what extent has **specialist teachers' guidance** influenced your teaching of students with reading disabilities?

1	2	3	4	5
Not at all	Very Little	Somewhat	Quite a Bit	A Great Deal

5. What are some of the other influences on your teaching of students with reading disabilities?

[Textbox in which to type response]

6. Is there anything else you would like to add about how any of these factors influence your teaching of students with reading disabilities?

[Textbox in which to type response]

Please indicate if you are willing to participate in a brief follow-up interview as part of this research project.

1. I agree to participate in an interview if requested
- Yes
 - No
2. *Only complete next section if you consent to an interview.

First and Last Name: *[Textbox in which to type response]*

Email address: *[Textbox in which to type response]*

APPENDIX D

Classroom Teacher Interview Protocol
Time:
Date:
Location:
Interviewer:
Interviewee:

(Interviewer notes in italics)

Preamble

- Turn on recording device.*
- Thank participant for their willingness to participate.*
- Chat informally about what degrees obtained, where degrees obtained, years of experience in various educational roles, title of current role, how long occupying current role.*
- Tell interviewee that the interview is about what they think supports or hinders their teaching of students with reading disabilities.*
- Inform interviewee that the interview will last about 30 minutes.*
- Inform interviewee that the recording is for transcription only.*
- Obtain permission from participant to continue with the interview.*

Primary Questions

Depending on the specific sociocultural influences/artifacts previously identified by the teacher, ask specifically about each of the potential influences/artifacts in the bulleted list (to be listed following the teacher interview).

1. Tell me what you know about RD.
 2. Tell me about how you feel about your ability to teach students identified with RD.
 3. In the survey that you completed, you indicated that you felt that _____ has influenced your teaching of students with reading disabilities. To what extent do you believe that _____ has supported or hindered your ability to teach students with reading disabilities? Tell me more about that.
 - *Specific sociocultural influences/artifacts identified by classroom teacher*
 4. What have you done or what supports have you accessed to improve your teaching of students identified with RD?
 5. What additional issues of relevance to how teachers in this district teach students identified with reading disabilities would you like to add?
- Thank participant for their time.*

APPENDIX E

Principal/Support Teacher Interview Protocol

Time:

Date:

Location:

Interviewer:

(Interviewer notes in italics)

Preamble

- Turn on recording device.*
- Thank participant for their willingness to participate.*
- Chat informally about what degrees obtained, where degrees obtained, years of experience in various educational roles, title of current role, how long occupying current role.*
- Tell interviewee that the interview is about what they think supports or hinders the teaching of students with reading disabilities in this district.*
- Inform interviewee that the interview will last about 30 minutes.*
- Inform interviewee that the recording is for transcription only.*
- Obtain permission from participant to continue with the interview.*

Primary Questions

Depending on the specific sociocultural influences/artifacts previously identified by classroom teachers, ask specifically about each of the potential influences/artifacts in the compiled list (to be listed following the teacher interviews).

1. What are the strategies teachers in your school use to teach students with reading disabilities that have had a positive impact? Why have these strategies been successful?
2. What are some of the current challenges teachers in your school face in teaching students with reading disabilities?
3. How do you support teachers in your school to overcome challenges in teaching students with reading disabilities?
4. What additional influences or issues of relevance to how teachers in your school teach students identified with reading disabilities would you like to add?

- Thank participant for their time.*